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**Article**

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## DIFFERENCES BETWEEN NEW IFRS AND US GAAP LEASE STANDARDS AND THEIR EFFECTS ON PUBLICLY LISTED COMPANIES

KAROLINA WINIARSKA<sup>1</sup>

### Abstract

Leases are quite relevant to a large number of enterprises. Due to the fact that a lease reduces an entity's exposure to risks inherent in asset ownership, it is a widely used method of obtaining access to property, plant and equipment. At the beginning of this article sources of existence of various international accounting standards as well as primary incentives (estimation of unrecognized lease obligations) to change the previous widespread lease standards used by publicly listed companies are mentioned. The IASB and FASB aware of the importance of this issue, put forward new similar accounting solutions. Despite the joint effort, there are some discrepancies between promulgated IFRS 16 and ASC 842. In the article they are divided into three groups of differences (basic, accounting and other lease issues). The main objective of this article is to point out those differences between new lease standards, as well as their distinct effects on the reporting entities' financial statements and crucial financial metrics. In particular, the impact of operating lease capitalization on the Warsaw Stock Exchange entities' assets by sector indices, as well as on EBITDA by industries on the global scale are presented. The article involves research methods such as: analysis of literature, global accounting regulations and financial statements, as well as comparison and deduction methods. The new lease standards have significant impact on those reporting entities with a great number of previous off balance sheet leases. Therefore, Polish sectors such as WIG-ODZIEZ, WIG-TELKOM and WIG-MOTO as well as global industries such as retail, airline and health care are the most affected. This paper may be useful for many users of financial statements (e.g. potential investors), because it provides information about effects of changed lease standards on financial position and performance of the most affected reporting entities.

**JEL classification:** G32, M41, M48

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## INTRODUCTION

Every country has its own individual accounting system. There are significant differences between them. Walton, Haller and Raffournier (2003) pointed out specific economic, cultural and social environmental factors which constantly shapes them. As a consequence, there are various aims and primary principles of accounting throughout the world. They, in turn, result in different ways of measurement, disclosure of information, as well as perception and interpretation of financial statements.

There are many classifications of accounting systems in the literature. The most widespread are Continental and Anglo-Saxon models. They represent groups of countries whose accounting regulations are to some extent similar (Krasodomska, 2010). Another well-known classification based on the strength of capital markets and cultural factors was created by Nobes (1998). He believes that national accounting systems result from the specific source of financing of the business entities. Those systems are divided into two classes - strong capital markets (Class A- accounting for outside shareholders) as well as weak capital markets (Class B- accounting for taxes and creditors). As a consequence, financial statements in every country have been presented in different ways. The globalization process has highlighted considerable differences between those national accounting systems (Mućko, 2009) which have caused a lot of problems for international capital market participants who have to make investment decisions. Moreover, the consolidation of financial statements under various national accounting standards have been very expensive. Those factors have evoked the need for accounting harmonization in order to make foreign financial information comparative (Hołda, 2013).

Nowadays, there are a fair number of of high quality accounting standards around the world. The most widespread are the International Financial Reporting Standards - IFRS based in London (previously the International Accounting Standards - IAS). They are mandatory on over 80 national stock exchanges. US Generally Accepted Accounting Principles (US GAAP), which standardize accounting in the United States together with the US Securities and Exchange Commission (SEC) are equally significant. In general standards establish the main principles for recognition, measurement and then presentation of information in the financial statements, and their goal is to bring transparency and efficiency to

capital markets.

The boards of both standards (International Accounting Standards Board and Financial Accounting Standards Board) have worked closely since 2002. Grabiński, Kędzior and Krasodomska (2013) pointed out the primary objective of cooperation, which relies on the full convergence of their accounting regulations. Their latest updated and promulgated standards concern the lease. This issue is essential due to the fact that leasing is a widely used method of obtaining access to property, plant and equipment for a large number of reporting entities. It provides the lessee with access to the use of assets without the need for large initial outlays. The other reason for the popularity of the lease (especially an operating lease) is its ability to transfer the risks inherent in asset ownership. Under the operating lease, the lessor is the legal as well as the economic owner of the leased asset. As a consequence, he bears the operating risks (e.g. residual asset risk and losses from technological obsolescence of the asset) while the lessee has the right to use the asset. In this way, the lessee reduces his exposure to the risks inherent in asset ownership during the operating lease.

