SHS Web of Conferences **92**, 02039 (2021) https://doi.org/10.1051/shsconf/20219202039
Globalization and its Socio-Economic Consequences 2020

Comparison of Financial Reporting in the Visegrad Four Countries in a Global Environment

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Abstract.

Research background: The Visegrad Four (V4) countries are the Czech Republic, Slovakia, Hungary and Poland. As members of EU they had to incorporate into their national legal accounting framework the European Directives related to annual accounts, valid at the time, where various choices were possible to adopt. Some principles of the international financial reporting standards IFRS also affected the national accounting frameworks more or less, depending on the country. These various influences may affect the external user´s ability to read the published financial statements and compare them.
Purpose of the article: The aim of this paper is to compare the relevant national legal framework of accounting in selected areas and the content of financial statements required in the V4 countries and to point out the influence of the chosen presentation of some financial information on selected indicators of financial analysis.
Methods: Methods of description, analysis, comparison and synthesis are used to achieve the set aims of the paper. The financial analysis is demonstrated on an illustrative example of reported financial information which is based on the different national accounting legislation.
Findings & Value added: The comparison showed some similarities and differences. The main differences amongst the V4 countries are related to the reporting of leased assets and the variation of own production and work-in-progress. Czech Republic does not report the leased assets in the balance sheet of the user of the asset but in the owner´s while the Slovak republic, Hungary and Poland report the asset in the user´s balance sheet which is in accordance with the international accounting standards IFRS (in case of Poland it depends on the lease contract). The Czech Republic reports the changes in own production and capitalization of own work as part of expenses which is in line with IFRS. The Slovak Republic, Hungary and Poland report these items as part of revenues which is in line with the EU Directive but in contrast with IFRS. Also, the Slovak republic and Poland have definitions of the elements of financial statements in their accounting legislation while the Czech Republic and Hungary do not have these definitions. These differences influence the results of ROA, ROE and

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cost efficiency when comparing the same situation in these countries as it is evidenced on the illustrative example in the paper.

Keywords: *financial statements; financial analysis; national accounting legislation; leased assets; international accounting standards IFRS*

JEL Classification: *M41; M48; K29*

1 Introduction

The Visegrad 4 countries are the Czech Republic, Slovakia, Hungary and Poland. All these countries are part of the European Union (EU) from 2004 and therefore the national accounting legislation in these countries has to adhere to the EU Directives related to accounting and incorporate the methods and prescribed layouts of the financial statements. At the time of accession, the Fourth Council Directive 78/660/EEC of 25 July 1978 on annual accounts of certain companies [1] was valid and prescribed the layout of the balance sheet and the income statment. Two layouts of balance sheet and 4 layouts of the income statement were offered for the member states to choose from. The balance sheet items could be presented in a horizontal or vertical format where in both cases the items had to be divided into current and non-current. The balance sheet lists the assets in order of increasing liquidity. Several items in the offered layouts were subject to the national law of the countries, for example in case of formation expenses (*as defined by national law, and in so far as national law permits their being shown as an asset*) or in case of research and development. The income statement layouts allowed the presentation of operating expenses by nature or by function. Former versions also included extraordinary expenses and revenues. The variation in stocks of finished goods and in work in progress were included in the revenues or as combination. This Directive was repealed by the Directive 2013/34/EU of 26 June 2013 on the annual financial statements [2]. In this new Directive there are some changes compared to the former version related to the topic of this paper. There are still 2 layouts offered for the balance sheet but the number of layouts offered for the income statement is reduced to 2. The presentation of expenses by nature and by function is still valid. This Directive [2] does not mention research in the balance sheet or extraordinary expenses in the Income statement.

In the global world, it is necessary that the information is comparable at the international level [3]. External users (including international potential investors) have to depend on the reported information in the published annual financial statements. Differences in reporting financial information may affect the comparison of the financial position and financial performance of similar companies in different countries. This is evidenced by many researches. Entities from different countries can operate in different regulatory frameworks [4]. Financial statements are often a subject of harmonization since a certain level of comparison is expected in order to fulfill information needs of wide range of users (especially investors on financial markets [5]. Other authors commented on the accounting background of the V4 countries. National accounting culture and traditions have developed over time in close relationship with the political, social and economic environment, and influence the way in which legislative requirements are applied [6]. The Czech Republic, Slovakia and Hungary benefit from a common historical accounting background based on the Austrian school. Polish accounting has a historical background based on the German school [6].

