EXAMINATION AND COMPARISON OF THE PROFITABILITY OF A COMPANY IN TWO DIFFERENT ACCOUNTING ENVIRONMENTS

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Abstract: *The primary goal of the present research is to examine the profitability of companies that have transitioned to IFRS in the year of transition. This provides an opportunity to compare the profitability of a given company in the system of IFRS and on the basis of the data of the annual statement prepared in accordance with the Hungarian accounting rules. In the scope of the literature review and material and method chapters, the method of calculating the applied profitability indicators and the economic content of the indicators are presented. In addition, the source of the annual statements containing the data used for the study is described. In the scope of the research, it is hoped to be highlighted how different results can be presented in terms of profitability, using the data of two annual statements prepared on the basis of two different accounting systems. For the study, the Magyar Telekom Telecommunications Plc was selected, which switched to IFRS in 2017. The profitability of Telekom Plc. was examined using the return on sales (ROS), return on assets (ROA), and return on equity (ROE) profitability ratios. Simultaneously with the presentation of the profitability indicators, the factors influencing the value of each profitability indicator were described. In addition, the accounting specificities of the factors influencing profitability indicators in the system of IFRS and in the Hungarian accounting regulations were highlighted. In the scope of the present study, the focus was on the causal relationships of each difference. As a result of the research, it can be clearly stated that the profitability indicators calculated on the basis of the data of the annual report prepared in accordance with the requirements of IFRS are higher, so a more favorable profitability situation can be detected than in the Hungarian accounting environment. In the conclusion chapter, the results of the study and the drawn conclusions are briefly summarized.*

Keywords: *IFRS; Hungarian accounting; profitability; transition; IFRS 1 standard.*

JEL Classification: *M4.*

Introduction

The globalization of international money and capital markets has given investors plenty of opportunities to invest their capital. By the 21st century, national and continental capital market boundaries have disappeared to such an extent that either an investor living in Europe has access to investments in the United States or even an Australian businessman is able to buy shares on the Tokyo Stock Exchange

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at any time. The globalization has several benefits, such as an increased supply of investments that allow the investors to choose from numerous options and choose the investment that best suits their preference. Accounting has been known since the beginning as a reliable source of information that greatly contributes to the decision-making of investors. Investor decisions may be hampered by valuation differences between accounting systems, which determine the value of individual assets differently. Different systems may differ so much that a given company may achieve different sales and after-tax results if two different accounting systems are used, but it may even show a given tangible asset at a different value. In the scope of the present study, the intention is to highlight how reports prepared based on two accounting systems might show different results in terms of profitability indicators.

1. Literature review, material, and method

In the present, our study, the individual financial statements of Magyar Telekom Telecommunications Plc (hereinafter: Telekom Plc.), were examined, which covered the 2016 financial statements, as in 2017, Telekom Plc. switched to the use of International Financial Reporting Standards (hereinafter: IFRS) in terms of its individual financial statements. In compliance with one of the important accounting principles, Telekom Plc. is obliged to publish and present the data of the previous year (2016) in its 2017 annual statement, which complies with the said principle if these data are prepared in accordance with International Financial Reporting Standards. Thus, a statement prepared on the basis of two accounting systems for a given year (2016) is available for examination. The statements were downloaded from the website of the company and e-beszamolo.hu.

1.1. The necessity of transition to IFRS
As a result of globalization, the need for international harmonization of accounting is becoming more and more important (Dékán Tamásné Orbán – Kiss, 2017). As a result of the rapid capital flows characteristic of the current economic life, national borders are becoming increasingly irrelevant (Beke, 2014), since, as the data of enterprises in several jurisdictions are examined, the comparison of financial statements prepared from these data becomes almost impossible (Rózsa, 2015). It makes it particularly difficult for companies, owners, investors, other decision-makers and public authorities to assess the wealth, financial and profitability situation of companies on the basis of reports prepared according to different principles (Madarasiné et al., 2018). Economic change reinforces the need to standardize the main communication language of the economy, i.e., accounting so that those wishing to invest in different countries can measure the performance of individual companies (Böcskei et al., 2017). For this reason, special emphasis should be placed on the teaching of IFRS for practice-oriented training (Fenyves et al., 2020).