## NEW APPROACH TO LEASING

The most significant incentive to change former standards was the disquieting result of estimation made by the US SEC in 2005. This institution estimated that public companies in the USA had approximately US\$ 1.25 trillion of off balance sheet leases at the time. It was a consequence of the previous regulations. Former lease standards (IAS 17 and ASC 840) required a firm to identify an asset when a lease was economically similar to purchasing the leased asset (Osei, 2017, p. 3-5). In this case it was classified as a capital lease under US GAAP (or finance lease in superseded IAS 17 under IFRS). Expenses associated with this type of leasing included depreciation, as well as interest expense on the lease obligation. Only assets under finance lease were presented in enterprises' statements of financial position (balance sheets). The great number of all other lease activities was reported as an operating lease. They were the off balance sheet leases. Therefore, there were no requirements to recognize the assets or the liability on balance sheets. Instead, they were accounted for similarly to service contracts which was reported in the income statement (Bolea & Cosma, 2012). Typically, the amount of the rental expense was

the same in each period of the lease (straight-line lease expense). It did not provide users of financial statements with comprehensive information about the costs of property, plant, equipment and the sources of funding them. As a result, analysts and investors were not able to compare enterprises which borrow money to buy assets with enterprises that lease them (<https://www.ifrs.org/projects/2016/ifrs-16-leases/#about>). Users had to analyze data merely from lease-related disclosures and make adjustments. Only in that way could they compare companies' financial performance.

The importance of the missing information varied depending on industry, region and even company. However, for a large number of enterprises it was substantial. This lack of transparency of information about appropriate lease obligations raised particular concerns among regulators and the user community. In response to those misgivings, the FASB and IASB in 2008 initiated a joint project to develop new standards to account for leases. Not only did the boards focus on the most problematic lessee's accounting for operating leases, but also the lessor's accounting and concurrently a new proposal on revenue recognition was considered (Revenue from Contracts with Customers issued in 2014: ASC 606, as well as IFRS 15).

In early 2016 the new leases standards were published. ASC (Accounting Standard Codification) 842 became effective for most public companies that follow US GAAP for fiscal years beginning after December 15, 2018. It also included interim periods. However, an effective date for all other enterprises was deferred as it will begin after December 15, 2020 (<https://www.fasb.org/jsp/FASB/Page/SectionPage&cid=1176156316498#2018>). For the above enterprises there is a possibility of early adoption. All of the reporting entities under IFRS are required to apply IFRS 16 for reporting periods beginning on and after January 1, 2019. Particular companies could implement it before that date but only after the application of IFRS 15.

The boards have reached the identical conclusions in many areas of leasing. The most significant are the following joint aspects. The IASB and the FASB hold the common view that at the beginning of a lease transaction a lessee obtains the right to use a particular asset for a specific period of time. Moreover, a reporting company incurs a liability to make payments when they are made over time. As a consequence, they have agreed that a lessee should recognize assets and obligations which have

arisen from those leases. Therefore, the new standards require a firm to present right-of use assets and lease liabilities in balance sheets. Also, the definition of the lease is the same under both standards. For instance in IFRS 16, paragraph B9 it is stated that: "a contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration" (<https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32017R1986&from=PL>). The appropriate lease liabilities are similarly measured too. Initially they are measured on a present value basis. The measurement includes two types of lease payments. Firstly, non-cancellable (including inflation-linked payments). Secondly, payments to be made in optional periods (when the lessee is almost certain to exercise an option to extend the lease, or not to execute an option to terminate the lease). Usually the initial value of the lease liability is equal to the lease asset (<https://www.ifrs.org/issued-standards/list-of-standards/ifrs-16-leases/>). In addition, the boards were consistent with the idea to carry forward the previous requirements of lessor accounting. This solution results in substantially unchanged lessor accounting requirements.