The listed companies in the EU countries had to implement international accounting standards IFRS for reporting purposes from 2005. Gradually, the principles of IFRS are being incorporated into the national accounting legislation as well. There are research results suggesting that accounting standards harmonization facilitates financial market integration [7] or proved that the harmonization process is useful and brings multiple benefits to the professional's day-to-day activities and also every professional plays a very significant role in the process of harmonization by actively presenting various comparative analyses [8]. Researchers also point out the importance of narrative reporting and argue that although Directive 2013/34/EU regulates the contents of management reports, a harmonised practice of narrative reporting at EU level is lacking, due to the high degree of flexibility provided by the Directive 2013/34/EU [9]. Other authors monitored how financial statement comparability affects the cost of capital and investor welfare and proved that the cost of capital decreases with comparability if and only if the quality of accounting standards is sufficiently high [10].

The aim of this paper is to compare selected aspects of financial reporting in the Czech Republic, Slovakia, Hungary and Poland, point out differences and demonstrate the influence of these differences on selected ratios of financial analysis.

2 Material and Methods

Methods of description, analysis, comparison and synthesis are used to achieve the set aims of the paper. The information was collected mainly from national accounting legislation and professional articles and literature. Selected ratios of the financial analysis are demonstrated on an illustrative example of reported financial information which is based on the national accounting legislation in the V4 countries. The paper focuses on the similarities and differences of the reported information and on the influence on the selected ratios of financial analysis. The focus of accounting areas are: the reporting of leased assets, reporting of changes in own production and capitalization of own services, the existence of definitions of the elements of financial statements, reporting research and development, own shares and formation expenses. The selected financial analysis ratios used for the demonstration of different results depending on the different national accounting legislation´s approaches to these issues are ROA, ROE and cost efficiency. ROA is calculated as net income divided by total assets. ROE is calculated as net income divided by total equity. Cost efficiency is calculated as net income divided by total expenses.

3 Results and discussion

The layout and content of the financial statements in the V4 countries is prescribed in the national accounting legislation of these countries and is based on the layouts offered by the EU Directives [1,2]. There are areas which are common for all these countries (for example the presentation of assets in increasing order of liquidity, dividing assets and liabilities to current and non-current and the general content of the financial statements). There are however some differences, for example in the presentation of leased assets or in the presentation of changes in own production. The official legal definition of the elements of the financial statements is missing in some cases.

3.1 The legal framework of Accounting in the Czech Republic

The legal frame of accounting in the Czech Republic is based on the Accounting Act No 563/1991 Coll. (Zákon o účetnictví), the Decree of Ministry of Finance No 500/2002 (Vyhláška 500/2002) and the Czech accounting standards, as amended. The structure of the Balance sheet and the Income statement is mandatory and is described in the appendixes to the Decree No 500/2002. The Balance sheet format is horizontal, the vertical format is not allowed. The current and non-current separation of assets and liabilities is present. Assets are presented from the least liquid to the most liquid ones. The Income statement format is vertical and can be prepared by nature or by function, both presentation of operating expenses is permitted although the "by function" presentation is rarely used for reporting purposes. The reason for that can be the fact that in the mandatory chart of accounts the expenses are presented by nature. The cash flow statement can be prepared using the direct or indirect method but the indirect method is prevalent. The elements of the financial statements are not legally defined i.e. there is no legal definition of assets or liabilities or expenses, etc. The lack of clear definition has some consequences, like in the case of assets, the leased assets are not reported in the balance sheet of the user but of the owner. Also, formation expenses were part of intangible assets up until 2014 but not anymore. Expenses on development can be capitalized and reported as intangible assets. In the case of liabilities, there is a possibility to create provisions for future obligations which is in contrast with the international accounting standards. In the Czech Income Statement, expenses used to be divided into operating, financial and extraordinary up until 2016 and also changes in own inventory and capitalization of own services were part of revenues. From 2016 the category of extraordinary expenses was abolished and also changes were implemented regarding the variation in own products and work-in-progress and capitalization. These items are now part of expenses. These changes are in line with the international accounting standards´ practice. The financial statements of the companies can be freely accessed in the online public register. Research says that the implementation of elements of IFRS into Czech accounting standards is still only partial. Each change of the Accounting Act involves some elements of IFRS; however, between the two systems, there are still significant differences, the roots of which lie in a different (continental) model of accounting [11].