1.2. Profitability indicators
In the present study, three profitability indicators in relation to the 2016 data of Telekom Plc. were analyzed.

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The first indicator used for the analysis is the return on sales ratio (ROS).

$$ROS = \frac{Profit\ after\ tax}{Revenues}$$

The ROS ratio shows how much after-tax profit is accompanied per unit of sales. Thus, in principle, the higher value can be considered more favorable, because if the company did not have an income adjustment item other than sales revenue and the payment of taxes would be disregarded, the value of the indicator would be 100%. The more costs and expenses a company has, the lower the value of the ROS indicator (Bán et al., 2017).

The second indicator used for the analysis is the return on assets (ROA).

$$ROA = \frac{Profit\ after\ tax}{Total\ assets}$$

The ROA indicator shows how much after-tax profit is achieved for a unit of total assets. Thus, it can be determined as a percentage how much the company can achieve an after-tax profit with the help of its asset portfolio. Basically, a higher indicator value can be considered more favorable; since then, the company can achieve a higher result in proportion to a smaller stock of assets (Bíró et al., 2016). The third indicator used for the analysis is the return on equity (ROA).

$$ROE = \frac{Profit\ after\ tax}{Return\ on\ equity}$$

The ROE indicator shows how much after-tax profit is achieved per unit of equity. A higher value can be considered advantageous, although further research is recommended, as a higher value may also mean a low amount of equity. Basically, the indicator can also be considered as a proportion, as the after-tax profit is part of equity (Birher et al., 2009).

2. Examination of Telekom Plc.'s profitability indicators in the year of transition to IFRS

In this chapter, the development of Telekom Plc.'s profitability indicators and the factors influencing them in the year of transition to IFRS, 2016, are presented. In addition, the accounting specifics of the factors influencing the indicators are explored.

2.1. Development of the return on sales profitability indicator of Telekom Plc. in the year of transition

In this chapter, Telekom Plc.'s return on sales (ROS) profitability indicators based on the Hungarian Accounting Act (HAS) and the annual statement prepared in accordance with IFRS are presented. The indicator can be defined as the quotient

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of after-tax profit and sales revenue. The following table shows the development of ROS indicators:

Table 1: Introduction of ROS indicators and the factors influencing them in the year of transition

million HUF

	HAS	IFRS	Difference (IFRS/HAS-1)
Sales revenue	*468 255*	*447 173*	*-4.50%*
Operational costs	475 299	392 580	-17.40%
Operational profit	34 729	62 268	79.30%
Earnings before taxes	29 398	45 788	55.72%
Tax liability	862	8457	881.09%
After-tax profit	*28 536*	*54 245*	*90.09%*
ROS	6,09%	12,13%	99.18%

Source: own calculation based on the annual statements of Telekom Plc

As shown in *Table 1*, the ROS indicator based on the data of the annual statement prepared in accordance with IFRS is almost double, 90.9% higher than the indicator calculated on the basis of the data of the annual statement prepared in accordance with the Accounting Act. One of the main reasons for this is that the after-tax profit is almost twice as large according to IFRS as under the Hungarian Accounting Act. After-tax profit is composed of several factors, so the large difference is likely to be due to the difference between several factors in the profit and loss account

The value of operating profit in the system of IFRS is much higher than according to the Hungarian Accounting Act. The main reason for this is that the value of operational costs expenses is much lower as required by IFRS.

The largest difference is shown by the tax liability, and its amount is almost ten times higher when accounted under the requirements of IFRS than in the Hungarian accounting system. This difference is due to the IAS 12 - Income Taxes standard. An essential difference between the two accounting systems with regard to the calculation of income tax is that under the Hungarian tax law, earnings before taxes must be adjusted with the so-called tax base adjustment items, and the determined tax liability corresponds to the actual tax liability. In contrast, IFRS and IAS 12 requires after-tax profit to be reduced not only by the actual tax but also by the deferred tax. Based on this, the large difference is given by the fact that earnings before taxes are adjusted by tax base adjustment items in the line of tax liability according to Hungarian accounting regulations. The most significant tax base reduction item is depreciation according to the taxation legislation and dividends recognized as income from financial operations. The tax liability under IFRS includes both actual and deferred tax liability.

