TALLINN UNIVESITY OF TECHNOLGY
School of Business and Governance
Department of Economics and Finance

Teemu Mäkiaho

LEASING: CURRENT STATUS AND FUTURE CHANGES

Bachelor Thesis

Supervisor: Associate Professor Tatjana Põlajeva

Tallinn 2017

I declare I have written the bachelor thesis independently.

All works and major viewpoints of the other authors, data from other sources of literature and elsewhere used for writing this paper have been referenced.

Teemu Mäkiaho ……………………………

(signature, date)

Student's code: 146126
Student's e-mail address: teemu.makiaho@icloud.com

Supervisor Professor Tatjana Põlajeva:
The thesis conforms to the requirements set for the master's/bachelor's theses

……………………………………………

(signature, date)

Chairman of defence committee:
Permitted to defence

…………………………………

(Title, name, signature, date)

TABLE OF CONTENTS

ABSTRACT 5

INTRODUCTION 6

1. LEASING INDUSTRY 9

1.1. Development of leasing 9

1.1.2. Early days 9

1.1.2. Industrial revolution 10

1.1.3. Independent leasing companies and captives 10

1.1.4. Modern era of leasing 11

1.2. Who are the current lessors? 13

1.2.1 Banks 13

1.2.2. Captive leasing companies 14

1.2.3. Independents 15

1.2.4. Current competitive situation among lessors 15

2. ADVANTAGES, LEASING TYPES AND REGULATION 17

2.1. Advantages of leasing 17

2.1.1. 100% Financing at fixed rates 17

2.1.2. Obsolescence of the asset 18

2.1.3. Cost 18

2.1.4. Flexibility 18

2.1.5. Off-balance-sheet financing 19

2.2. Different leasing types 20

2.2.1. Finance lease 20

2.2.2. Operating lease 22

2.3. Regulators and their mission 24

2.3.2. IAS 17 on leasing contracts 25

2.3.2. Future changes in regulation 26

3. NEW STANDARDS AND THEIR EFFECT ON COMPANIES 28

3.1. General direction of the changes 29

3.1.1. Income statement 29
3.1.2. Balance sheet 31
3.1.3. Summary 32
3.2. Financial ratios 33
3.3 Case: Company X 36
3.4. Summary of results 40
CONCLUSIONS 42
REFERENCES 44
APPENDICES 47
Appendix 1. Impact on the income statement at the end of the leasing contract........ 47
Appendix 2. Impact on the balance sheet at the end of the leasing contract 48
Appendix 3. Impact on the selected financial ratios at the end of the leasing contract....... 49

ABSTRACT

Aristotle once said, “Wealth does not lie on ownership but in the use of things”. Clearly, many companies have decided that Aristotle is right, as they have become heavily involved in leasing assets rather than owning them (Kieso, Weygandt, Warfield 2011, 1120). Leasing is important and widely used source of financing. It enables entities, from small start-ups to massive multinationals, to acquire the right to use property, plant and equipment without making large initial cash outlays.

Leasing is a contract through which a company acquires the use of a particular asset for a certain period of time as an alternative to purchasing the the same asset (Regalli, Tagliavini 2004). Leasing contracts can be divided into two different types, finance leases and operating leases. The accounting standards determining the accounting principles of leasing are evolving and the newest International Financial Reporting Standards (IFRS) are providing changes to the existing regulations and practices. These changes required the lessee to record existing operating lease contracts to the financial statements similarly as finance leases are recorded according to current standards. The purpose of the research is to determine the IFRS 16’s impact on companies, their financial statements and key financial ratios. In order to understand the content of the empirical research, the theory of leasing, its current and past status, advantages and accounting principles have to be introduced.

Keywords: leasing, accounting, financial analysis, IASB, IFRS, new standards, impact of the new standards

INTRODUCTION

Leasing has become incredibly popular way of acquiring the right to use various assets. It is spread across the globe and almost every industry. This makes it an essential part of global economy. From corporations' view point, it enables them to purchase assets, which would otherwise bind huge amounts of capital or be out of reach with current purchasing power. Leasing is an efficient use of capital, which makes it possible for different size companies to grow faster and steadier. From shareholders' point of view, company, which can at the same time grow and be financially stable is a good business.

It is a common misunderstanding that leasing is a modern phenomenon. In fact, it is centuries old, and has been used already in 3000 B.C. However, the modern concept of leasing in detail was born around 50 years ago. Since then it has been continually evolving and becoming the kind of it is today. This doesn't mean that it will stay this way forever. Continually, the practises and regulations of leasing are under microscope. Leasing standards have changed and new parties are getting into the industry. Different regulators form different accounting standards, what companies then have obey, and adjust their accounting measures according the jurisdiction they are under.

The most widespread authority is the International Accounting Standards Board (IASB) and the accounting standards they provide are published as the International Financial Reporting Standards (IFRS). These standards are created by independent board of members, from different kinds of backgrounds and countries. Last year in 2016 IASB published a new accounting standards called IFRS 16 and it brings some changes concerning lease accounting. The lease contract as we now know as operating lease is facing big changes in terms of accounting and reporting. These changes and their influence on corporations and their financial statements as well as financial ratios are researched in the bachelor thesis later on, but in order to understand the significance of the proposed standards it is beneficial to look at what is the past and current nature of leasing.

Leasing and the knowledge related to it is an understated area of expertise. Just now companies that use extensive amounts of leasing are realizing that they can face huge issues, when the new IFRS 16 becomes effective. This lack of proper researches and expertise in the area creates the justification of topic. The research problem relates to the situation companies and their financial data is currently, and what the situation and data is after the proposed accounting standards introduced in the IFRS 16. The general objective for this research is to give a general overview of the leasing industry and eventually estimate the changes IFRS 16 causes to corporations' financial statements and their essential financial ratios on theoretical and empirical basis. Final part of the research is an empirical research on the actual and relative changes happening in the financial statements and selected financial ratios of Company X.

The actual research questions are as follows:

1. "What are the advantages related to leasing rather than owning?"
2. "What are the differences between operating leases and finance leases?"
3. "What are the consequences of the IFRS 16 to financial statements and essential financial ratios?"

The first question is crucial to understand the motivation that thrives corporations to lease an asset rather than owning it. It helps to reveal, why leasing is as popular as it is in the current world economy. The hypothesis is that it is more flexible, carefree and cost effective to the lessee than owning. Another advantages, regarding especially to operating lease, might be that it doesn't show on balance sheet.

The research question number two seeks to answer clearly the differences in the two lease types that are currently available. It is essential to the later part of the research. The main hypothesis that they are different in terms. Finance lease is longer period, more like a traditional asset purchase with capital loan with its liabilities and fixed assets. Operating lease is more like a rent basis contract with shorter leasing period and off-balance sheet recording.

The last research question is answered with the help of financial analysis related to different components that are influenced by the IFRS 16. It will cover the direction of changes in the financial statements and selected financial ratios as well as empirical research concerning company X and the changes it would face. The hypothesis is that the balance sheet will grow, the leverage and solvency ratios will increase and the performance ratios will decrease.

The research task is to find and study the necessary theoretical information related to the leasing industry, define the object and the method of the research, gather necessary data, make the adjustments to the current data, analyse the changes, obtain the result and finally make the conclusion. The main research method is going to be empirical, quantitative research and financial analysis.

The theoretical part of the research covers chapters one and two. The first chapter reveals the history and development of the leasing industry. It briefly covers the nature of the business from its ancient days to modern history. That is followed by the information related to the parties in the other side of leasing contracts, the lessors. In order to understand the fundamentals of leasing, it is necessary to know the parties related to the transaction. The second chapter seeks to answer the first research question about the advantages of leasing in relation to owning. It answers this question by listing the pros of the lease contract. The same chapter answers the research question number two, by explaining the key differences between operating lease and finance lease. These differences are important in order to understand the leasing industry. In addition, the same chapter covers the IASB authority responsible of the accounting standards to most of the countries world wide. It also gives the brief information about the IFRS 16 standards related the leasing and its accounting procedures. The last chapter covers the information necessary to understand the financial analysis, as well as the actual empirical research and analysis covering the effects of proposed accounting standards to corporations and their financial statements and selected financial ratios.

1. LEASING INDUSTRY

1.1. Development of leasing

Leasing is not a modern phenomenon. The early days of leasing goes back as far as 3000 B.C., in the form of asset renting. The leases involved the rental of agricultural tools to farmers by the priest, who at the time where playing the part of government officials. However, the modern concept of financial leasing developed in the United States of America after the 2nd World War. (Lo 1989, 5). Equipment leasing had a somewhat mixed reputation in the late 1970s and early 1980s. The variety of accounting procedures in use not only often made impenetrable many lessees' figures, but also raised doubts over whether number of lessors themselves understood where they stood. Large part of the business was driven by the tax reliefs rather than the straightforward commercial advantages it provides. Today, tax is no longer of such overwhelming significance and accounting has been standardized. (Wainman 1995, 11).

1.1.2. Early days

The actual hard evidence about the existence of leasing dates back to 2000 B.C., when the ancient people in the City of Ur kept records written in clay tablets. Later on in the 1700 B.C. there is records of the first leasing laws written by the King Hammurabi in Babylonia.