## **BASIC DIFFERENCES**

The IASB and the FASB began this project jointly. However, the boards did not elaborate on identical lease solutions. They diverged in some key areas, which resulted in occurrence of differences in their standards. The most noticeable distinction concerns classifications. The specific type of lease is determined by the terms of a lease arrangement (<https://www.pwc.com/us/en/cfodirect/assets/pdf/accounting-guides/pwc-lease-accounting-guide.pdf>). Lessor under ASC 842 (842-10-55-19) could identify them at the transaction commencement date as:

- 1) sales-type (effectively transfer control of the underlying asset to lessee),
- 2) direct financing (the above condition is not fulfilled, but lessor obtains a guarantee for the value of the asset),
- 3) operating (others).

Under IFRS 16 (par. 61) the lessor continues to classify leases as either operating or finance at the inception date. In general, a finance lease "transfers substantially all the risks and rewards incidental to ownership of an underlying asset" (par. 62). Otherwise, there is an operating lease that does not depend on the form of the



contract, but on the substance of the transaction. The other party of the contract (lessee) recognizes leases in a different way. Under US GAAP they could be classified at the commencement date as either finance or operating (dual model). Under US regulations the type of leasing is determined by whether the arrangement is an effective purchase. On the contrary, the IASB decided to apply a single model (Morales Díaz & Zamora-Ramírez, 2018), which is very similar to the finance lease presented in ASC 842.

Both standards provide useful criteria in order to classify the leases. They are based on specific clear lines, as well as numerous interpretations. Those contained in ASC 842-10-25-2 and ASC 842-10-25-3 (intended for the lessee and lessor) are similar to the criteria of IFRS 16 par. B63 (for lessor). Below are examples of criteria which would lead to a finance lease:

- 1) ownership transfer of the underlying asset to the lessee by the end of the lease,
- 2) term of lease is for the major part of the economic life of the asset,
- 3) specialised nature of the asset (only the lessee can use it without major modifications).

However, the standards require a different number of criteria that should be met. A lessor under US GAAP needs at least one single criterion in order to recognize for instance a sales-type lease, which means that each criterion is determinative. Under IFRS there is another solution that provides classification criteria (examples and indicators of situations) which could be considered individually or in combination. In this case meeting a single criterion could not result in finance lease recognition.

In addition to the criteria under US GAAP, the lessor has to assess collectability of the lease payments. It is required in order to determine whether a lease is classified as a direct financing or an operating lease (ASC 842-10-25-3). However, there is no explicit guidance for considering collectability of payments under IFRS.

In terms of sublease classification, there is one difference which affects the sublessor. This intermediate lessor classifies the transaction based on the underlying asset (instead of the right-of-use asset arising from the main lease) as described in ASC 842-10-25-6, while under IFRS 16 (par. B58) this phenomenon is classified by reference to the right-of-use asset that was recognized in the main lease.

There are also some distinctions in both standards.

They have influence on the lease scope and measurement. Firstly, with reference to low-value assets, US GAAP does not provide any opportunity for exemption based on the value of the underlying asset, whereas under IFRS (par. 5-8) it is possible not to recognize leases the underlying asset of which has low value, e.g. US\$ 5,000 or less when it is new (Liviu-Alexandru, 2018, p. 512). Secondly, taking into account intangible assets, all leases of this type of assets are completely excluded from the scope of ASC 842 (they are subject to ASC 350). IFRS 16 includes leases of intangible assets (par. 3); lessees could lease them, except for those under licensing agreements within the scope of IAS 38 (for example video recordings, patents and copyrights). Moreover, lessors have to apply this new standard in order to lease the intangible assets (without intellectual property contained in IFRS 15).

In general, initial direct costs are defined as incremental costs of a lease that would not have been incurred if the lease had not been executed. However, both standards contain different details. Under US GAAP (842-10-30-9 up to 30-10) lessor expenses of initial direct costs for sales-type leases (when at lease commencement date the fair value of the underlying asset is not the same value as its carrying amount), whereas in appendix A, which is the integral part of IFRS 16, those costs incurred by a producer or dealer lessor in connection with a finance lease are always expensed.