The difference is further increased by the fact that the sales revenue is lower according to the rules of IFRS than the Hungarian Accounting Act. The difference between the amounts of revenue is likely to be due to the special requirements of IAS 18 – Revenue standard, as IAS 18 strictly defines the conditions for accounting revenue. One of the most common examples is that if the product sold includes a

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right of return, the resulting revenue cannot be fully accounted for. One option is for the company to account for revenue only when the right of return ceases. The other option is that the standard provides an opportunity to determine, based on the experience of previous years, the proportion of products returned by a reliable estimate, and the recognized sales revenue should be reduced accordingly. In connection with IAS 18, another common example is when a company provides an additional guarantee for its products in addition to the statutory warranty obligation. According to the standard, the guarantee obligation, in addition to the statutory requirement, must be accounted for as a revenue-reducing item, the amount of which must also be estimated on the basis of the experience of previous years. IFRS 15, which replaced IAS 18 after 1st January 2018, will certainly cause further differences in results, which is worth addressing later.

Overall, it can be stated that the ROS indicator calculated in the system of IFRS is twice as large as the indicator calculated according to Hungarian accounting. As a result, higher profitability is recognized in accordance with the provisions of IFRS.

2.2. Development of the return on assets profitability of Telekom Plc. in the year of transition

After the comparison of return on sales (ROS), the next indicator was return on assets (ROA). As already explained in the methodology, the return on assets is the ratio of after-tax and total assets. ROA shows how much after-tax profit is generated per unit of total assets. The development of the indicator is greatly influenced by the development of the after-tax profit and total assets calculated based on the two different accounting systems. Table 2 shows the development of ROA for 2016 based on the application of the Hungarian and international accounting systems.

Table 2: Introduction of ROA indicators and the factors influencing them in the year of transition

million HUF

	HAS	IFRS	Difference (IFRS/HAS-1)
After-tax profit	28 536	54 245	90.09%
Total assets	984 574	1 084 223	10.12%
Intangible assets	289 939	392 069	35.22%
Inventories	12 224	10 683	-12.61%
ROA	2.90%	5.00%	72.62%

Source: own calculation based on the annual statements of Telekom Plc.

Table 2 shows that the after-tax profit influencing the development of the ROA indicator in the case of financial statements prepared on the basis of IFRS is almost twice that of the report prepared on the basis of the Hungarian accounting system. The reason for this has already been explained when presenting the development of the ROS indicator. 10.12% higher amount was reported for all assets, so in the case of return on assets, most of the difference is due to the difference in the method of calculating net profit between IFRS and the Hungarian accounting system.

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However, it is also worth examining the 10.12% difference for total assets. In the scope of the present study, the aim is to present the assets that show a more significant and greater difference within total assets.

If the development of intangible assets calculated on the basis of both Hungarian and IFRS regulations is examined, it can be seen that the value of intangible assets in the financial statements prepared in accordance with International Accounting Standards is higher than the value calculated in accordance with the Hungarian Accounting System, despite the fact that the Hungarian Accounting System provides more freedom to activate various direct costs. The costs of foundation reorganization and the direct costs incurred with experiments can also be capitalized in the Hungarian accounting system.

In this case, we should examine the valuation procedure for items belonging to intangible assets. The company has goodwill, which is defined in the Hungarian accounting system as the difference between the market value and the liabilities of the acquired company. In the case of International Financial Reporting Standards, intangible assets that might not have been recognized as intangible assets of the acquired company may also arise at the time of the acquisition, as they are internally generated assets (IFRS 3 Business Combinations). One of the most common examples of this is an internally generated client list (Lakatos et al., 2013), which is disclosed in the financial statements in accordance with IFRS 3 after the invisible capital, thus increasing the total assets of the company.

