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Impact of New Lease Reporting on Retailing and Wholesale Companies

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ABSTRACT

Effect of application of IFRS 16 could differ across industries. Retail and wholesale companies are expected to be most significantly affected by the changes in the new lease requirements. Retail space rental is a fundamental part of the business model of these entities. The ratio of operating and finance leases for selected companies in the retail sector is 96% in average. An important factor influencing the magnitude of the changes is not only the percentage of the operating lease to the total lease, but also the volume of unrecognized assets and leasing liabilities. The main aim of the paper is to evaluate the impact of the new lease reporting in the lease intensive industries, especially to keep comparability of financial indicators. Financial statements data of EU retail and wholesale companies are subject of the research. Leases and financial statements and transformed financial statements using IFRS 16 for operating lease reporting are the subject of comparison. The information concerning the operating lease presented in the notes is utilized for financial statements transformation. The financial statements items were selected as significant indicators: Long-term assets, B/S total, Equity, Liability, EBIT, EBITDA, Depreciation, Interest Cost. The changes in affected financial statements´ items and financial analysis ratios were researched. The average increase in total assets is 37% and debts 55%. The decrease in equity of 4.5% is due to the fact that the carrying amount of the leased asset usually decreases faster than the carrying amount of the lease liability.

INTRODUCTION

The leasing industry has experienced significant growth and has introduced new and innovative ways to finance equipment for companies worldwide. Lease could be considered as an important alternative to a bank loan, while the treatment for its reporting could differ significantly. According to the treatments of International Accounting Standard (IAS) 17, leases should be treated in two different ways as an operating or financial lease. Lease is classified as financial if it transfers substantial risks and rewards incidental to ownership of an asset to the lessee. It is irrelevant for classification of lease as a financial lease whether after the end of the lease there will be transfer of ownership to the lessee. Otherwise, lease is

recorded as an operating lease. The subject of the financial lease is reported as a long-term asset and an appropriate liability while the operating lease is not recognized on the financial position statement - off-balance sheet financing (OBS). OBS financing was very attractive to all companies, but especially to those that had already been highly levered when reported according to IAS 17. For a company that had high debt to equity ratio, increasing its debts was considered problematic for several reasons (their borrowing costs were climbing, the share prices of these companies "mirror" the fluctuations in short-term borrowing costs) and these companies preferred off-balance financing in the form of operating lease. In general, regardless of the form of lease, a lessee obtains an asset or right to use an asset and a liability arises when company enters into a lease contract. The different treatments for financial lease and operating lease reporting were the reason why the IAS 17 lease accounting principles did not provide comparable, and comprehensive information for external and internal users of the financial statements.

The effect of the operating lease reporting on reported leverage was substantial for many lessees. According to Imhoff (1991), firms structured leases as operating leases to avoid increasing the debt-to-equity ratio. Duke, Hsieh and Su (2009) and others stressed that many companies had used operating lease to hide their current liabilities and assets and increase their operating profit to external users in the post-Enron era. They presented the possibility of improvement of financial analysis ratios (Return on Assets (ROA), Debt to Equity (D/E), Debt to Assets (D/A), current ratio) by reporting leases as operating.

On the basis of studies carried out on the off-balance sheet financing, an idea to develop a single high-quality treatment for lease reporting arose. The International Accounting Standards Board (IASB) and Financial Accounting Standards Board (FASB) began to work in 2006 on a joint project with the aim of developing a common standard for lease reporting. The main idea of the lease reporting project was that a lease reporting should be based on principles that fairly report the substance of the lease transaction. The final standard IFRS 16 – Leases was released in 2016, effective date is January 1st, 2019. There are common treatments for reporting of the lease with the term of over one year, regardless of the lease classification in IFRS 16. Due to the effectiveness of this standard since January 2019, it is still the question of the real impact of application of IFRS 16 on financial reporting of the companies.