Back in the ancient times many civilizations found that leasing was the only viable and affordable way to finance equipment. That's why Greeks, Romans, Egyptians and Phoenicians used leasing to finance necessary tools, land and livestock among their societies. The Phoenicians used so called "ship-charter", which closely resembles today's pure equipment lease. The word "ship-charter" comes from the fact that the Phoenicians were shipping and trading experts who used the ship charters for obtaining the use of a ship and a crew. In many ways these civilizations were using similar leasing terms as nowadays. The long-term lease

contracts covered the whole economic life of the asset and required the lessee to assume the benefits and obligations of the ownership. (The History … 2010, 1).

As time passed leasing had expanded tremendously and by Medieval Ages, various of agricultural, industrial and even military equipment were leased. This gave people the opportunity to gain usage of equipment that otherwise would have been to expensive to acquire. As historical age moved on, leasing was limited mostly to horses and farming equipment. The leasing of personal property in England was not recognized under the English common law, but long-term leasing of real property was allowed. (The History … 2010, 1).

1.1.2. Industrial revolution

During the time of industrial revolution, the demand of equipment, which could enable manufacturing and transportation, was booming. Most of the early railroad companies were able to afford the laying of the track, but lacked the capital needed to buy trains and locomotives. This gave an opportunity for investors, who had the capital necessary to buy these vehicles. These people were able to contact each other and the leasing contracts were established.

Investors across the United States provided the railroad entrepreneurs financing for their locomotives and vehicles through equipment trusts. Banks or trust companies set up and controlled these trust, issuing an equipment trust certificate. The certificate represented the right of the holder to receive a return of the principal and the interest on their investment funds. The trust administrator was the link between people with excess of capital and the people in need of it. Usually the administrator paid for the equipment on the behalf of the manufacturer and then sold the investments certificates to investors. During the leasing period, the administrator collected rent from the lessee, covering the cost of the equipment plus some interest, and commonly at the end of the leasing period the ownership of the asset was transferred to the lessee. (The History … 2010, 2).

1.1.3. Independent leasing companies and captives

In the early 1900s, first independent leasing companies and captive leasing companies, being subsidiaries for bigger manufacturing, companies were born. This was possible because

of the fast economic growth during the time. Manufacturers wanted to sell more and lessees wanted to have more short-term leasing contracts.

During the early 1900s independent leasing companies were born to serve lessees' needs for short-term leases. These companies recognized that many railroad, manufacturing or other companies were not interest in long-term control nor the ownership of assets, which was the idea behind the early equipment trusts. They started to sell short-term leases, which came under the terms that at the end of the leasing period of the ownership of the asset would stay with the leasing company, and the item would be returned to the company's possession. This type of financing was the true born of the operating lease, which is still very popular way of financing. The independent leasing companies, which were founded to provide vendor financing were, and are even today called third-party leasing. The name came from the fact that they were not related to either manufacturer or the end-user.

At the same time that independent leasing companies were found, independent manufactures wanted to sell more and they felt by offering affordable payment plans they would be able to do so. Some companies felt that leasing was a way of retaining the control of their proprietary equipment. Many companies started to establish subsidiaries, which could provide the financing for customers, who were lacking in that aspect. These subsidiary companies today are called captive leasing companies. After the second World War, as many manufacturers were seeking to modernize and upgrade their operations and equipment, leasing became a viable tool for financing the continuing growth of the world economy. From those days the growth of leasing industry has been significant and has led us to the modern era of equipment leasing. (The History … 2010, 2-3).

1.1.4. Modern era of leasing

While the early days of leasing dates back thousands of years, the business has evolved significantly for the past 50 years. While commercial leasing has it origins in real estate leasing, nowadays leasing items can be virtually anything. The items are usually categorized under small- and big-ticket items. When talking about big-ticket items, the lease financing is commonly over two million dollars. (Coyle 2000, 2-3). Small-ticket items can be such as cars, furniture, computers, vending machines, small real estates and industrial machines. Big ticket

items can be for example ships, aircrafts, big real estate complexes, satellites and entire industrial plants.

Table 1 is and illustration of the popularity of equipment leasing in the United States between 1988 and 1998.

Table 1. Trends and forecasts for equipment leasing in the US

Year	Business investment in equipment (Billions of dollars)	Equipment leasing volume (Billions of dollars)	Market penetration range (Percentage)
1988	348.4	112.7	32.3
1989	365.7	125.4	34.3
1990	388.3	124.3	32.0
1991	375.5	120.2	32.0
1992	376.2	121.7	32.3
1993	443.9	130.5	29.4
1994	487.0	140.2	28.8
1995	538.8	151.4	28.1
1996	566.2	169.9	30.0
1997	582.1	179.8	30.9
1998	593.0	183.4	30.9

Source: (Coyle 2000, 3)

This was the case in the late 20th century, but since it has grown massively and became very popular across every industry and place of the earth. Today you can see banks, insurance companies, captive financing companies, third-party vendors, brokers and independent leasing companies all competing to serve lessees. It has been estimated that in many of the mature leasing markets across the globe, lease finance accounts approximately 20% to 30% of all capital expenditures. This has led to the fact that leasing nowadays has a significant influence to the global economy.

1.2. Who are the current lessors?

It takes three independent parties to make leasing work. Lessees, who represent the demand; lessors, who are the suppliers in this function; and finally, government, who place the regulations and tax obligations for both of the contracting parties. The actual lease is a contractual arrangement between a lessor and a lessee. This contract gives the lessee the right to use to use specific asset, owned by the lessor, for an agreed period of time. In return the lessee agrees to pay certain rental fees to the lessor over the term of the lease agreement. (Lo 1989, 6).

Who are the lessors? Generally speaking, there are three different parties who are willing to finance an asset, which is then used by someone else.

Figure 1. Main lessors

Source: (Kieso, Weygandt, Warfield 2011, 1121)

These are banks, captive leasing companies and independents. Banks do this naturally to collect interest payments from customers. Captive leasing companies wants to increase the sales of their parent company by creating innovative payment solutions for potential customers. Independent leasing companies seek to do the same as banks, which is collecting interest payments and make profit this way. The following chapters will explain the function of these parties in more detail.

1.2.1 Banks

Banks, the organizations which handle large quantities of funds in the economy are the largest players in the leasing business. They have low-cost funds, which they are willing to reinvest in order to create wealth and growth. The advantage with banks is that they are able to purchase assets at less actual cost than their competitors, because of the the low-cost funds. Due to the massive growth in the demand for leasing, banks have decided to be more aggressive in

the markets. This decision to invest more and more in the leasing environment has led to expansion in the product lines in the area. Finally, leasing transactions are now more standardized, which gives the banks an advantage because they do not have to be as innovative in structuring lease arrangements. Thus, banks like Credit Suisse, Chase, Barclays and Deutsche Bank have substantial leasing subsidiaries. (Kieso, Weygandt, Warfield 2011, 1121).

1.2.2. Captive leasing companies

Captive leasing companies are usually subsidiaries whose primary business is to perform leasing operations for the parent company. Parent companies focus on providing various properties like vehicles, computers, machinery or real estates, and the subsidiary's main task is to lease them forward to the potential customers. Thus, despite most of the products are directly sold to third parties, increasing amount of them are leased through subsidiary companies.

Captive leasing companies have the point-of-sale advantage in finding leasing customers. This is, as soon as parent company receives a possible order, its leasing subsidiary can quickly develop a lease-financing arrangement. Furthermore, the captive lessor has product knowledge that gives it an advantage when financing the parent's product.

The current trend is for captives to focus primary on their companies' products rather than do general lease financing. For example, Boeing Capital and UPS Capital are two captives that have left the general finance business to focus exclusively on their parent companies' products. (Kieso, Weygandt, Warfield 2011, 1121).

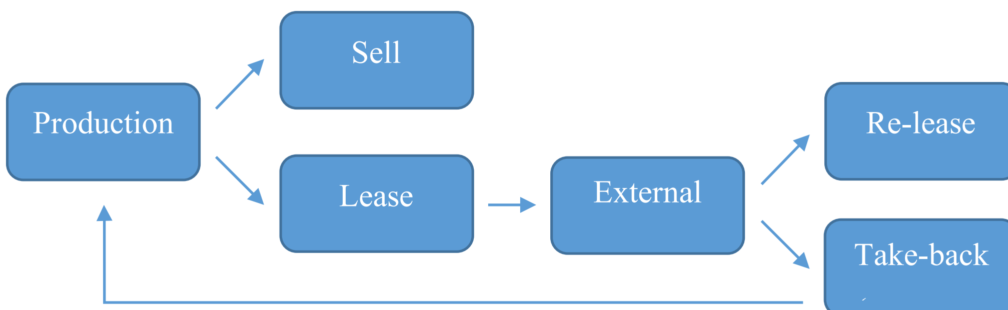

Figure 2. Product life cycle from the viewpoint of a producer who has a leasing subsidiary
Source: (Qian, Burritt 2011, 5)

The figure above clarifies the function of the parent-subsidiary organization and the purpose of captive leasing company. If the parent company is not able to sell the product without financing, the captive leasing company leases the asset and the life cycle of the product after that can be seen on the figure above.

1.2.3. Independents

Independents or sometimes called third-party vendors are the final category of lessors. Independents have not done so well over the last few years. Their market share has dropped fairly dramatically as banks and captive leasing companies have become more aggressive in the lease-financing industry. Independents do not have point-of-sale access, nor do they have low cost of funds advantage. What they are often good at is developing innovative contracts for lessees. In addition, they are starting to act as captive finance companies for some companies that do not have a leasing subsidiary, which could improve their market share in the future. (Kieso, Weygandt, Warfield 2011, 1121).