Additionally, it is also important to mention valuation options related to intangible assets. In both accounting systems, intangible assets are accounted at cost value, but there may be differences after initial recognition. In the Hungarian accounting system, intangible assets are depreciated over their useful lives. In the case of the application of IFRS, intangible assets may have a definite (finite) and indefinite useful life, intangible assets with indefinite useful lives cannot be depreciated, but must be tested annually for impairment. Thus, if the impairment test does not reveal any circumstances that would justify an impairment, the book value of those assets remains unchanged for years. It is also worth mentioning the differences related to goodwill, because while the Hungarian accounting system depreciates the value of goodwill to zero over a period of 5-10 years, IFRS only subject the said asset to the impairment test, so the value of goodwill may remain unchanged for years if no impairment is revealed.

In the case of inventories, some differences can also be detected, as the inventory value in the statement prepared in accordance with the IFRS was 12.61% lower than the inventory value in the statement prepared on the basis of the Hungarian accounting system. This difference is due to the inventory valuation rule applied by IFRS. In the Hungarian accounting system, inventories are impaired if the market value of the inventories is permanently below their book value. In the case of IFRS, inventories should be depreciated to the net realizable value, where it is not sufficient to determine their market value, as net realizable value is determined as the difference between the market value and the costs of selling the inventories. So the cost of sales calculated by the company is also deducted from the market value.

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Interestingly, the asset side of the balance sheet prepared on the basis of the Hungarian accounting system includes the repurchased own shares, which, according to IFRS, must be shown as equity reducing entry.

Overall, it can be stated that the ROA indicator calculated in the IFRS system is 72.62% higher than the indicator calculated according to the Hungarian accounting system.

2.3. Development of the return on equity profitability indicator of Telekom Plc. in the year of transition

The third examined indicator was the return on equity (ROE). The ROE indicator can be defined as the ratio of after-tax profit and equity. The development of the indicator is shown in the following table:

Table 3: Presentation of ROE indicators and factors influencing them in the year of transition

million HUF

	HAS	IFRS	Difference (IFRS/HAS-1)
Subscribed capital	104 274	104 274	0%
Capital reserve	58 952	27 119	-54.00 %
Accumulated profit reserve	233 761	408 708	74.84%
Own shares (within equity)	0	-55	N/A
Equity	425 558	540 046	26.90%
After-tax profit	28 536	54 245	*90.09%*
ROE	6,71%	10,04%	49.63%

Source: own calculation based on the annual statements of Telekom Plc

Table 3 lists the factors that may affect the development of the ROE indicator.

The first capital item is the subscribed capital, the value of which is the same according to the accounting of both accounting systems, as the value of the subscribed capital is always included in the balance sheet at nominal value.

The amount of the profit reserve shows a significant difference according to the accounting of the two accounting systems. The main reason for this is that, in accordance with IFRS 1 - First-time Adoption of International Financial Reporting Standards, any differences that arise from differences in the specifics of the two accounting systems are reflected in profit reserve. The most common difference during the transition, which can significantly affect the profit reserve is the recognition criteria for assets. According to the requirements of IFRS, certain assets cannot be shown in the balance sheet, which is allowed by the Hungarian Accounting Act, and vice versa. In addition, the difference is increased by the fact that the balance sheet prepared in accordance with IFRS does not show the after-tax profit on a separate line, but is transferred directly to the profit reserve. *Table 3* shows that the value of the after-tax profit, according to IFRS, is 54,245 million HUF, so only the direct transfer of the after-tax profit to the profit reserve causes such a difference.

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In the present case, the difference between the recognition of repurchased own shares in the two accounting systems causes a minimal difference, as according to IFRS it is required to be shown as equity reducing entry, while according to Hungarian accounting regulations it is shown on the asset side, among current assets.

Overall, these differences result in a 26.9% increase in the value of equity when accounted for in accordance with IFRS.

The reasons for the large-scale difference in the after-tax profit have already been explained in the previous chapter.

The ROE indicator calculated in the accounting system of IFRS is 49.63% higher than the indicator calculated in the Hungarian accounting environment. This is due to the difference in the requirements of the two accounting systems explained above.