1. THEORETICAL BACKGROUND

A big problem in comparison of financial statements of business companies using the operating lease as a source of financing of their long-term assets in a high volume with similar business entities was identified by many studies in this area (for example Imhoff, Lipe, Wright, 1991, 1993, 1997, Moody´s, 2015, Fito, Moya, Orgaz, 2013, Beattie et al. ,1998, Fahnestock and King, 2001). The agency studies such (Standard and Poor´s, 2005, Moody´s, 2006, Fitch's, 2006), and academic studies used their own models, their own simulation of effects of operating lease capitalization on balance sheet (B/S) items and related items of income statement (I/S).

All models started with the same point - the disclosure of future minimum lease obligations in notes to financial statements according to IAS 17.

The most significant studies in the operating lease area are studies by Imhoff, Lipe and Wright (1991, 1993, 1997) – hereinafter ILW. They indicate that the capitalization of leases leads to a significant decline in the ROA for both intensive and less intensive lease users. Additionally, the impact on the debt-to-earnings ratio is significantly higher for intensive lease users than for less intensive users, 191% compared to 47%. The work of Imhoff, Lipe and Wright is often viewed as the seminal contribution in the area of operating lease capitalization.

Using the capitalization method ILW, the study by Beattie et al. (1998) assessed the impact of operating leases of 232 UK listed companies on their financial statements. They found that unrecorded lease assets make up 6% of the total assets and the unrecorded long-term liabilities are on average 39% of the liabilities reported. Consequentially there is an impact on key financial ratios such as the Asset Turnover, ROA, Debt to-Equity ratio. The Debt-to-Asset ratio drastically increases and the Current ratio significantly decreases. Durocher (2008) tested the impact of the transformation of operating leases in 100 Canadi-

an listed companies on the financial indicators. The results indicated that the capitalization leads to the recognition of substantially more assets and liabilities on the balance sheet. The study found evidence that some industry segments: merchandising and lodging, oil and gas, and financial services are affected significantly, especially the Return on Assets (hereinafter ROA), Return on Equity (hereinafter ROE) and earnings per share. Fülbier et al. (2008) identified a significant capitalization impact on a number of companies in general and on certain industry groups (fashion and retail) in particular. All studies observed changes in financial ratios for the statement of financial position but minor effects for profitability ratios.

Deloitte (2016) considers the introduction of IFRS 16 as a starting point of an increase in leased assets and financial liabilities on the balance sheet of the lessee and EBITDA. According to their study, companies with material off – balance sheet lease commitments will encounter significant changes in their key financial metrics such as leverage ratio, Return on Invested Capital (ROIC) and valuation multiples. The analysis of expected impact of a new operating lease reporting in retail and hospitality sectors was carried out in 2010 by Singh. He found significant relative and absolute differences across and within the two industries in relation to financial ratios related to leverage, profitability and interest coverage. PricewaterhouseCoopers (PwC) conducted a lease capitalisation study in 2016. They assess the impact of the new leases standard on reported debt, leverage, solvency, and EBITDA in a sample of more than 3,000 listed entities reporting under IFRS across the range of industries and countries (excluding the United States). The research identifies a minimum impact of capitalising existing off – balance sheet operating leases based on commitments disclosures in entities that published financial statements in 2014. The highest impact was identified in retail and wholesale due to the high volume of real estate leases for their stores.

2. RESEARCH OBJECTIVE, METHODOLOGY AND DATA

The aim of the paper is to identify and quantify the impact of the new IFRS 16 Lease in the sector where the operating lease is a material way of financing economic resources for doing business. The conclusions of the paper should serve as an information source about the estimated instant changes in financial analysis indicators due to the change in methodology of lease reporting.

There are large numbers of recent studies carried out on the impact of operating lease reporting, the majority of them concern the publicly traded companies regardless of the industry. On the other hand, there are some studies carried out by European Financial Reporting Advisory Group (EFRAG, 2017; IASB, 2016; Moussaly and Wang, 2014) which have shown that some sectors use operating leases more than others. In these sectors, operating leases represent an alternative to massive capital investment.

The research question is: “Will the new methodology have a significant impact on financial analysis ratios for large companies operating in the lease intensive industry indeed?”