1.2.4. Current competitive situation among lessors

The current situation at the leasing market is very competitive. These three main lessor groups are fighting over a multi-billion-dollar industry and the profits it can possibly create. Key competition aspects are the cost of funds, the point-of-sale and the flexibility of the lease arrangements. According to recent data retrieved from the *'www.ficinc.com'* on new business volume by lessor type market share are as follows:

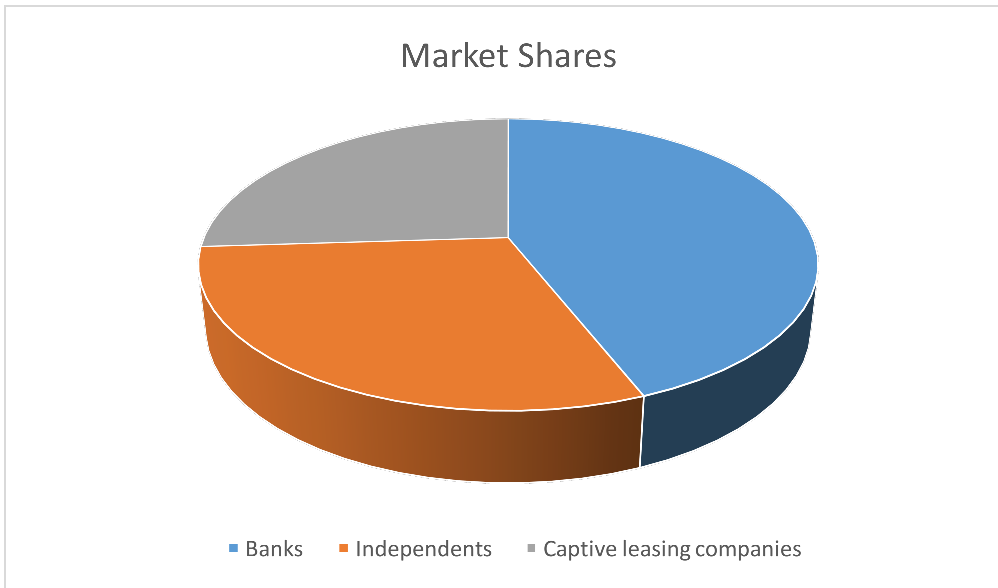

Figure 3. Markets shares of the lessors

Source: (Kieso, Weygandt, Warfield 2011, 1121)

Banks hold approximately 44 percent of the market, followed by independents at 30 percent. The captive leasing companies had the remaining 26 percent of new business. The data shows that both captive leasing companies and banks have increase their businesses at the expense of the independents. Banks have increased their market shares by 58 percent, captive leasing companies by 36 percent. Independents market share has decreased by 44 percent. (Nelson, 2016). (Kieso, Weygandt, Warfield 2011, 1121).

2. ADVANTAGES, LEASING TYPES AND REGULATION

2.1. Advantages of leasing

The growth of leasing an asset rather than owning one indicates that there can be serious advantages in this type of asset acquisition. Companies that lease, tend to be smaller, high growth, and in technology-oriented industries. If only these kind of companies would lease their properties, the number of leasing organizations and the size of leasing industry world-wide would be much smaller. The sheer size of the leasing business indicates that leasing is common variety of industries. Why would a company, who has the necessary capital, choose to lease instead of buy? (Kieso, Weygandt, Warfield 2011, 1120).

2.1.1. 100% Financing at fixed rates

Since many companies are in need of outsource financing, leasing can be a viable option in most of the cases. One of the factors that encourage companies to lease rather search for other possible financing solutions is the fact that leasing contract is often offered with fixed rates. This gives the lessee a protection against possible inflation and the rising of the market interest rates. In addition, the lessee will get the whole amount what is required for purchasing an asset. When negotiating with a bank the given loan amount can often come under the sum what was asked for.

The scarce amount of liquid capital is something that shouldn't be wasted on down payments either, especially in developing companies. Leasing assets helps in that relation too, since often money paid down before the actual fees is not required. This conservation of capital is one of the pros regarding to leasing. In addition, company may preserve the possibility to loan capital for other purposes from financing institutions later on if needed. (Coyle 2000, 25).

2.1.2. Obsolescence of the asset

At the end of the useful life of an asset, whether it's a computer, car or industrial machinery, company owning it faces the problem of having it at their hands. Leasing equipment reduces risk of obsolescence of the asset to the lessee, and in many cases passes the risk of residual value to the lessor, particularly in the operating leases. This gives the lessee a possibility to use the asset for the time of the leasing term and then pass it over to the lessor, who then re-leases it or sells it for profit or loss. Short-term operating leases are particularly popular on industries like information technology, where the working tools have to be updated frequently in order to perform. (Kieso, Weygandt, Warfield 2011, 1122).

2.1.3. Cost

One major advantage of leasing over bank loan or other financing form is the competitive pricing of the lease finance. Since the size of the leasing industry has become so huge leasing companies have to compete with the prices. This gives the lessee a benefit of reasonable rental fees, which often comes with lower costs than a straight forward capital loan.

Leasing usually provides the lessors noticeable tax benefits through depreciation deductions of the assets that are leased out. These tax benefits can be reflected on the amount of the monthly rental fees. For example, small companies in the low tax brackets with low taxable income may lose their current taxation level, if they decide to buy an asset instead of leasing. In these cases, the depreciation deductions usually won't be able to retain the desired level of the past. Through leasing the asset in the other hand are able to remain at the current tax bracket and obtain the use of the wanted asset at a reasonable price. (Kieso, Weygandt, Warfield 2011, 1122).

2.1.4. Flexibility

Leasing contract terms can be tailored to match the customers needs and requirements. This is one of the main things that make leasing such a popular phenomenon. Lessee will receive such great benefits that traditional capital loan, and the bank associated with it can't

give, unless talking about the Fortune 500 companies and the amount they tend to loan. (Lyon 2010, 4).

Innovative lessors can tailor the lease agreement according to the lessee's special needs and at the same time get their needed return on investment. Lessee is often given the opportunity to hand pick the supplier and the product they desire. In addition, there is often room to play in the contract in terms of duration and rental payments. Duration of the lease can vary between a short period of time to the entire expected economic life of the asset. Rental payments, their time frames and the amounts can be adjusted to meet the customers needs. The payments may be level from year to year, or they may increase or decrease in amount over time. In some cases, the rental payments can be adjusted to meet the lessee's individual operational cash flow by means of deferred payments, seasonally-adjusted payments, stepped leases or balloon payments. Often the lease can be extended after the primary period upon request by the lessee. Some cases also allow the lessee to upgrade or replace the asset before the secondary leasing period. (Coyle 2000, 27-28).

Eventually, the lessor should try to make leasing convenient and smooth for the customer, since lessor's profits in this highly competitive industry rely on the customers and the signed leasing contracts. The complexity of the documentation related to leasing is well recognized by the leasing companies. Since they don't want to deter the amount of potential leases, the procedures and documentation for the lease applications have been simplified with the exception of leases for more expensive items.

2.1.5. Off-balance-sheet financing

The reluctance to record lease obligations as liabilities is one of the primary reasons for some companies to choose to finance their assets using leasing. There are certain leases, to be more specific, operating leases, that might not add the amount of leasing debt on the statement of financial position, balance sheet. According to the current accounting standards this is the case in many countries, if the type of lease is operating lease. (Lyon 2010, 4).

When company agrees to lease a property and gain the use of the asset it generally has two accounting options. The first option is to exclude the assets entirely from the balance sheet. This means that there are no records on the balance sheet showing the fixed assets neither the capital liabilities. The justification comes from the fact that legally the assets aren't really

owned by the company, but lessor and he holds the main risks and rewards related to the ownership of the asset. The second option for the lessee is to recognize that it holds these assets and has the unrestricted ability to use them, similarly to ownership. In this case, the lessee will record the leased assets in the balance sheet as fixed assets, and the leasing obligations as capital liabilities. (Kieso, Weygandt, Warfield 2011, 1122-1123).

However, the accounting standards and rules about lessee's obligation to report the leasing related financial information in the balance sheet or not, vary depending on country and according to the type of the lease. In most of the countries finance lease needs to be shown on the balance sheet and operation lease can be left off. This gives companies the possibility to affect certain financial ratios, which can be beneficial for some of them. (Coyle 2000, 28-29).

2.2. Different leasing types

There are differences in how companies lease their assets and which type of lease they use. Leasing contracts can be divided into two different types. One is operating lease, which is usually used when the leasing period is shorter than the useful life of the asset. This also determines that the lessor won't be expecting to recover the full price of the asset through lease payments. The second leasing type is finance lease, sometimes called capital lease, financing lease or full pay-out lease. This type of lease agreement is used when the lease term is expected to be longer, usually longer than three years. At the end of the leasing term it is expected that the asset, which is under contract, won't have much or no residual value left. The forces the lessor to get the full price of the asset plus some interest through the leasing payments. (Coyle 2000, 31;35).

2.2.1. Finance lease

Finance lease is a viable option in a situation where company seeks to obtain long-term asset and wants to use outsource financing to do so. The holding period of the asset can vary, but the idea of the finance lease is that the primary leasing period last as long as or more than 75 percent of the economic life of the asset. Typical lease period can be anything between three- to five years. To put it bluntly, five-year primary lease periods are common for plant and

machinery items, and periods of approximately 10 years are typical for ships, airplanes and railway rolling stock. This is to give some perspective, but there are much longer finance lease periods as well, generally related to high value items.