Under ASC 842 both parties of a lease contract determine the discount rate at the lease commencement date (IFRS 16 also recommends it for lessees), while the lessors determine the implicit rate at the lease inception date. In turn, US GAAP allows the lessee to consider an incremental borrowing rate taking into account the effect of lease term options (not included in the lease term). The IFRS does not determine if the lessee could consider these effects (e.g. purchase and renewal options).

Another important difference concerns a remeasurement of the lease liability. It results from changes in variable lease payments, which are based on an index or rate. In IFRS it occurs whenever there is a change in the cash flow, and according to ASC 842-20-35-4 when liability is remeasured for another reason.

## **OTHER DIFFERENCES**

Apart from the lease differences mentioned above, there are additional ones. They refer to sale, leaseback and leveraged lease transactions, as well as some transition

**Table 1: Accounting differences (ASC 842 vs IFRS 16)**

Description	ASC 842	IFRS 16
<b>Selling profit for direct financing leases (its assets are presented in statement of financial position as a receivable the amount of which is equal to the net investment in the lease)</b>	Selling profit for direct financing leases is deferred at lease commencement date and amortized into income (during the whole lease term) - ASC 842-30-25-7.	There is no distinction between sales-type and direct financing (only finance leases). Lessor recognizes it at lease commencement (par. 71).
<b>Separation of lease and non-lease components (lessors)</b>	Lessor has the possibility not to separate lease and related non lease components (by class of underlying assets). For dominant non lease elements lessor should apply ASC 606.	No similar solution.
<b>Allocating variable consideration that is not dependent on any index or rate (lessors)</b>	Lessor recognizes allocated to the component payments as income (in profit and loss statement) in the period which contains the changes of variable payment.	No similar solution (it is in par. 73–90 of IFRS 15).
<b>Collectibility of the lease payment (lessors)</b>	In sales-type leases it is estimated for purposes of initial recognition and measurement, while in operating leases in order to determine the income recognition. Under US GAAP lessors are required to evaluate whether lease payments, plus any amount necessary to satisfy a residual value are likely to be collected (ASC 842-30-25-3).	No similar solution.
<b>Purchase option in short-term lease (lessees)</b>	If option is reasonably certain to be exercised by the lessee (a significant economic incentive should exist such as favorable price of the option compared to the expected fair value of leased asset) there is a possibility not to qualify the lease as a short-term (ASC 842 Glossary).	Only existence of a purchase option make it possible to not qualify the lease as short-term (Appendix A).
<b>Change in term of short-term leases (lessees)</b>	Lease could not be short-term when after the change, the remaining term extends more than 12 months (from the end of the previous determined term) or when lessee is reasonably certain to exercise a purchase option (purchase a leased asset).	In this case new lease occurs and it could not be qualified as short-term when its term is longer than 12 months.

Source: PwC Leases guide 2019 (<https://www.pwc.com/us/en/cfodirect/assets/pdf/accounting-guides/pwc-lease-accounting-guide.pdf>), International Financial Reporting Standard 16 Leases (<https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32017R1986&from=PL>)

aspects.

In general, in sale and leaseback transaction, the seller (lessee) sells and transfers an asset to another party (the buyer-lessor) and then leases it back (for all or part of the remaining economic life of this asset). There are different considerations under US GAAP and IFRS in order to assess whether the transfer of the asset is a sale or not (in a sale and leaseback transaction). The American standard instructs the parties of the transaction to consider if this transfer meets the sale criteria in ASC 606 and if this leaseback would be qualified as a sales-type (by

the buyer-lessor) or a finance lease (by the seller-lessee). However, IFRS 16 (par. 99) recommends both parties of a transaction apply the requirements for determining when a performance obligation is satisfied in another standard (IFRS 15). In this type of transactions under US GAAP (ASC 842-40-25-4) the seller (lessee) recognizes immediately all gains or losses (adjusted for off-market terms), while under IFRS the seller (lessee) recognizes only that amount which is related to the rights transferred to the buyer-lessor. Additionally, ASC 842-40-25-5 says that each asset transfer not classified as sales must be accounted

for as a financing transaction by the seller (lessee) and lending transaction by the buyer-lessor. ASC 842 provides also useful information about adjusting the interest rate. Par. 103 in IFRS 16 says then the seller (lessee) should recognize the transferred asset and account for financial liability applying IFRS 9 and the buyer-lessor should not recognize this asset and account for the financial asset applying also IFRS 9.