3.2 The legal framework of Accounting in the Slovak Republic

The legal frame of accounting in the Slovak Republic is based on the Accounting Act No. 431/2002 Coll. (Zákon o účtovníctve) as amended and on the Measure of the Ministry of Finances No. 23054/2002-92 which contains accounting procedures. Basically these are the slovak accounting standards. Also important is the Measure No. 23377/2014-74 as in its appendix the official example of the structure and content of the Balance sheet and Income statement can be found. The Balance sheet layout is horizontal and the assets and liabilities are separated as current and non-current. The Income statement is prepared by the nature of the operating expenses. Variation in own products and Capitalization of own services are reported in revenues which is in contrast with the international accounting standards´ practice. The elements of the financial statements are defined in the Accounting Act. Liabilities are defined as current obligations which then has an impact on the possible reasons when creating provisions. There is a mandatory chart of accounts which has a connection to the illustrative official financial statements where the exact account numbers are allocated to the particular lines.The statements of cash-flow and of changes in equity are part of Notes to the financial statements. Valuation of non-current assets is based on the income tax regulation. Treasury stock is presented as a short-term financial asset with plus and subscribed but unpaid capital receivables are reported in Equity with minus. Expenses on research are expensed as they occur, capitalized expenses on development are reported as intangible assets. The financial statements of the companies can be freely accessed in an online public register.

3.3 The legal framework of Accounting in Hungary

The legal frame of accounting in Hungary is based on the Accounting Act 2000 C (2000. évi C. törvény a számvitelről) as amended. The mandatory layouts of the financial statements are included in this Act as appendixes. There are 2 formats to choose from for the companies : the horizontal (referred to as A) and vertical format (referred to as B). Formation expenses are part of intangible assets. Expenses of development are capitalized and reported in intangible assets. Own shares are reported in assets. There is no legal definition of the elements of the financial statements. For the Income statement, the by nature and by function presentation is both allowed. In the income statement by nature, the changes in own production and capitalization of own services are reported as revenues. The financial statements of the companies can be freely accessed in an online public register. As with the other EU countries, the listed companies has to prepare their financial statements according to IFRS. However, that only a negligible proportion of Hungarian companies have stock exchange presence, IFRS compliant reporting is only required of a tiny segment of companies [12].

3.4 The legal framework of Accounting in Poland

The legal frame of accounting in Poland is based on the Accounting Act (Ustawa o rachunkowości Dz.U. 1994 Nr 121 poz. 591), as amended and domestic accounting standards (MAMIC) The mandatory financial statements are the balance sheet, the income statement and the Notes. Audited companies also prepare the cash-flow statement and the statement of changes in equity. The mandatory structure and content of the financial statements is in the appendix to the Accounting Act. The elements of the financial statements are defined in the Accounting Act. The Balance sheet has a horizontal format and the assets are listed from the least liquid ones to the most liquid ones. Capitalized expenses of completed development are reported as intangible assets. Own shares are reported in Assets. Leased assets are reported in the fixed assets of one of the parties to the lease contract. In the definition of liabilities the current obligation is not mentioned. The Income statement can be prepared by reporting operating expenses by nature or by function. The changes in own production is reported as part of revenues which is in contrast to the international accounting standards.

3.5 Comparison of selected accounting characteristics in the V4 countries

Summary of the similarities and differences in some selected accounting characteristics is shown in Table 1. In all countries of V4 there is a mandatory structure of the financial statements (meaning the Balance sheet and the Income Statement and also the requirements to the Notes).

Table 1 Comparison of selected accounting and reporting characteristics

	The Czech Republic	**The Slovak republic**	**Hungary**	**Poland**
Format of Balance sheet	horizontal	horizontal	Horizontal or vertical	horizontal
Expenses in Income Statement	By nature or by function	By nature	By nature or by function	By nature or by function
Definition of the elements of financial statements	no	yes	no	yes
Leased assets	By the owner	By the user	By the user	By the owner

reporting				or the user
Research and development in intangible assets	Only development	Only development	Only development	Only development
Own shares reported	Equity (minus)	Assets	Assets	Assets
Liabilities definition as current obligation	no	yes	no	not specified
Changes in own production	In expenses	In revenues	In revenues	In revenues
Capitalization of own services	In expenses	In revenues	In revenues	In revenues
Mandatory structure of financial statements	Yes Decree 500/2002, appendix	Yes Measure 23377/2014-74, appendix	Yes Accounting Act, appendix	Yes Accounting Act, appendix
Formation expenses in intangible assets	no	no	yes	no

3.5 Comparison of selected indicators of financial analysis

Different accounting national approaches in the V4 may have an influence on some calculated indicators of financial analysis. The illustrative example shown in Table 2 highlights some differences in the approaches of the V4 countries to some reporting issues that were mentioned above and assumes the following: a capitalized expenses spent on development are 200, leased assets are 500, own shares 50, increase of own production on the store 300, capitalisation of own services 100. The amounts presented in currency units are the same for all countries and include some other assets, equity, expenses and revenues which has the same accounting and reporting treatment in all V4 countries.