The retail sector according to Nomenclature statistique des activités économiques dans la Communauté européenne (NACE) G. 47 was chosen for this research. Retail is identified as one of the sectors with a very high level of operating lease that is supposed to be most affected by the new lease reporting methodology (EY, 2016; Fito et al., 2011; Durocher, 2008; Fülbier et al., 2008; Mulford & Gram, 2007; Morales-Díaz, Zamora-Ramírez, 2018).

Durocher (2008) proved the importance of leasing in the retail sector and estimates the potential balance sheet impact of including all leases onto lessees' balance sheets. Off-balance sheet operating leases are shown to be a major source of finance, and far more important (3.3 times higher) than on-balance sheet long-term debt; by contrast, finance leases are immaterial. Operating leased assets, the major part of which is ‘land and buildings' (98%), represent a significant proportion (28%) of reported total assets. The changes in the retail sector financial analysis indicator are estimated due to the current practices in this business. The majority of retailers and wholesalers use the rented fixed assets such as business area in the form of long-term operating lease contracts. Using the treatments of IAS 17, these assets are neither recognized on financial statements, nor connected liabilities are recognized.

The selection of companies operating in retail, preparing financial statements according to the IFRS and fulfilling the following criteria: annual turnover over EUR 2 billion, use of operating leases as an external source of financing, headquarters of the company in the territory of the EU and the European Free Trade Association – EFTA was carried out. The turnover criterion is based on a 2011 European Commission study that concluded that more than fifty per cent of companies with a turnover of more than 2 billion EUR use lease as an external source of financing. The starting point for company identification was the Amadeus database, which enables to identify the industry on the basis of the defined NACE code, to meet the predetermined turnover. Other assumptions were tested on the basis of an individual assessment - IFRS reporting and the volume of operating leases, the quality of the information in the notes to the financial statements. Failing to meet any of the set of criteria, companies were discarded. The following companies, which met the previously mentioned conditions, were identified Ahold (1), Auchan (2), Carrefour (3), COOP (4), Dixons (5), Douglas (6), Groupe Casino (7), Groupe Fnac Darty (8), HM (9), Inditex (10), J Sainsburys plc. (11), KESKO (12), Kingfischer plc. (13), Marks & Spencer (14), METRO AG (15), Migros Group (16), Morrisons plc. (17), REWE Group (18), SPAR (19), TESCO plc. (20).

The financial statements for the years 2010 – 2016 of these companies were the subject of the research. The share of operating lease (operating lease/ total lease liability) in the researched sample was from 72.5% to 100%, the median was 96.95%. Quantification of the impact of lease reporting according to the new IFRS 16 Leases in the retail sector is the main aim of the paper. The selected financial statements items and financial analysis indicators are utilized for their quantification. The indicators of financial statements prepared according to IAS 17 – Leases and financial statement and transformed financial statements using IFRS 16 for operating lease reporting are the subject of comparison. The information concerning the operating lease presented in the notes is utilized for financial statements transformation. The financial statements items were selected as significant indicators.

- Financial Position Statement (Long-term assets, B/S total, Equity, Liability)
- Income Statement, EBIT, EBITDA, Depreciation, Interest Cost)
- Selected financial analysis ratios (ROE, ROA, D/E, D/A).

Researched companies use leasing services and currently present data on operating leases in accordance with IAS 17. IAS 17 (Paragraph 35) specifies which information is disclosed for operating leases in the notes to financial statements (the summary of future minimum lease payments for non-repayable operating leases separately for a period of one year and a period of up to five and over five years). This information is used for transformation of financial statements prepared according to IAS 17 to IFRS 16. The methods of Fito, Moya and Orgaz (2011) and Fülbier et al. (2008) were used for the interest rate estimation. These methods are based on the median disclosed by researched companies' interest rates (4.2%). The unrecognized value of the leased asset is equal to the value of the discounted future minimum lease payments. This value is added to the assets in the balance sheet and the balance sheet total is increased. Further adjustments are required to determine the change in interest and depreciation costs. Interest expense is determined using the discount rate applied to the average net present value of the minimum lease payments for the current and prior years. These interest costs increase the original interest costs. The unrecognized value of the leased asset is equal to the value of the discounted future minimum lease payments. This value is added to the assets in the balance sheet and the balance sheet total is increased. Further adjustments are required to determine the change in interest and depreciation costs. Interest expense is determined using the discount rate applied to the average net present value of the minimum lease payments for the current and prior years.