Overall, it can be stated that the ROE indicator also shows higher profitability in the IFRS system.

3. In conclusion

In the scope of the present study, the aim was to point out what differences may appear in the financial indicators of a given company if it uses different accounting systems. In the study, the accounting data of Telekom Plc. were available to in both the Hungarian and international accounting environment. From these data, profitability indicators were calculated, which showed a relatively large difference. Basically, it cannot be stated that a company applying IFRS has higher profitability. Still, it can be established that the profitability indicators showed a big difference, and in the case of Telekom Plc. the transition in 2016 turned the development of the indicators in favor of the company. However, the company had the same assets and resources, and only the valuation methods of these assets and liabilities differed and complied with the rules and regulations of the applied accounting system. Investors should consider the accounting system used by companies when comparing their investment opportunities. It is not very fortunate to compare companies based on their balance sheets and results that operate in a completely different accounting system, as decision-makers may not be able to make the right decision. One of the main goals of the emergence of IFRS was to unify accounting systems so that investors could make a rational decision between companies operating in the same accounting system. Basically, it is only rational to compare profitability indicators that are calculated with elements (revenue, profit, asset value, etc.) determined on the basis of valuation procedures of the same accounting system. Also, only companies that prepare their annual statements based on similar principles should be compared based on their profitability ratios.

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References

1. Bán, E., Kresalek, P. and Pucsek, J. (2017): A vállalati gazdálkodás elemzése, Budapest: Perfekt Gazdasági Tanácsadó Oktató és Kiadó Zártkörűen Működö Részvénytársaság. ISBN 974-963-394-721-0

2. Beke, J. (2014): Nemzetközi számvitel, Budapest: Akadémiai Kiadó.

3. Birher, I., Pucsek, J. and Sztanó, I. (2009): A vállalkozások tevékenységének gazdasági elemzése, Budapest: Perfekt Gazdasági Tanácsadó Oktató és Kiadó Zártkörűen Működö Részvénytársaság. ISBN 978-963-394-657-2

4. Bíró, T., Kresalek, P., Pucsek, J. and Sztanó, I. (2016): A vállalkozások tevékenységének complex elemzése. Budapest:Perfekt Gazdasági Tanácsadó Oktató és Kiadó Zártkörűen Működő Részvénytársaság. ISBN 978-963-394-851-4

5. Böcskei, E., Dékán, Tamásné Orbán I., Bács, Z., Fenyves, V., (2017a): Az IFRS beszámolóban rejlő sajátosságok controlling szemléletű vizsgálata – döntéstámogató vezetői számvitel előtérbe kerülése a pénzügyi számvitel szabályozásán keresztül, Controller Info V : 4 pp. 2-8., 7 p. (2017)

6. Dékán, Tamásné Orbán I., Kiss, Á., (2017): Az IFRS-ek szerinti beszámolásra történő áttérés gyakorlati kérdései, Controller Info 1K pp. 133-143., 11 p.

7. Fenyves, V., Dajnoki, K., Dékán, Tamásné Orbán I., Harangi-Rákos, M. (2020): Gyakorlatorientált képzések megítélése a vállalati szférában, Acta Medicinae Et Sociologica 11 : 1 pp. 1-22., 20 p.

8. Lakatos, L., Kovács, D., Mohl, G., Rózsa, I. and Szirmai, A., and. (2018): A Nemzetközi Pénzügyi Beszámolási Standardok elmélete és gyakorlata, Budapest: Magyar Könyvvizsgálói Kamara.

9. Madarasiné Szirmai, A., Bartha, Á., Kovács, D.M., and Mohl, G., (2018): Nemzetközi számviteli ismeretek, Budapest: Perfekt Gazdasági Tanácsadó Oktató és Kiadó Zártkörűen Működö Részvénytársaság.

10. Rózsa, I. (2015): Nemzetközi számvitel I., Budapest: Hessyn Informatikai és Oktatási Kft.

The Annals of the University of Oradea. Economic Sciences
Tom XXIX 2020, Issue 1 (July 2020)
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