The key fundamentals behind finance lease from the lessor's point of view are following:

- Recovering the cost of the asset
- Covering own financing costs
- Covering administrative expenses
- Earning profit

In order for the investment to be profitable from the lessor's point of view factors above need to be considered and fulfilled during the primary leasing period. These are the drivers of the lease payments that eventually face the lessee. (Coyle 2000, 35).

Finance leasing contracts are usually made in such terms that the maintenance, service and insurance obligations of the item are lessee's responsibilities. This is because the lessee will use the asset for the most of its economic life, if not the whole life. Terms also ensure that all the risks and rewards commonly associated with the ownership are often lessees to keep.

Accounting standards and regulations used in most of the countries related to finance lease are more or less similar to every other asset purchase made using outsource financing. The actual item and its book value has to be recorded at the balance sheet in the assets. On the other side of the balance sheet liabilities associated with the leased asset has to be recorded. During the leasing period and assets economic life, depreciations and amount of liabilities are deducted in a normal accounting manner.

What happens at the end of the primary leasing period is often predetermined in the leasing contract. Since the economic value of the item after finance leasing period, which usually last as long as the economic life of the asset, is low or non-existent the lessee has a possibility to gain the title to the asset with small investment, usually under fair market value, by undertaking a lease purchase. Another possible outcome of the contract is that the lessee helps the lessor to sell the asset and gets a predetermined percentage of the resale price. However, the most usual procedure after the leasing contract expires is that the the ownership of the asset stays with the lessor and the item is handed to him. (Heinonen, Trebs 2011, 26-28). (Moretto, Tagliavini 2009, 1-2).

2.2.2. Operating lease

Operating lease's fundamental idea is that the leasing period is much shorter than the useful life of the item under contract. The assumption is that the asset will have significant residual value after the leasing period. This gives the lessor an opportunity to eventually sell the asset at secondary markets after the leasing contract has ended. From the lessee's point of view operating lease can be commonly regarded as rental agreement. Typical duration for operating lease is between two to three years, but in some cases it can be longer.

In order to understand what is expected as lease payments it is beneficial to look at what the lessor gains from the asset that is leased out as operating lease. The total returns from the leased asset from the lessor's point of view comes from two components:

- The lease rental payments
- The resale value of the asset after the leasing period

If lessor wishes to gain some profit, he has to have understanding what is the resale value of the asset after some time and usage. However, the resale value can't be known exactly and that is why the lease payments usually have some extra, which makes the investment worthwhile for the lessor. (Coyle 2000, 31).

One of the biggest difference between finance lease and operating lease is the way they are reported in the balance sheet of the lessee. When finance lease is reported more or less the same way as an asset that is purchased with a capital loan, operating lease is not. According to current accounting standards, in most of the countries operating lease puts nothing to lessee's financial statements other than expense appearing in income statement. (Wainman 1995, 102). If operating leases are used in significant quantities, the information on balance sheet can give falsified picture of the company's financial status.

Another feature that is critical to notice in the operating lease is that the residual value and the risk associated with it is fully on the lessor hands. The lessee has no opportunity to gain the ownership nor share of the resale value after the leasing period. This makes the operating lease fairly care-free for the lessee since he doesn't have to be concerned of the items life after own usage. In addition to the residual risk, usually it is lessor's responsibility to take care of the maintenance, service and the insurance of the asset. (Heinonen, Trebs 2011, 28-29).

Operating lease is ideal option for companies who are looking to continually modernize or upgrade their assets. At the same time operating leases are only attractive for lessor, when

there is a reasonably liquid second hand market for the assets. Assets that are usually leased under the terms of operating lease are widespread and can be generally any marketable items such as motor vehicles, airplanes, computers, phones or industrial machinery.

The Table 2 summarises the key differences between finance lease and operating lease.

Table 2. Differences between finance- and operating leases

Finance Leases and Operating Leases Compared

	Finance lease	**Operating lease**
Alternative terms	Capital lease (US), Lease rental	True lease (US), Operating rental, Rental
Choice of asset	By the lessee	By the lessee, or available from the lessor's own equipment range
Primary lease period	Most of the asset's useful life, but not longer	Shorter than a finance lease for a similar asset
Secondary lease period	Lease period can often be extended, for a nominal rental	If the lease is extended, the rental will be at a market cost (based on the asset's current value)
Lease rentals	Sufficient to recover the capital cost of the asset. Total rentals payable higher than for operating lease	Usually the lessee's rentals alone are insufficient to provide the lessor's required return on investment. The residual value of the asset is significant
Residual value	Rental cover the cost of the asset	Rental structure takes into account the estimated residual value of the asset to the lessor
Early termination	Early termination clause during the primary lease period is uncommon	Early termination sometimes allowed
Maintenance and insurance	Lessee's responsibility	Lessee's responsibility. Lessor could impose more exacting requirements in the lease
Ownership (UK)	Asset owned at all times by the lessor during the lease period	Asset owned at all times by the lessor during the lease period
Ownership (US and other countries outside the UK)	Lessee can purchase the asset at the end of the lease without affecting the tax position of the lessor or lessee	Asset returned to lessor for sale or re-leasing
Disposal at end of lease	The purchase price is well below realizable water In the US and UK, the lessee often acts as the lessor's agent to sell the asset. The lessee receives most of the sale proceeds	Asset returned to lessor for sale or re-leasing

Source: (Coyle 2000, 41)

As explained in the Table 2 the differences between finance and operating lease contracts can be different depending on the case. Sometimes it can be hard to point out the exact line between these two contract. However, often the deciding factor is that the finance lease covers most of the assets economic life. Another is that the risk and rewards related to ownership are more evenly distributed between lessor and lessee, even tough the legal ownership often is lessor's. This classification defines, which accounting principles are applied to the leased asset in the lessee's financial statements.

2.3. Regulators and their mission

There has been a lot of debate claiming that leasing gives companies the possibility to hide their risk. To be more exact, operating lease is the form of leasing that gives this opportunity, since there are no visible records of the liabilities in the financial statements. Before diving into the regulations and the future changes that could have an impact to company leasing, the paper takes a look what kind of organizations regulate the leasing business.

The people at the International Accounting Standards Board are responsible for the development and publication of the International Financial Reporting Standards. According to their own website: "The International Accounting Standards Board (IASB) is an independent group of experts with an appropriate mix of recent practical experience in setting accounting standards, in preparing, auditing, or using financial reports, and in accounting education. Broad geographical diversity is also required."

The IFRS (International Financial Reporting Standards) Foundation and the International Accounting Standards Board (IASB) were established in 2001, replacing the International Accounting Standards Committee (IASC), which was set up in 1973. The Foundation is an independent, privately organized, non-profit organization, which task is to operate in order to serve the public interest. Basically, it is operating to provide a set of requirements which companies have to follow when preparing financial statements and their content. The set of requirements given by the International Accounting Standards Board are called IFRS Standards. They concern publicly accountable companies, which are those listed in the stock exchange and financial institutions such as banks. IFRS states that their mission is "To develop IFRS Standards that bring transparency, accountability and efficiency to financial

markets around the world. Our work serves the public interest by fostering trust, growth and long-term financial stability in the global economy.” (Who … 2017,1-3).

IFRS Standards:

- bring **transparency** by enhancing the international comparability and quality of financial information, enabling investors and other market participants to make informed economic decisions;
- strengthen **accountability** by reducing the information gap between the providers of capital and the people to whom they have entrusted their money. Our Standards provide information that is needed to hold management to account. As a source of globally comparable information, IFRS Standards are also of vital importance to regulators around the world;
- contribute to economic **efficiency** by helping investors to identify opportunities and risks across the world, thus improving capital allocation. For businesses, the use of a single, trusted accounting language lowers the cost of capital and reduces international reporting costs.

Figure 4. IFRS Standards’ purpose in depth

Source: (Who … 2017,1)

The Figure 4 explains why the International Financial Accounting Standards exist. The key purposes are to bring transparency, accountability and efficiency into financial accounting. Current regulations regarding to leasing are called International Accounting Standards 17 (IAS 17). Its key regulations concerning leasing are described in the next chapter.

2.3.2. IAS 17 on leasing contracts

The current IAS 17 defines that the following terms on the contract would result the lease contract to be classified as finance lease:

- According to contract the ownership of the item transfers to the lessee by the end of the leasing period
- The lessee has a right to purchase the asset at a price that is expected to be lower than the fair market price of the asset at the end of the leasing period
- The leasing period covers the most of the assets economic life, even if the ownership does not transfer to the lessee
- The minimum lease payments cover the most of the asset fair market value at the beginning of the contract

- The leased assets are extraordinary in a way that the lessee can use them without significant changes

In addition, the IAS 17 describes the following recognizable characteristics of a finance lease contract:

- The lessee can terminate the leasing contract, but the lessee has to cover the financial losses that occurs to the lessor in this situation
- The risks and rewards of the residual value are lessee's
- The lessee can continue the leasing period with a lower than market rent for additional leasing period

According to IAS 17 the examples above are not always the deciding factors. If it is decided that the key risks and rewards of ownership aren't transferred in the leasing contract, it is classified as operating lease contract or other leasing contract. (Kallunki, Lantto, Sahlström 2008, 58-59).