$$NPV = \sum_{i=0}^{n} \left[\frac{Pmt_i}{(1+r)} \right] + \frac{Res}{(1+r)^n}$$

Where:

NPV = Net Present value of the minimum lease payments
Pmt_i = Lease payment for period i
r = Interest rate

n = Number of payment periods
Res = Residual amount (if any)

Further assumptions:

- all cash flows occurred at year-end;
- assets are depreciated using the straight-line method;
- operating lease expenses are removed from the income statement, and replaced by depreciation (estimated 20 years of useful life as Imhoff, Lipe, Wright (1991, 1993, 1997) and interest expenses. For the proper estimation of useful life of leased assets, the kind of the assets and accounting policy for depreciation in the business entity should be available. This information is not usually presented in financial statements. In these cases, the useful life was estimated by authors similarly to other studies using the following data: real estate 45 years, mix 20 years, others 10 years.

In order to identify the significance of changes caused by the new leasing reporting methodology, a comparison of the monitored characteristics before and after application was performed. Theoretically, these are two dependent samples, so a two-sample t-test should be used for testing. However, when verifying the assumption of the normality of the differential selection using the Shapiro-Wilk test, the normality was rejected (see Table 3) and therefore a non-parametric alternative to the t-test, namely the Wilcox sign rank test, was used.

3. RESULTS AND DISCUSSION

IFRS 16 does not distinguish between reporting financial and operating leases on the side of the lessee any more. All types of leases with a lease term longer than twelve months are required to be reported on the lessee's financial statements, similar to the financial lease under IAS 17. The lease is capitalized on lessee´s financial statements. According to the IASB (2016), if the lease is economically close to a loan for purchase of an asset, it is a situation where the lease term corresponds approximately to the life of the leased asset and the value of the reported asset and the liability on the financial statements should be very similar. In an opposite situation where the lease term will be significantly shorter than the economic life of the asset, the value of this asset is significantly higher than the value of the lease liability. IFRS 16 imposes to recognize this asset in a value corresponding to the right of use of this asset.

3.1 Impact on B/S

The volume of non-recognized lease liabilities as a percentage of recognized lease liabilities is shown in Table 1. The volume is in the range from 9.25% to 445.53%. The median is 47.08%. It means that all recognized lease liabilities would increase 1.47 times due to incorporation of operating lease liability to financial statements of retailing companies. The B/S total would increase in the range from 0.65% to 133.98%. The median is 37.88%. The total liabilities would increase in the range from 1.2% to 148.38%, with the median 54.99 %. In contrast to the increase in the previous items, the equity would decrease due to a faster decrease in value of the long-term lease assets in comparison to the decrease in the lease liability. The lease instalment is split into interests and an amortization of the lease liability. The decrease in equity is significantly lower in comparison to the increase in long-term assets.

The results of similar studies focusing on the impact of lease capitalization and IFRS 16 in the retail sector differ. The study carried out by Mulford and Gram (2007) which capitalized operating leases concluded that the total assets increased by 14.6% and total liabilities increased by 24.4%. The PwC study (2016) concerned only the increase of the debt; it concluded that the increase was 98%. The study did not mention the change in assets. The IASB (2016) conducted an extensive study on the impact of IFRS 16 on several sectors of the economy. In the case of retail, there were 204 companies researched. After capitalization of long-term operating leases, these companies showed an increase in debt of 214%.

Table 1. Changes on the B/S.