Table 2 Comparison of selected indicators of financial analysis in currency units and numbers

	The Czech Republic	**The Slovak republic**	**Hungary**	**Poland**
Capitalized development costs	200	200	200	200
Leased assets	0	500	500	0 or 500
Own shares	50 (Equity -)	50 (asset +)	50 (asset +)	50 (asset +)
Other assets	2000	2000	2000	2000
Other equity	500	500	500	500
Changes in production	-300 in expenses	+300 revenues	+300 revenues	+300 revenues
Capitalization of own services	-100 in expenses	+100 in revenues	+100 in revenues	+100 in revenues
Other expenses	600	600	600	600
Other revenues	1000	1000	1000	1000
Total assets	2250	2750	2750	2250 or 2750
Total Equity	450	500	500	500
Total Expenses	200	600	600	600
Total Revenues	1000	1400	1400	1400
Profit (net income)	800	800	800	800
ROA	0,355 (800/2250)	0,291 (800/2750)	0,291 (800/2750)	0,355 or 0,291

ROE	1,77 (800/450)	1,6 (800/500)	1,6 (800/500)	1,6 (800/500)
Cost efficiency	4 (800/200)	1,33 (800/600)	1,33 (800/600)	1,33 (800/600)

From the results shown in Table 2 is evident that different approaches result in different numbers when calculating some financial analysis ratios. The same situation and numbers give different results depending on how the specific country reports for example the leased assets, the changes in own production and capitalization of own services. The Slovak Republic, Hungary and Poland report the increase of own production as part of revenues which is in contrast with the international accounting standards IFRS. Reporting the changes in own production and capitalization of own services as part of expenses or part of revenues does not have an influence on the final profit as it is the same in each case. Reporting of these items influence the total expenses and total revenues thus influence the results of cost efficiency.

On the other hand, in the Czech Republic, leased assets are reported in the lessor´s balance sheet and not in the balance sheet of the user (lessee). In the Slovak Republic, Hungary and Poland the lessee reports and depreciate the leased asset (in case of Poland it depends on the lease contract). All V4 countries report only the capitalized expenses spent on development, the research phase is expensed as they occur. In the Czech Republic, own shares are reported in equity with minus, the Slovak Republic, Hungary and Poland report it in assets.

4 Conclusion

The V4 countries are the Czech Republic, Slovakia, Hungary and Poland. As members of EU they had to incorporate into their national legal accounting framework the European Directives related to annual accounts, valid at the time. The results show different level of accounting harmonization. The most significant differences regarding accounting and reporting in these countries are the reporting of changes in own production and capitalization of own services (in the Czech Republic these items are reported as part of expenses, in the other countries of V4 it is reported as part of revenues which is in contrast with the international accounting standards IFRS) and the treatment of leased assets (in the Slovak republic, Hungary and Poland the user of the asset reports the leased asset – although in Poland it can be also the owner, depending on the contract), in the Czech Republic it is the owner who reports the leased assets. The legal definition of the elements of the financial statements is missing in some cases, only the Slovak Republic and Poland have definitions of the elements in their national accounting legislation. Regarding the V4 countries in the cases mentioned above the Czech Republic has a different accounting and reporting approach to the leased assets and to the changes in own inventory than the rest of the V4 countries. While reporting the changes in own inventory is in line with IFRS in the Czech Republic, the reporting of leased assets in the owner´s balance sheet is in contrast with IFRS.

We agree with other authors [11] that each amendment of the national legislation in the monitored countries is influenced by IFRS principles and also that the number of companies who has to use IFRS in preparing their financial statements is limited [12]. It is possible to predict though that the national accounting legislation will be gradually amended to meet the IFRS principles. Users of the financial statements need comparability but also credibility of the published financial statements. [13]

Different approaches of reporting may influence some ratios of financial analysis and thus the comparability of the same situation in different countries. Reporting leased assets differently influence the results of ROA, reporting own shares influence ROA and ROE and reporting changes in own production influence cost efficiency. On the other hand, there is a research [14] regarding the relationship between total assets of the companies and their profit measures proving that the strength of these dependencies among V4 countries is very similar, and that over the years, these results did not change.

The accounting terminology used can be similar of different even within the Slavic language countries although it is influenced by the IFRS terminology [15]. In the V4 countries, similar terminology in the native language can be a benefit when comparing financial statements, which is true for the Czech and Slovak Republic, in less degree in case of Poland and not applicable in case of Hungary.

Limitation of the paper is related to the very narrow focus of selected areas of comparison. Future research will focus on other areas of comparison of the national accounting legislation (like valuation or reporting responsibilities) and the adaptation of the IFRS principles and approaches to various accounting issues and their influence on financial analysis.

In the era of globalization and international student mobility the accounting harmonization and the comparability of reported financial information is increasingly important both for the potential investors and academics.

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