The following difference refers to the possibility of leveraged lease accounting. According to ASC 842-10-65-1(z) the leveraged leases which were commenced prior to the effective date are exempted. Existing ones that are modified, as well as the new ones that are commenced on or after the effective date should be subject to the new rules, whereas under IFRS 16 leveraged leases are not even permitted.

Both standards use a retrospective approach during a transition of existing leases but they differ in adjusting comparative periods. ASC 842-10-65-1 has two options. The first one concerns adjustments of comparative periods (when an enterprise applies provisions as of the earliest comparative period shown in the reports). In the second one, adjustments are not permitted (the enterprise applies the transition provisions as of the effective date). However, in the whole appendix C about transition to IFRS 16 the comparative periods are not adjusted at all. Last but not least, ASC 842 provides information needed during transition of all leases types, while IFRS 16 is focused on

transition of the lessees' operating leases (under previous IAS 17).

## EFFECTS OF DIFFERENCES IN FINANCIAL STATEMENTS AND METRICS

The IASB and the FASB require the reporting entities to present virtually the same leases in their statements of financial position (balance sheets). However, some accounting differences between the new standards (<https://www.ifrs.org/-/media/project/leases/ifrs/published-documents/ifrs16-effects-analysis.pdf>) could have the following effects.

Both new lease standards cause an increase in enterprise assets. The median percentage growth of total assets value of companies listed on the Warsaw Stock Exchange (WSE) is presented in Table 2. The vast majority of enterprises included in the sector indices have adopted the IFRS 16 using the modified retrospective approach from 1 January 2019. They have not restated the comparative financial statements for 2018 (specific transitional provisions have permitted it). In calculations almost 150 out of 198 reporting entities contained in sector indices have been taken into account. Some of them are excluded because they have taken advantage of the relief provided for lessees (IFRS 16, par. C3) or they have prepared their financial statements according to the Polish Accounting Act.

**Table 2: Median increase of total assets value after applying IFRS 16**

WSE sector indices	Growth (%)
WIG-ODZIEZ	27,34
WIG-TELKOM	8,09
WIG-MOTO	4,61
WIG-MEDIA	4,21
WIG-SPOZYW	3,69
WIG-CHEMIA	3,33
WIG-PALIWA	2,75
WIG-INFO	2,49
WIG-NRCHOM	1,97
WIG-BUDOW	1,44
WIG-GORNIC	1,39
WIG-LEKI	1,05
WIG-ENERG	0,79
WIG-BANKI	0,39

Source: Own elaboration based on financial statements of reporting entities included in sector indices on WSE (<https://gpwbenchmark.pl/en-notowania>)

As a consequence of disclosure of right-of-use assets, there is a noticeable percentage increase of value of total assets noted by enterprises included in the above indices. It has the most significant impact on the financial statements of WIG-ODZIEZ enterprises (the median percentage increase is 27,34). As part of their own operations, they are the parties to lease agreements for premises (stores) in which they sell, warehouse and have offices. Also, a relatively high increase is noticed in WIG-TELKOM (8,09%), WIG-MOTO (4,61%) and WIG-MEDIA (4,21%). However, these changes do not have significant impact on the financial position of companies contained in other sector indices. Compared to IFRS, the carrying amount of lease assets and equity in the entities which apply US GAAP requirements could be higher. Those effects would not be relevant for all companies that prepare the financial statements under American standards. Precisely, they are expected among enterprises with a large number of former off balance sheet leases (such as airlines and retailers).

The depreciation of the lease assets (arising especially from the off balance sheet leases) in the early years of leases under IFRS 16 is more rapid. It is a consequence of straight-line depreciation typically used for those assets instead of increasing depreciation used in ASC 842.

There are also different presentations of financial lease liabilities. Entities which apply IFRS 16 would report lease liabilities (referring to previous on and off balance sheet items) in different line items only if it is relevant to a general understanding of their financial positions, whereas under US GAAP it is required to make the above

distinction.