Company	Non-Recognized Lease Liability	Change in Total Assets	Change in Total Liabilities	Change in Equity
1	10.18%	8.53%	11.08%	-2.40%
2	38.28%	36.06%	43.73%	-10.29%
3	47.06%	44.68%	62.12%	-7.37%
4	96.28%	75.66%	109.87%	-8.55%
5	70.87%	42.38%	55.92%	-4.60%
6	62.29%	44.30%	71.48%	-3.82%
7	13.18%	11.08%	15.20%	-2.24%
8	9.29%	6.40%	10.20%	-0.77%
9	124.84%	79.62%	148.38%	-4.35%
10	43.87%	39.70%	51.98%	-2.21%
11	47.10%	34.13%	54.06%	-5.12%
12	16.19%	0.65%	1.20%	-0.06%
13	124.06%	65.21%	141.57%	-6.73%
14	22.41%	16.15%	25.83%	-2.68%
15	117.72%	58.11%	138.06%	-2.78%
16	455.53%	133.98%	419.70%	-10.10%
17	24.61%	21.68%	26.89%	-4.81%
18	102.33%	105.63%	117.45%	-6.70%
19	79.28%	29.70%	93.98%	-2.70%
20	29.25%	22.27%	2.03%	-4.67%
Median	47.08%	37.88%	54.99%	-4.48%

Source: own processing

3.2 Impact on the I/S

The increase in total interest costs (financial costs) is obvious and the increase in depreciation is obvious as well. Table 2 describes changes in the examined items of costs. The increase in depreciation costs is between 0.07% and 113.47% for the researched sample, the median is 27.43%. The rise in interest costs is in the range of 0.23% to 94.96%, the median is 16.36%. The difference between the increase in depreciation costs and interest costs is associated with a decreasing lease liability during the lease, and a straight-line depreciation of leased assets during the lease term. In comparison with the conclusion of the Aslaksen and Baastad study (2017) which shows the expected increase in depreciation costs between 80% and 89%, the conclusions of our research estimate a lower impact. However, Aslaksen and Baastad (2017) did not investigate the change in interest costs separately from other financial costs. The results of this study showed higher increase in financial costs (89%) compared to the conclusions of this work (16.36%). Significantly higher interest costs are mainly due to the assumption that there is a significantly higher increase in liabilities.

As a result of the application of IFRS 16, there is a year-on-year decrease in leasing costs over the lease terms as compared to the previous straight-line lease costs of operating leases. In the context of the new methodology for reporting operating leases of over one year, there is an increase in EBIT, as EBIT is affected only by depreciation costs, interest costs are a part of finance costs. The impact on the researched sample is quantified in Table 2. In the case of EBITDA, the increase is higher as all costs associated with the operating lease are excluded from the EBITDA, in comparison with IAS 17 where all lease costs were reported as operating costs. The median increase is 14.57%.
Compared to the results of similar studies, only Aslaksen and Baastad (2017) focused their research on the change in EBIT – EBIT increased by 15%. The increase is higher than that obtained in this study (2.5%). As concerns the change in EBITDA after the application of IFRS 16, the result is a 14.57% increase and it is lower than the conclusions of other studies. Mulford and Gram (2007) reported an increase of 22.5%. A study of Singh (2012) researched 234 restaurants and retail companies during the period from 2006 to 2008. It estimates an increase of 61.3%. Similarly, the IASB study (2016) also estimates a higher increase of 43%.

Table 2. Impact on the I/S.

Company	*Change in Amortization and Depreciation Costs*	*Change in Interest Costs*	*Changes in EBIT*	*Changes in EBITDA*
1	13.15%	8.74%	2.15%	6.63%
2	41.83%	10.65%	3.82%	20.92%
3	85.41%	16.99%	2.26%	26.61%
4	41.58%	74.39%	13.29%	31.34%
5	79.01%	74.31%	1.57%	8.12%
6	19.35%	12.82%	2.45%	10.04%
7	26.89%	39.15%	2.96%	15.97%
8	8.00%	9.47%	1.64%	4.00%
9	44.92%	15.72%	2.49%	18.80%
10	25.04%	10.29%	3.44%	16.10%
11	27.96%	8.60%	1.54%	12.66%
12	0.07%	0.23%	0.09%	0.08%
13	106.20%	94.96%	7.14%	39.46%
14	18.07%	9.99%	2.30%	11.90%
15	3.06%	84.90%	2.80%	3.11%
16	113.47%	71.04%	2.51%	20.21%
17	14.59%	15.72%	10.03%	13.18%
18	61.69%	37.48%	9.14%	27.28%
19	23.89%	87.58%	1.49%	6.58%
20	37.58%	30.08%	7.03%	20.24%
Median	27.43%	16.36%	2.50%	14.57%