2.3.2. Future changes in regulation

In January 2016, International Accounting Standards Board published a new IFRS 16, which no doubt started a new era at the accounting principles of leasing contracts, at the least from the lessees' point of view. According to the earlier International Accounting Standards (IAS 17), lessee had to make a clear difference between finance and operating leases. Defining the difference between these two leasing types created many of the problems associated with the IAS 17 (Knubley 2010, 3). Finance lease contracts had to be included on the balance sheet, but operating lease contracts were recorded simply as expenses in the income statement (Beckman 2016, 4). The regulations on the new IFRS 16 describes that the classification between finance and operating leases are not made and from accounting perspective every leasing contract is treated as finance lease. This basically means that all of the lessees' lease contracts has to be recorded on the financial statements. If the company has many operating leases, this could have big impact on the company's financial statements.

The current IFRS allow companies to record some of their leased assets and the payments they include as expenses. That basically means that leasing doesn't affect company's balance sheet performance in any way. This way companies can hide their actual financial liabilities from the audience and be more leveraged than it seems from the financial

statements. The new IFRS 16 is making this hiding of the indebtedness through operating leasing impossible since the leased assets have to be recorded as they are assets and liabilities. (Churyk, Reinstein, Lander 2015, 3-4)

First and foremost, this new regulation will have an impact on the balance sheet. Key ratios related to debt, equity and their relationship will change, if company has operating leases on their account. Secondly, income statement is going to be under influence by the new accounting standards. According to the current IAS 17 company records both the principal and the interest expenses related to operating lease as rent expenses to the income statement. The rent expenses are recorded as earnings before interest, taxes, depreciation and amortization. The result in the income statement is that EBIT and EBITDA will grow in companies, who use operating leasing in larger content, since now depreciation, amortization and interest expenses are separated. Another factor increasing the EBIT and EBITDA is the fact that the operating lease contracts are currently creating less expenses at the beginning of the leasing period, since the payments are fixed, where as finance lease, to which the operating leases are going to be transferred into, payments are high at the beginning and decrease gradually. All these changes in the income statement will have an effect in the statement of cash flows as well. According to IAS 17 leasing contracts named as operating leases and lease payments related to them are presented as operating cash flows of the company. When IFRS 16 becomes the new standard only the interest of the lease payments is stated on the operating cash flows and the principal amount is recorded on the financing cash flows. (In depth … 2016, 1)

Overall the new IFRS 16 Leases will have substantial effect on many companies' financial statements, since many of them are using operating lease contracts to finance their assets. Despite the new standards doesn't have many new accounting regulations related to lessor, they have to adjust their contracts and procedures to match their customers needs and requirements. Currently companies are preparing for the changes, since the new IFRS 16 will become effective for annual periods beginning on or after 1st of January 2019 (Applying … 2016, 3).

3. NEW STANDARDS AND THEIR EFFECT ON COMPANIES

The IASB and FASB boards decided to require all leases to reported on the balance sheet. The impact of this change in the IFRS standards could be substantial to many lessees' financial reporting, asset financing, information technology controls and systems. Naturally, the impact will be much bigger on the entities, which have 'big-ticket' items under operating lease terms. These items could include real estate, manufacturing equipment, aircraft, trains, ships, computers and technology. At the same time companies with numerous small operating leases, such as office equipment and cars would be affected. Naturally, the only case where company wouldn't be affected by the changed standards is when it has no operating lease contracts at all. However, most of the companies have operating leases and the reason why they are so popular currently is mainly because the financial liability it carries doesn't show in the balance sheet. This makes the impact of the IFRS 16 globally significant. (The Future … 2010, 3).

The general hypothesis of the theoretical part of the research is that balance sheets will grow, leverage ratios will increase and capital ratios will decrease. In addition, there will be change in both the expense character and the recognition pattern. Currently operating leases are characterized as rent expenses, but the new regulations will replace it with depreciation or amortisation and interest expense. Related to expense recognition pattern, there will be significant acceleration of total expense recognition relative to recognition pattern under current rules. This causes that the performance measures such as earnings before interest and taxes (EBIT) and earnings before interest, taxes, depreciation and amortization (EBITDA) will change. The changes inside the company won't be only numerical and financial. In order to keep track of the lease obligations, ongoing measurement will be needed. This could cause companies significant changes in internal controls and accounting systems. Eventually this will effect companies' future 'lease or buy' decision. (Singh 2011, 17).

3.1. General direction of the changes

Estimating the effects of the new IRFS 16 Leases to companies' financial statements and the key financial ratios is rather difficult, since the records of operating leases in the current annual reports are somewhat inadequate. The following research face is done purely on theoretical basis with the help of previous researches made on the subject. The study focuses on the changes happening in the financial statements of companies when the new accounting standards come into effect and the changes it causes to ratios related to the subject.

Every essential financial statement will be affected by the new rules on operating leases, some more and some less. This change in the values on financial statements will have an effect on the essential ratios related to the subject. At first it is beneficial to look at more simplified income statement and balance sheet in order to see which components will change and what is the direction of the change. The Table 3 and Table 4 were made using Microsoft Excel and the figures are taken from Company X's annual report to be able to reflect the possible changes in most understandable way possible. The Table 3 is a theoretical illustration of the changes that could happen in the income statement. The proposed direction of the components in the income statement are visible in the right side of the Table 3 under 'Change' cell. The biggest changes that the IFRS 16 will cause can be seen on the balance sheet at the Table 4, which will give similar overview of the changes as the Table 3 gives regarding to the income statement.

3.1.1. Income statement

The theoretical impact and the direction of the change on the income statement and its components can be seen on the Table 3.

Table 3. Changes in the income statement

Income Statement, Company X	Before IFRS 16	Change
Revenue	1 000 000	none
Cost of good sold	300 000	none
Gross profit	**700 000**	none
Salaries expense	125 000	none
Marketing expense	100 000	none
Rent expense	70 000	decrease
Administrative expenses	75 000	none
EBITDA	**330 000**	increase
Depreciation/Amortization	10 000	increase
EBIT	**320 000**	increase
Interest expense	20 000	increase
Income before income tax	**300 000**	dependable
Income tax expense (35%)	105 000	dependable
Net income	**195 000**	dependable

Source: (Company X 2016)

The first thing that is affected by the new IFRS 16 accounting standards is the rent expense. Under the current standards, operating lease payments can be recorded by adding the total annual amount of the leasing payments to 'rent expenses'. According to the new standards that is no longer valid. The 'rent expenses' will decrease since the operating lease payments are mostly going to be recorded as depreciation or amortization and interest expenses. This change in the rent expenses, which generally regarded under operating expenses will affect the earnings before interest, taxes, depreciation and amortization (EBITDA) and earnings before interest and taxes (EBIT). As a result, they both will increase. As stated before the lease payments will be recorded as depreciation or amortization, depending on the item, and interest expense. The outcome of this change is increased depreciation or amortization and interest expenses. However, the amount that was previously recorded as rent expense is rarely exactly the same as the sum of depreciation or amortization and interest expense. Especially at the beginning of the lease period the costs occurring, according to new standards, tend to be higher that similar costs related to current operating lease. This happens because of the interest payments, which will usually decrease overtime depending on the contract. This will cause that the income before taxes and the eventual net income will slightly decrease, if the lease contracts are at the

beginning of their life cycle. Towards the end of the leasing period they will increase again and that's why the change really is dependable on the contracts company holds. (Singh 2011, 11).

3.1.2. Balance sheet

The theoretical impact and the direction of the change on the balance sheet and its components can be seen on the Table 4.

Table 4. Changes in the balance sheet

Balance Sheet, Company X		Change
	Before IFRS 16	
ASSETS		
Current assets		
Cash	345 000	dependable
Accounts receivable	100 000	none
Inventory	300 000	none
Short-term investments	125 000	none
Total current assets	870 000	dependable
Property, plant and equipment	725 000	increase
Other long-term investments	250 000	dependable
TOTAL ASSETS	**1 845 000**	increase
LIABILITIES		
Current liabilities		
Accounts payable	40 000	none
Notes payable	65 000	increase
Accrued liabilties	55 000	none
Income taxes payable	60 000	dependable
Other current liabilites	65 000	increase
Total current liabilities	285 000	increase
Long-term debt	320 000	increase
Deferred income taxes	120 000	none
Other long-term liabilites	100 000	dependable
TOTAL LIABILITIES	825 000	increase
OWNER'S EQUITY		
Share capital - common	825 000	none
Retained earnings	195 000	dependable
TOTAL OWNER'S EQUITY	1 020 000	dependable
TOTAL LIABILITIES & OWNER'S EQUITY	**1 845 000**	increase

Source: (Company X 2016)

All the changes happening in the balance sheet depend on what kind of item is in question. Starting from the top the first asset class current assets. General rule is that assets and investments that have economic life of one year or less are recorded as current assets. All the asset classes under current assets are most likely going to be unaffected by the IFRS 16, since there is a relief that concerns leasing contracts lasting under 12 months. These contracts are not obliged to be recorded on the balance sheet. In total the changes in the current assets will be hardly noticeable or non-existent. If entity holds any operating leases, long-term assets are most likely going to be affected. However, cash balance might be affected in relation to the net income. Growth in the asset classes like property, plant and equipment as well as other long-term investments are more than likely, since the undepreciated value of the leased asset is recorded in these brackets. The growth in long-term assets inevitably affects the total monetary amount of assets, which can be seen as increased total assets. Another side of the balance sheet, which includes liabilities and shareholder’s equity is probably going to be affected even more than the assets, not by amount, but the relation. Generally, the balance between equity and liabilities are going to be more heavy on the liabilities side after the new standards take place. As leased item is always financed by using someone else’s money, we’re always talking about liabilities in this context. The new standards are going to increase the total amount of current liabilities. To be more specific, asset classes like notes payable, other current liabilities and lease liabilities are going to grow in amount. In addition, it is safe to assume that the income taxes payable is affected too by the relative change in the net income. Depending on the nature of the lease, long-term liabilities are affected too. Increased long-term debt and other long-term liabilities are more than likely. As the total liabilities grow the retained earnings and total equity are affected in relation to the net income of the entity. However, as written, this is dependable in many cases, since the total expenses of the life time of lease contract is not going to change it’s just going to be patterned differently. (Singh 2011,11).