The recognition of assets and liabilities that previously were not recognized has effects on enterprises financial metrics. Below there are examples of affected key ratios based on those changed amounts in statements of financial position:

- 1) asset turnover (Sales / Total assets) - the expected effect is decrease of this ratio.
- 2) current ratio (Current assets / Current liabilities) - decrease,
- 3) financial leverage (Liabilities / Equity) - increase.

The application of new lease standards results in the increase of profit before interest in the income statements, for instance EBITDA (earnings before interest, taxes, depreciation and amortization) which is frequently used by investors and analysts. Table 3 shows the median growth of EBITDA in the industries most affected by the new lease regulations under IFRS 16. The following data is the result of a global study conducted by PwC in collaboration with the Rotterdam School of Management from the Netherlands. They took into account a sample of 3,199 listed IFRS reporting entities across a range of industries and countries (without the USA). The transitional relief available upon adoption of the new standard on 1 January 2019 was not included in the study based on financial statements for 2014.

This study shows that the impact of the IFRS 16 differs significantly between industries. The largest median increase in EBITDA is expected in retail (41%). Moreover, median growth in airlines, health care, transport and

**Table 3: Ten highest median increases in EBITDA by industry after applying IFRS 16**

Industry	Median increase in EBITDA (%)
All reporting entities	13
Retail	41
Airlines	33
Health care	24
Transport and logistics	20
Textile and apparel	18
Wholesale	17
Entertainment	15
Professional services	15
Broadcasting	11
Lodging	9

Source: A study on the impact of lease capitalization, PwC. (<https://www.pwc.com/gx/en/audit-services/publications/assets/a-study-on-the-impact-of-lease-capitalisation.pdf>)



logistics would be at least 20%. As a result of differences between new lease standards, the US GAAP regulations do not have the same impact on the income statements. In general, the ASC 842 results in lower profit before interest (in enterprises that possess material off balance sheet leases) in comparison with the same amount presented according to IFRS 16. For instance, there is a smaller value of EBITDA, as well as operating profit (EBIT). This is due to the fact, that all previous off balance sheet lease payments in enterprises reporting under IFRS are divided. The implicit interest is included in the finance costs. Therefore, they are not included in the calculation of the above profit before interest, whereas the entire lease expense according to US GAAP is merely a part of operating costs.

The changes triggered by the new standards also influence the mentioned below financial ratios based on changed values from income statements, for example:

1) interest cover (EBITDA / Net finance costs) – the expected effect: depends on the lease portfolio. Additionally, this metric is expected to differentiate between IFRS and US GAAP. In most cases, the interest cover calculated according to American standards is expected to be higher than IFRS,

2) debt to EBITDA- US GAAP regulations cause a rather higher level of this ratio compared to IFRS.

3) EPS (Profit or loss / Number of shares in issue) - depends on the lease portfolio, as well as the effects on tax,

4) ROE (Profit or loss / Equity) - depends on the lease portfolio, but if there is no effect on profit or loss, this ratio will be higher.

5) ROCE (EBIT / Equity plus financial liabilities) - depends on the lease portfolio. As a result of lack of expectations concern changes of operating profit under US GAAP, this metric would be lower than under IFRS.

New standards do not cause differences in the total cash flows. However, there are some discrepancies in the cash flow statements prepared under IFRS and US GAAP. As a consequence of applying IFRS 16, the operating cash outflows are relatively reduced, and concurrently financing cash outflows are relatively increased compared to the amount reported under ASC 842. This is a result of presenting cash outflows on previous off balance sheet leases as financing activities, whereas the payments made

by companies reporting under US GAAP are shown as operating activities.

There are also slight differences in notes to financial statements. For instance, they concern disclosure of expenses. According to IFRS 16, enterprises account for all leases included in statements in the same manner. However, under ASC 842 the reporting entities have to separate expenses for previous on and off balance sheet leases. In addition, US GAAP sets requirements for companies to disclose qualitative items when IFRS sets merely objectives (enterprises have to satisfy objectives on their own). As a consequence, differences are expected in the scope of information disclosure with reference to specific features (for instance conditions of lease extensions).