Source: own processing

Using the Normality Test (Shapiro-Wilk test) it was shown that all the variables monitored do not have a normal distribution, so it is necessary to use a non-parametric test (Wilcoxon test) to verify the impact on individual indicators. IFRS 16 has a significant impact on total assets, total liabilities, depreciation and interest expense. Detailed data are in Table 3.

Table 3. Normality test. Source: own processing

Variable	*Value*
Assets	2,71E-
Liabilities	1,07E-
Equity	1,89E-
Depreciation	4,06E-
Interest cost	3,43E-
EBIT	2,59E-
EBITDA	1,66E-

Table 4. Statistical Significance of IFRS 16 Effects. Source: own processing

Null hypothesis	*Value*
Σ Assets	2.34**
Σ Liabilities	3.57***
Σ Equity	-0.48
EBIT	0.38
EBITDA	1.15
Depreciation	2.74***
Interest cost	2.11**

*** p-value< 0.01; ** p-value< 0.05; *p-value<0.1

3.3 Impact on Financial Analysis Ratios

For the analysis of the impact of IFRS 16, only those ratios whose input information is expected to be changed due to the new treatments were selected. The selection is based not only on the studies already carried out, but also on the authors´ judgment.

The decrease in the ROA ratio is due to the fact that the change in the denominator (assets) is higher than the changes in the numerator (EBIT). In contrast to ROA, the ROE indicator is increasing in the span of time as the numerator of the formula (EBIT) increases due to the elimination of interest cost from operating income, but the denominator (equity) is lower in the first part of the lease term in comparison with lease reporting under IAS 17. The impact of IFRS 16 on ROE is moderate (less than 7%). In the case of ROA in retail companies there was a decrease of about 20%. As mentioned above, ROA decreased approximately by 23.97%.

Table 5. Impact of IFRS 16 on Selected Financial Analysis Ratios. Source: own processing

Company	*ROE*	*ROA*	*D/E*	*D/A*
1	4.31%	-6.17%	13.53%	2.25%
2	18.10%	-23.57%	61.31%	5.99%
3	11.07%	-28.29%	77.95%	14.79%
4	23.86%	-35.75%	128.60%	19.54%
5	6.43%	-28.67%	70.40%	10.59%
6	6.17%	-28.83%	78.53%	19.98%
7	5.33%	-7.31%	17.83%	3.68%
8	2.58%	-4.67%	10.98%	3.23%
9	7.20%	-43.02%	159.38%	37.88%
10	6.08%	-22.14%	53.42%	12.61%
11	7.66%	-24.36%	63.76%	15.32%
12	0.05%	-0.40%	1.08%	0.64%
13	14.61%	-35.53%	159.01%	44.20%
14	5.45%	-18.43%	29.21%	7.79%
15	6.20%	-34.86%	131.82%	54.39%
16	14.97%	-56.95%	240.80%	62.58%
17	18.50%	-6.72%	35.96%	5.26%
18	92.58%	-28.41%	67.78%	19.08%
19	4.18%	-21.74%	96.54%	47.45%
20	12.28%	-12.29%	37.82%	7.56%
Median	6.81%	-23.97%	65.77%	13.70%

The increase in the volume of liabilities due to the recognition of the former operating lease liability and the decline in equity, which is less than the increase in debt, lead to an increase of D/E ratio. Table 4 shows that the increase in the D/E indicator is very significant (median of 65.77%). A significant increase in this indicator is due to a higher increase in total liabilities compared with a very low change in equity. Due to the fact that the items entering D/A calculations are growing strongly (total liabilities and total assets), the change in the D/A indicator compared with D/E does not reach such a high value (median of 13.7%).