3.1.3. Summary

The following list is presented in order to conclude the most important changes in the income statement as well as the balance sheet, when the lease contract is new:

- Increased EBIT and EBITDA, from short sighted point view, can be seen as a positive outcome, but after interest and depreciation/amortization expenses this positive outcome is reversed.
- Net income, as a primary measurement of entity's capability to perform and create wealth, is going to decrease. This is a negative change.
- Increased assets as independent factor doesn't create so much concern. It can be seen as a positive or negative change depending on the company, but the productivity of the assets is going to decrease, which is negative.
- Increased liabilities. This is the biggest and most concerning change due to the new standards. Companies, which have large amount of operating leases are most likely going to face financial distress.
- Retained earning are directly affected by the changes in the net income. Less retained earnings directly affect the company's equity and this can have effect to its capability to invest, grow and so on.

3.2. Financial ratios

The changes in different factors in the balance sheet and income statement will cause related financial ratios to change as well. From companies as well as investors point of view this change is not ideal in most of the situations. The capitalization of the operating leases can lower the rates of return and increase leverage ratios, which can make the company less attractive to present and potential investors.

The following ratios were selected because they are most likely to be impacted due to the changes in the balance sheet and income statement. In addition, the significance of the ratios to companies and their valuation were a factor. Selected financial ratios and their formulas:

- ROE (return on equity) = Net Income/Total Equity
- ROA (return on assets) = Net Income/Total Assets
- Operating margin = Operating Profit/Net Sales
- Current ratio = Current Assets/Current Liabilities
- Interest coverage ratio = EBIT/Interest Expense
- Equity to assets = Total Equity/Total Assets

- Debt to equity = Total Liabilities/Total Equity. (Financial … 2010, 2;13-17;23;25-26).

Return on equity (ROE) is a ratio, which basically indicates how much net profit company is able to generate with shareholder's equity on percentage basis. The bigger the percentage is the better it is for the company and eventually for the shareholders. Return on assets (ROA) in the other hand tells what is the relation between net profit and total assets. In another words, how well the company manages to turn its assets into net profit. Operating margin as a ratio reveals what portion of the sales revenue are eventually left after operating expenses. Operating profit basically equals to EBIT, since it covers all the expenses needed to run the company plus depreciation and amortization. It is crucial to understand that operating profit excludes expenses such as interest expense, investment expenses and tax expenses. All the ratios mentioned above are commonly referred as profitability or efficiency ratios. Following ratios are called solvency, gearing or leverage ratios, which are used to analyse entity's financial leverage and its capability to meet its obligations. Current ratio reveals how well company is able to meet its current liabilities with its current assets. It gives a picture of the entity's liquidity and solvency. Interest coverage ratio is used to determine how easily company is able to pay the interest expenses of its outstanding debts with the profit it creates. Equity to assets ratio highlights the relationship between shareholder's equity and company's assets. This basically tells how large part of the assets shareholders would receive in the company-wide liquidation. Debt to equity ratio is probably the ratio that is the most essential to this analyse. It is used the determine the financial leverage company uses. Basically, what part of the assets are financed using liabilities in relation to shareholder's equity. (Financial … 2010, 2;13-17;23;25-26).

The Table 5 represent the selected financial ratios and the changes they are most likely going to face when the current operating leases are recorded into the income statement and balance sheet in the future.

Table 5. Illustration of the changes in the selected financial ratios

Selected ratios, Company X		Change
	Before IFRS 16	
Return on equity	19,1 %	dependable
Return on assets	10,6 %	decrease
Operating margin	32,0 %	Increase
Current ratio	3,05	decrease
Interest coverage ratio	16,0	decrease
Equity to assets	0,55	decrease
Debt to equity	0,81	increase

Source: (Company X 2016)

ROE is calculated on basis of two figures, which direction of change depends on the age of the leasing contracts and the decisions company makes. If the leasing contracts are relatively new and the interest expenses are high, net income will decrease and the probable outcome is that the retained earnings, which are part of shareholder's equity will decrease in the same relation. This equals that the changes happening in the return on equity might not be that significant. ROA in the other hand is going to take a negative impact once operating lease contracts are going to be recorded on the financial statements. Net income will most likely decrease at the beginning and the assets are going to increase significantly. This will result that we might see relatively significant decreasing in the return on assets. Operating margin takes into account operating profit, similar to EBIT, and net sales. Since earnings before interest and taxes are most likely going to increase and the net sales are going to be stationary, at least in theory, operating margin is going to increase. This is positive change, but probably not so significant in general. The biggest changes are going to happen in liquidity, leverage and solvency ratios. Current ratio is calculated by using current assets and current liabilities. Since lease contracts under one year are not going to be shown in the balance sheet and the current liabilities are going to rise, this ratio is going to be decreased. This tells the potential investors that the company is not able to meet its current liabilities with its current assets as well as before. Interest coverage ratio is calculated based on the EBIT and the interest expense. Since interest expense is estimated to rise more in relative to earnings before interest and taxes, this ratio is probably going to decrease. Again this shows that the company is not able to pay its interest expenses

with its earnings as well as before. Equity to assets ratio illustrates the relationship between equity and assets. The equity is most likely going to decrease rather than increase and the assets are definitely going to increase the result is that equity to asset ratio is going to decrease significantly. Last but not the least, debt to equity ratio is the ratio, what is the most concerning of all. It describes the relationship between liabilities and equity, which highlights the leverage used. This ratio is going to increase, since liabilities are going increase and equity is most likely going to decrease. In most of the situations this can be seen as a negative impact, of course depending on the current state of the leverage. (Wong, Joshi 2015, 32-33).

3.3 Case: Company X

The following chapter will show the impact of the IFRS 16 accounting principles in the Company X, introduced in the previous chapter. The effect will be illustrated in the income statement, balance sheet and eventually in the selected financial ratios. The impact of the new standards is that current operating leases are going to be recorded in the financial statements the same way that finance leases are recorded currently. In this research wanted outcome is achieved by adding two components similar to the asset in the Table 6.

Table 6. Expense differences between finance lease and operating lease

Finance lease versus operating lease						
year	Depreciation	Executory costs	Interest	Total charge	Operating lease charge	Difference
2019	25000	2500	9502,30	37002,30	32477,03	4525,28
2020	25000	2500	7454,83	34954,83	32477,03	2477,80
2021	25000	2500	5202,60	32702,60	32477,03	225,58
2022	25000	2500	2725,40	30225,40	32477,03	-2251,63
2023	25000	2500	0,00	27500,00	32477,03	-4977,03
TOTAL	125000	12500	24885,125	162385,13	162385,13	0,00

Source: (Company X 2016)

Table 6 is an illustration of the differences between the expenses of finance lease and operating lease. Since the IFRS 16 is going to basically make the current operating leases appearing as

finance leases in the future, Table 6 is a helpful tool to show the appearing differences in the financial statements.

By recording the corresponding expenses, assets and liabilities the following income statement by Company X from 2019, we can see the following changes presented in the Table 7.

Table 7. Actual and relative impact in the Company X income statement

Income Statement, Company X			Change	
	Before IFRS 16	After IFRS 16	Actual	Relative
Revenue	1 000 000	1 000 000	0	0 %
Cost of good sold	300 000	300 000	0	0 %
Gross profit	**700 000**	**700 000**	0	0 %
Salaries expense	125 000	125 000	0	0 %
Marketing expense	100 000	100 000	0	0 %
Rent expense	70 000	10 046	-59 954	-85,65 %
Administrative expenses	75 000	75 000	0	0 %
EBITDA	**330 000**	**389 954**	59 954	18,17 %
Depreciation/Amortization	10 000	60 000	50 000	500,00 %
EBIT	**320 000**	**329 954**	9 954	3,11 %
Interest expense	20 000	39 005	19 005	95,02 %
Income before income tax	**300 000**	**290 949**	-9 051	-3,02 %
Income tax expense (35%)	105 000	101 832	-3 168	-3,02 %
Net income	**195 000**	**189 117**	-5 883	-3,02 %

Source: (Company X 2016)

The results of the empirical research are similar to the results of the theoretical research. Rent expenses, which previously included the operating lease payments are decreased by the equal amount minus the executory costs, which are still recorded as rent expenses. The result is that EBITDA and EBIT are increased quite significantly. The depreciation or amortization expenses and interest expenses are increased by the equal amount of first year depreciations and interest expenses represented in the Table 6. The eventual outcome of the implementation of the IFRS 16 into the income statement is that the income before taxes is decreased by the difference of the first year payments in the Table 6, which result that the net income is decreased by 3,02%. However, it is important to understand that this change in the net income will even out through the life of the lease, since the eventual total expenses of the leases are the same. This is why the change in the net income is dependable on the age of the leasing contracts company holds.