## CONCLUSIONS

New IFRS and US GAAP lease regulations are the result of particular concerns raised because of the lack of transparency of information about appropriate lease obligations. The US SEC estimated that public companies in the USA had approximately US\$ 1.25 trillion of off balance sheet leases in 2005. As a consequence, a joint project was initiated by the IASB and the FASB. In early 2016 the new standards were promulgated. The boards have reached identical conclusions in most aspects. They hold the common view that a lessee should recognize right-of-use assets and obligations which have arisen from this lease (lessee accounting was substantially changed). Moreover, the boards maintain largely unchanged lessor accounting. Despite joint efforts, there are also noticeable differences between IFRS 16 and ASC 842. They concern various areas of lease regulations. Firstly, they differ in lease classification, criteria, scope exemptions, and determination of used rates (discount rate and lessee's incremental borrowing rate). Secondly, the parties to the lease contract under both standards have some distinct accounting solutions. In lessor accounting they refer to selling profit (for direct financing leases), separation of components, variable consideration (not dependent on any index or rate) and collectability of the lease payments. In lessee accounting they concern short-term leases. Furthermore, there are differences in sale, leaseback and leveraged lease transactions, as well as in modified retrospective transition.

The application of IFRS 16 and ASC 842 produces

effects on financial statements and ratios. The main focus is on those effects that vary due to differences mentioned above. The new lease standards have significant impact merely on those reporting entities with a great number of previous off balance sheet leases. In a statement of financial position there is change (growth) in total assets. The highest median increase caused by IFRS 16 in the WSE sector indices is noticed in WIG-ODZIEZ (27,34%). This is due to the fact that enterprises included in this sector are the parties to lease agreements for a large number of premises (stores) in which they sell, warehouse and have offices. Moreover, WIG-TELKOM (8,09%), WIG-MOTO (4,61%) and WIG-MEDIA (4,21%) are characterized by quite high growth, whereas the carrying amount of lease assets reported under US GAAP is higher. The changes in standards do not have significant impact on the financial position of companies contained in other sector indices. In turn, the pace of depreciation in the early years of leases and manner of presentation of financial lease liabilities also differ. Under IFRS 16 the depreciation of assets arising from the off balance sheet leases is relatively more rapid because of the straight-line depreciation that is typically used (instead of increasing depreciation used in ASC 842). The recognition of assets as well as liabilities that previously were not recognized has effects on financial metrics. In particular key ratios based on those changed amounts in statements of financial position are e.g.: asset turnover, current ratio and financial leverage.

In the income statement the effect mainly concerns the increase of profit before interest. The most affected industry under IFRS 16 is retail. It has the largest median increase in EBITDA among other industries around the world. Moreover, industries such as airlines (33%), health care (24%), transport and logistics (20%) also have significant median increase in EBITDA. In comparison with the same amount of material off balance sheet leases presented according to IFRS 16, the ASC 842 results in

relatively lower profit before interest. The smaller value of EBITDA is due to the fact that the entire lease expense under US GAAP is merely a part of operating costs, whereas under IFRS 16 it is divided into operating and finance costs. Moreover, the changed values in the income statements have influence on financial ratios which are based on them (e.g. interest cover, EPS, ROE and ROCE).

In the case of cash flow statement, there are some discrepancies in values of operating and financing cash outflows presented under IFRS and US GAAP. According to IASB regulations the operating cash outflows are relatively reduced, and concurrently financing cash outflows are relatively increased compared to the amount reported under ASC 842. However, the new standards do not cause differences in the total cash flows.

There are no significant differences in disclosure requirements in notes to financial statements. They are similar under both standards. However, slight differences are also noticeable in notes to the financial statements. They concern disclosure of lease expenses. US GAAP requires separate disclosure of expenses related to former on and off balance sheet leases, while the IFRS does not require it. Additionally, differences refer to some qualitative items (for instance terms and conditions of lease extension). ASC 842 sets requirements for enterprises to disclose the specific qualitative items, whereas IFRS sets merely objectives (companies have to satisfy objectives on their own).

The above analysis shows that a particular group of companies' financial metrics used by users of financial statements (especially investors when making investment decisions) is significantly changed. The enterprises' future credit ratings and borrowing costs could be also affected. Therefore, new studies could describe entity valuation models updated by analysts and various stakeholders.

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