Comparing the results of our study they are very close to results of similar studies carried out in similar issues. The PwC Global Lease Capitalization study of 2016 identified a 98% increase in debt balances in the retail sector and a 41% increase in EBITDA (measured as a median). Morales-Díaz Zamora-Ramírez (2018) identified the average increase in total liabilities and total assets in retail sector (27% in total assets and 59.2% in total liabilities). According to Baastad, Berg, Aslaksen (2017) the reallocation of costs will have an enormous impact on EBITDA, and to a lesser extent on EBIT and Net Operating Profit After Tax (NOPAT). The capitalization of leases has on average increased Norges Gruppen's non-current assets with approximately 36%. Operational measures derived from the income statement (EBITDA,

EBIT, NOPAT) increase notably. The results of the study by Giner, Pardo (2018) confirm similar conclusions as our study. They identified that there are no-difference results between operating lease liabilities and bank loans. Sari (2016) revealed that lease capitalization has no significant impact on total equity and increases total assets (30.90%, 23.70% respectively) and total liabilities (45.05%, 37.27% respectively).

CONCLUSION

The retail sector is characterized by a high volume of unrecognized lease liabilities due to the high book value of the leased assets for this sector (retail space, plant and equipment). The obligation to disclose the subject of the lease and the lease liability on the lessee's balance sheet was reflected in a one-third increase in the balance sheet total and in almost half of the total liabilities from the newly recognized subject of the lease and the lease liability, the depreciation and interest costs increase to the previously reported depreciation and financial costs. For these reasons, it is clear that the increase in these items must be higher for sectors (companies) showing a greater change in assets and liabilities. In the case of retail companies, there was an increase of about twenty percent. Due to the new structure of the profit, there was not only an increase in EBIT but also a significant increase in EBITDA. The new treatment of IFRS 16 will affect the financial analysis ratios regardless of any changes in business transactions of business entities. Due to the new approach the profitability ratios ROA and ROE usually decrease (ROA without exceptions). This is connected with a true and fair view on the financial situation and performance of a business entity. All business entities employ the assets in their activity regardless of the way of acquisition. Using treatments of IFRS 16, the indebtedness increases due to the recognition of all lease liabilities, it is in an accord with the intended aim of the IFRS 16 development – to protect off-balance financing. According to the results of our research, the significant increase in liabilities, assets, depreciation and interest cost were proved (the median of increase in liabilities is almost 55%, the median increase in balance sheet total is almost 38% and the decrease in equity is 4.5%, depreciation costs increase of 27.4% and the increase in interest cost is 16.4%).

The results of the paper could serve external users of financial information on retail and wholesale listed companies as a source of information about the reasons for a possible significant deterioration in financial analysis indicators. Obtained results show the range of deteriorations in indicators of financial analysis due to the application of the new operating lease reporting methodology (financial analysis ratios deteriorated – ROA by 24%, D/E by 66% and D/A by 14%).

Limitations of the study - the paper presents results of the research using data from 20 largest retail companies in Europe, we used annual reports of these companies, it was not possible to get all exact data of individual lease contracts, we use the estimation.

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REFERENCES

Aslaksen, A. B., Baastad, M. S. (2017), "IFRS 16 Leases and its Effects on Management Compensation Systems in the Norwegian Retail Industry", *Master Thesis,* BI Norwegian Business School, Oslo.

Beattie, V., Edwards, K., Goodacre, A. (1998), "The impact of constructive operating lease capitalisation on key accounting ratios". *Accounting Business research*, Vol. 28, No. 4, pp. 233–254.

Deloitte (2016), "Leases: Key differences between U.S. GAAP and IFRSs", http://www.iasplus.com/en-us/ standards/ifrs-usgaap/leases.