The impact on the balance sheet of the Company X is significant, as represented in the Table 8.

Table 8. Actual relative impact in the Company X balance sheet

Balance Sheet, Company X			Change	
	Before IFRS 16	After IFRS 16	Actual	Relative
ASSETS				
Current assets				
Cash	345 000	337 307	-7 693	-2,23 %
Accounts receivable	100 000	100 000	0	0 %
Inventory	300 000	300 000	0	0 %
Short-term investments	125 000	125 000	0	0 %
Total current assets	870 000	862 307	-7 693	-0,88 %
Property, plant and equipment	725 000	975 766	250 766	34,59 %
Other long-term investments	250 000	250 000	0	0 %
TOTAL ASSETS	**1 845 000**	**2 088 073**	243 073	13,17 %
LIABILITIES				
Current liabilities				
Accounts payable	40 000	40 000	0	0 %
Notes payable	65 000	95 766	30 766	47,33 %
Accrued liabilties	55 000	55 000	0	0 %
Income taxes payable	60 000	58 190	-1 810	-3,02 %
Other current liabilites	65 000	85 000	20 000	30,77 %
Total current liabilities	285 000	333 956	48 956	17,18 %
Long-term debt	320 000	520 000	200 000	62,50 %
Deferred income taxes	120 000	120 000	0	0 %
Other long-term liabilites	100 000	100 000	0	0 %
TOTAL LIABILITIES	825 000	1 073 956	248 956	30,18 %
OWNER'S EQUITY				
Share capital - common	825 000	825 000	0	0 %
Retained earnings	195 000	189 117	-5 883	-3,02 %
TOTAL OWNER'S EQUITY	1 020 000	1 014 117	-5 883	-0,58 %
TOTAL LIABILITIES & OWNER'S EQUITY	**1 845 000**	**2 088 073**	243 073	13,17 %

Source: (Company X 2016)

The changes in the current assets are dependable on the age of the leasing contract and its impact on the net income. This empirical research was done by adding a lease contract in its first year so the changes in the cash balance are negative as the retained earnings decreased. Previously hidden value of the leased asset can be now seen on the long-term assets. Either in the property, plant and equipment or in the other long-term assets depending on the nature of the item. In this research assets were added on the property, plant and equipment. This result that the total assets are increased by the total payments left on the leased assets after the first year payments minus the actual decrease in the net income and the changes in the income taxes payable. Total current

liabilities are increased by the impact in the notes payable, income taxes payable and the other current liabilities. Notes payable are increased by the interest payments left on the leasing contract after the first year. Similar increase can be seen on the other current liabilities, which include the executory costs left on the leasing contract. Income taxes payable are decreased relative to the decreased income tax expenses. Long-term liabilities are increased by the amount of the depreciation left on the leased asset after the first year depreciation. Finally, the shareholders' equity is decreased by the change in the net income, which can be seen in the retained earning directed back into the company.

The outcome of the new standards is that the company now has balance sheet, which has increased by 13,17%, and net income, which has decreased by 3,02%. Both of these changes make performing at the previous level considerably harder. This can be seen in the selected financial ratios in the Table 9.

Table 9. Actual and relative changes in the selected financial ratios of Company X

Selected ratios, Company X			Change	
	Before IFRS 16	After IFRS 16	Actual	Relative
Return on equity	19,1 %	18,6 %	-0,5 %	-2,5 %
Return on assets	10,6 %	9,0 %	-1,5 %	-14,4 %
Operating margin	32,0 %	33,0 %	1,0 %	3,1 %
Current ratio	3,05	2,57	-0,48	-15,7 %
Interest coverage ratio	16,0	8,5	-7,54	-47,1 %
Equity to assets	0,55	0,49	-0,07	-12,2 %
Debt to equity	0,81	1,06	0,25	31,2 %

Source: (Company X 2016)

Because of the changes in the balance sheet and income statement, the almost every selected ratio has moved into direction, which is not beneficial to the Company X. The first ratio ROE has decreased by 0,5%, which is due to the decreased net income and decreased total shareholders' equity. Even tough the change in the components are by the monetary value the same, relative change has been more significant in the net income. ROA is one of the most important ratios and it has decreased by 1,5%. This change is due to decreased net income and increased assets. The more leased assets company introduces to the financial statements, the bigger the impact will be. Since the sales hasn't actually changed and the EBIT has increased by the decreased rent expenses, operating margin has slightly improved. However, the relative

change of the ratio isn't so significant. Current ratio has decreased by 0,48 points, which might not sound so significant, but the relative change of -15,7% is considerable. The change is the result of increased current liabilities and the decreased current assets. Interest coverage ratio has decreased by 7,54 points, which is significant decrease. This is due to the interest payments, which have nearly doubled. However, the impact is eased by the increased EBIT. The next ratio, equity to assets has decreased by 0,07 points, but the relative change is 12,2%, which is again significant. Increased total assets and the decreased total shareholders' equity are the components behind this change. The last ratio, debt to equity, has increased by 0,25 point, relatively 31,2%, which indicates that the leverage company uses have increased significantly. The change is caused by increased total liabilities and the decreased total shareholders' equity.

3.4. Summary of results

The results of the empirical research prove that the impact by the IFRS 16 on company's financial performance generally is negative. How big the actual impact is, depends on the size of the enterprise and amount of operating leases they hold. The smaller company, the bigger is the impact. The larger is the amount of operating leases, the bigger is the impact. This is the case in most of the situations, but the impact really depends on company itself. There surely are situations where there is no impact to the financial performance at all (Lee, Paik, Yoon 2014, 1-2). However, the results indicate that small companies with large amount of operating leases are going to be impacted in a way that may get them into serious financial distress, more so, if the ratios aren't good to begin with. Particularly start-ups are usually such companies. They use large quantities of leasing relative to their size, which enables them to grow by using equipment that is necessary.

It is important to understand how the finance lease payments are not the same from year to year, but change during the life of the lease. This evolvement of the payments can be seen in the Table 7. At the beginning of the lease period the financial statements and the selected ratios are going to be influenced the most. At the end of the leasing period the payments related to finance lease are often smaller than the operating lease payments of the same asset. This actually improves the net income, and that's why in the earlier illustrations this component of the income statement is marked as dependable (Appendix 1.). Towards the end of the leasing period the

financial liabilities and the asset burdens are going to decrease as well, and eventually at the termination of the lease contract they disappear totally from the balance sheet (Appendix 2.). Obviously, this has an impact on the financial ratios as well (Appendix 3.). However, after the termination of the old leasing contract a new one is usually acquired and the same impact can be seen again. That's why the result in the Appendixes 1, 2, and 3 can't be seen that often, other than in cases that company decides to quit leasing totally. In addition, it is as important to understand that not every leasing contract is at the exact same point of life. The time of the leasing periods vary, starting times of the contracts vary and the value of the assets and corresponding liabilities vary. This makes the changes in the financial statements and financial ratios constant.

Taking into account that the amount of leasing Company X was using in this situation was modest, the impact it had was still significant. The changes that some other companies face could actually be much more significant. The principles can eventually impact the stock markets, leasing companies and individual companies using leasing considerably. This makes the impact of the IFRS 16 globally significant.

CONCLUSIONS

Leasing is an essential part of the modern economy. However, the expertise and knowledge related to it is limited. Only the people using it and working around it really know what the future might bring. The purpose of this bachelor thesis was to introduce information related to leasing, its current status and the future changes.

Development of leasing has been significant during the past 50 years and it has come to the fact that around 30% of new acquisitions on average are made using lease financing. The advantages of leasing rather than owning are clear. Leasing finance covers the full asset price, total costs and the interest rates are fixed and predictable, contract is flexible and drafted according to lessee needs, there is no risk of obsolescence of the asset and most of all current off-balance sheet accounting gives a possibility to the enhance key financial ratios. By summing up the advantages of leasing, it is pretty easy to understand why it is so popular.

Drawing the line between operating lease and finance lease in many situations is rather difficult, but there are essential differences. Operating lease is short-term lease with little risk to the lessee and more of it on the lessor's end. It is not recorded in the balance sheet, but recorded as rent expense, since the asset isn't legally owned by the lessee. At the end of the leasing term the lessor claims the asset to itself and the lessee has no risk of residual value. The finance lease is usually more long-term contract and carries some risks on the lessee end as well, of course depending on the contract details. Unlike operating lease, finance lease is recorded on the balance sheet and the public can see the liabilities and fixed assets as the asset was lessee's own. This is why finance lease is a lot like asset purchase with capital loan. The lessee has more responsibilities related to the maintenance of the asset and, eventually, at the end of the leasing period, he might have the risks and rewards related to the ownership, depending on the contract. Often the details in the contract resembles the situation that the asset would be owned by the lessee.

Leasing however, is debt bearing contract, no matter if its finance or operating lease. Until recent proposals by International Accounting Standards Board (IASB), the legal

interpretations and accounting standards allowed to think and act otherwise regarding to operating lease. Since the International Financial Reporting Standards (IFRS) are changing and the standards regarding to lease accounting are going to change, it is going to have a substantial impact on companies' financial performance. This substantiality is of course affected by the amount of leasing, that individual companies are using. There is no doubt that many companies, which are using large amounts of equipment leasing will have to restructure their financials in order to perform at the same level or better than before. Since the lessee's accounting principles are ought to change, it was worth researching.