Duke, J., Hsieh, S., Su, Y. (2009), "Operating and synthetic leases: Exploiting financial benefits in the post-Enron era", *Advances in Accounting*, Vol. 2, No. 1, pp. 28–37.

Durocher, S. (2008). "Canadian Evidence on the constructive capitalization of operating lease", *Accounting Perspectives*, Vol. 7, No. 3, pp. 227–256.
EFRAG (2017). "Ex ante Impact Assessment of IFRS 16. Europe Economics", https://www.efrag.org/Assets/Download?assetUrl=%2Fsites%2Fwebpublishing%2FSiteAssets%2FIFRS%252016%2520-%2520Europe%2520Economics%2520-%2520Ex%2520ante%2520Impact%2520 Assessment%2520%2822%2520 February% 25202017%29.pdf.
European Commission. (2011), "SMEs' Access to Finance Survey 2011. Results by business characteristics", http://ec.europa.eu/enterprise/policies/finance/files/smes_demb.xls
EY (2016), "Applying IFRS A closer look at the new leases standard", https://www.ey.com/ Publication/vwLUAssets/ey-applying-ifrs-a-closer-look-at-the-new-leases-standard-august-2016/$FILE/ey-applying-ifrs-a-closer-look-at-the-new-leases-standard-august-2016.pdf
Fahnestock, R.T., King, C.G. (2001), "An Evaluation of the Impact of Constructive operating Leases on Financial Position and Results of Operations", *Journal of Accounting and Finance Research*, summer, pp. 39–52.
Fito, M. A., Moya, S., Orgaz. N. (2013), "Considering the effects of operating lease capitalization on key financial ratios", *Revista Española de Financiación y Contabilidad,* Vol. 42, No. 159. pp. 341-369.
Fülbier, R. S., Silva, J. L., Pferdehirt, M. (2008), "Impact of lease capitalization on Financial ratios of Listed German Companies", *Schmalenbach. Business Review*, Vol. 60, No. 1, pp. 122–144.
International Accounting Standards Board (2009), IAS 17 – Leases.
International Accounting Standards Board (2016), IFRS 16 Leases Effect Analysis.
International Accounting Standards Board (2016), IFRS 16 – Leases.
Imhoff, E. A., Jr., Lipe, R.C., Wright, D.W. (1991), "Operating Leases: Impact of Constructive Capitalization". *Accounting Horizons*, Vol. 211, pp. 51–63.
Imhoff, E.A., Lipe, R.C., Wright, D.W. (1993), "The effects of recognition versus disclosure on shareholder risk and executive compensation", *Journal of Accounting, Auditing, and Finance*, Vol. 8, No. 4, pp. 351–368.
Imhoff, E.A., Lipe, R. C., Wright, D.W. (1997), "Operating Leases: Income Effects of Constructive Capitalization", *Accounting Horizons*, Vol. 28, No., 4, pp. 12–32.
Moody's (2015), *Moody's updates its global methodology for financial statement adjustments*, https://www.moodys.com/research/Moodys-updates-its-global-methodology-for-financial-statement-adjustments--PR_327853.
Morales-Díaz, J., Zamora-Ramírez, C. (2018), "Effects of IFRS 16 on Key Financial Ratios: A New Methodological Approach", *Accounting in Europe*, Vol. 15. No. 1, pp. 1-33.
Moussaly, K., Wang, W. (2014), *The Impact of Leased and Rented Assets on Industry Productivity Measurement,* http://www.statcan.gc.ca/pub/15-206-x/15-206-x2014036-eng.htm.
Mulford, Ch.W., Gram, M. (2007), "The Effects of Lease Capitalization on Various Financial Measures: An Analysis of the Retail Industry", *Journal of Applied Research in Accounting and Finance*, Vol. 2, No. 2, pp. 3–13.
PWC (2016), *A study on the impact of lease capitalisation IFRS 16: The new leases standard*, https://www.pwc.com/gx/en/audit-services/publications/assets/a-study-on-the-impact-of-lease-capitalisation.pdf.