The theoretical and empirical research came to the conclusion that the proposed changes introduced in the IFRS 16 could have significant impact to the businesses using operating leases. Analysis revealed a negative impact to the companies, their financial statements and key financial ratios. Key findings indicated that ratios related to the performance and efficiency were impacted negatively. At the same time ratios related to leverage and gearing were increasing and the ratios related to solvency and liquidity were decreasing, indicating increased risk and uncertainty. While the effect of the new regulations from companies' perspective is not ideal, it brings transparency and predictability, which is eventually better for the external parties interested in the subject, because companies are no longer able to hide their risks in operating leases. In a long run, this makes the new IFRS 16 worth it.

Recommendations for further research could be to investigate the actual and relative impact on companies, which have multiple operating leases with different time periods and different due dates. This addition would make the research much more challenging, but could provide more complex information. For individual companies this evaluation of the future changes the IFRS 16 will bring, is necessary. The research will help companies to prepare their actions regarding to the matter. Nevertheless, taking into account the time sensitivity of the matter, the impact in most of the cases can't be fully avoided, but constrained.

Regarding to the hypothesises made in the introduction, they all proved to be somewhat adequate, but the was some additions and slight differences. All in all, this thesis succeeded to provide additional information of the leasing industry and the changes it is going to face.

REFERENCES

Beckman, J (2016). FASB and IASB Diverging Perspectives on the New Lessee Accounting, Implications for Managerial Decision-Making. *International Journal of Managerial Finance*, Vol. 12 No. 2, 2016, pp. 161-176. Emerald Group Publishing Limited.

Canadian Finance & Leasing Association (2010). The History of Leasing. https://www.cfla-acfl.ca/CLEO/Reference_Materials/CLEO_Chapter-History_of_Leasing-Sep3010.pdf (15.4.2017)

Churyk, N & Reinstein, A & Lander, G (2015). Leasing: Reducing the Game of Hiding Risk. *Journal of Accounting & Organizational Change*, Vol. 11 No. 2, 2015, pp. 162-174. Emerald Group Publishing Limited.

Company X (2016). Annual Report.

Coyle, B (2000). Leasing. New York: Glenlake Pub. Co. ISBN 0 81 442512 7 / 97 8081 44251 21

EY (2016). Applying IFRS – A Closer Look at the New Leases Standard. EYGM Limited.

Heinonen, V & Trebs, K (2011). Leasing ja Vuokraus Vaihtoehtoina Reaali-Investoineille - Case Yritys X Oy. Leppävaara: Laurea-ammattikorkeakoulu.

IASB (2017). Who We Are and What We Do. http://www.ifrs.org/About-us/Documents/Who-We-Are-English.pdf (10.4.2017)

Investopedia (2010). Financial Ratios Tutorial.
http://i.investopedia.com/inv/pdf/tutorials/financialratio.pdf (2.5.2017)

Kallunki, J-P & Lantto, A-M & Sahlström, P (2008). Tilinpäätösanalyysi IFRS-maailmassa.
Helsinki: Talentum.
ISBN 978-952-14-1251-6

Kieso, D & Weygandt, J & Warfield, T (2011). Intermediate Accounting, Vol. 2. United States of America: John Wiley & Sons.
ISBN-13 978-0470-61631-4

Knubley, R (2010). Proposed Changes to Lease Accounting. *Journal of Property Investment & Finance*, Vol. 28 No. 5, 2010, pp. 322-327.
Emerald Group Publishing Limited.

Lee, B & Paik, D & Yoon, S (2014). The Effect of Capitalizing Operating Leases on the Immediacy to Debt Covenant Violations. *Journal of Accounting and Finance*, Vol. 14 (6). Northridge: California State University.

Lo, H (1989). History and Development of Leasing in the UK.
Managerial Finance, Vol. 15 Iss. 1/2 pp. 5-12.
Emerald Group Publishing Limited.

Lyon, J. (2010). Accounting for Leases: Telling How It Is.
Journal of Property Investment & Finance, Vol. 28 No. 5, 2010, pp. 328-332.
Emerald Group Publishing Limited.

Moretto, E & Tagliavini, G (2009). Pricing and net profit of operating lease.
Managerial Finance, Vol.35 Iss. 10, pp. 828-840.
Emerald Group Publishing Limited.

Nelson, C (2016). Leasing Industry Records 27 Per Cent Growth. *The Guardian* https://guardian.ng/business-services/money/leasing-industry-records-27-per-cent-growth/ (9.5.2017)

PricewaterhouseCoopers (2010). The Future of Leasing. PricewaterhouseCoopers Oy.

PricewaterhouseCoopers (2016). In depth, Ajankohtaista taloudellisessa raportoinnissa. PricewaterhouseCoopers Oy.

Qian, W & Burritt, R (2011). Lease and Service of Product Life-Cycle Management: An Accounting Perspective. *International Journal of Accounting and Information Management*, Vol. 19 No. 3, 2011, pp. 214-230.
Emerald Group Publishing Limited.

Regalli, M & Tagliavini, G (2003). A New Approach for Estimating the Tax Advantage of Leasing. *Management Research News*, Vol. 27 Iss. 3 pp. 1-31.
Emerald Group Publishing Limited.

Singh, A (2011). A Restaurant Case Study of Lease Accounting Impacts of Proposed Changes in Lease Accounting Rules. *International Journal of Contemporary Hospitality Management*, Vol. 23 No. 6, 2011, pp. 820-839.
Emerald Group Publishing Limited.

Wainman, D (1995). Leasing. London: Waterlow Publishers.
ISBN 0 08 040856 6

Wong, K & Joshi, M (2015). The Impact of Lease Capitalization on Financial Statements and Key Ratios: Evidence from Australia. *Australasian Accounting, Business and Finance Journal*, Vol. 9(3), 2015, pp. 27-44. Melbourne: RMIT University

APPENDICES

Appendix 1. Impact on the income statement at the end of the leasing contract

Table 11. Impact on the income statement at the end of the leasing contract

Income Statement, Company X			Change	
	Before IFRS 16	After IFRS 16	Actual	Relative
Revenue	1 000 000	1 000 000	0	0 %
Cost of good sold	300 000	300 000	0	0 %
Gross profit	**700 000**	**700 000**	0	0 %
Salaries expense	125 000	125 000	0	0 %
Marketing expense	100 000	100 000	0	0 %
Rent expense	70 000	10 046	-59 954	-85,65 %
Administrative expenses	75 000	75 000	0	0 %
EBITDA	**330 000**	**389 954**	59 954	18,17 %
Depreciation/Amortization	10 000	60 000	50 000	500,00 %
EBIT	**320 000**	**329 954**	9 954	3,11 %
Interest expense	20 000	20 000	0	0,00 %
Income before income tax	**300 000**	**309 954**	9 954	3,32 %
Income tax expense (35%)	105 000	108 484	3 484	3,32 %
Net income	**195 000**	**201 470**	6 470	3,32 %

Source: (Company X 2016)

Appendix 2. Impact on the balance sheet at the end of the leasing contract

Table 12. Impact on the balance sheet at the end of the leasing contract

Balance Sheet, Company X			Change	
	Before IFRS 16	After IFRS 16	Actual	Relative
ASSETS				
Current assets				
Cash	345 000	353 461	8 461	2,45 %
Accounts receivable	100 000	100 000	0	0 %
Inventory	300 000	300 000	0	0 %
Short-term investments	125 000	125 000	0	0 %
Total current assets	870 000	878 461	8 461	0,97 %
Property, plant and equipment	725 000	725 000	0	0,00 %
Other long-term investments	250 000	250 000	0	0 %
TOTAL ASSETS	**1 845 000**	**1 853 461**	8 461	0,46 %
LIABILITIES				
Current liabilities				
Accounts payable	40 000	40 000	0	0 %
Notes payable	65 000	65 000	0	0,00 %
Accrued liabilties	55 000	55 000	0	0 %
Income taxes payable	60 000	61 991	1 991	3,32 %
Other current liabilites	65 000	65 000	0	0,00 %
Total current liabilities	285 000	286 991	1 991	0,70 %
Long-term debt	320 000	320 000	0	0,00 %
Deferred income taxes	120 000	120 000	0	0 %
Other long-term liabilites	100 000	100 000	0	0 %
TOTAL LIABILITIES	825 000	826 991	1 991	0,24 %
OWNER'S EQUITY				
Share capital - common	825 000	825 000	0	0 %
Retained earnings	195 000	201 470	6 470	3,32 %
TOTAL OWNER'S EQUITY	1 020 000	1 026 470	6 470	0,63 %
TOTAL LIABILITIES & OWNER'S EQUITY	**1 845 000**	**1 853 461**	8 461	0,46 %

Source: (Company X 2016)

Appendix 3. Impact on the selected financial ratios at the end of the leasing contract

Table 13. Impact on the selected financial ratios at the end of the leasing contract

Selected ratios, Company X			Change	
	Before IFRS 16	After IFRS 16	Actual	Relative
Return on equity	19,1 %	19,6 %	0,5 %	2,7 %
Return on assets	10,6 %	10,9 %	0,3 %	2,8 %
Operating margin	32,0 %	33,0 %	1,0 %	3,1 %
Current ratio	3,05	3,06	0,01	0,3 %
Interest coverage ratio	16,0	16,5	0,50	3,1 %
Equity to assets	0,55	0,55	0,00	0,2 %
Debt to equity	0,81	0,81	0,00	-0,4 %

Source: (Company X 2016)