RETURN ON REVENUE OF MANUFACTURING ENTERPRISES AFTER AMENDMENT OF CZECH ACCOUNTING LEGISLATION

Jiřina Bokšová – Josef Horák – Monika Randáková – Michal Vejvoda

Abstract

The profitability ratios are among the commonly used ratios, they bring basic information of the effectiveness of the business entity. One of the indicators of profitability is Return on Revenue. However, the explanatory power of indicators of profitability is dependent on the content of certain items that are measured. There were erroneously reported the items such as work in progress, produced products that were not sold during relevant accounting period and products that were finished during previous accounting periods in the Czech Republic from 1989 until December 2015. Consequences of factually incorrect reporting had an impact on profitability indicators. The paper describes the results of research of companies in automotive for 2014 and the impact of legislative changes effective from 1st January 2016 on the Return on Revenue. The main aim of the paper is to answer the question if the mentioned changes in reporting of work in progress and capitalization influence the profitability ratios.

Key words: amendment of Act on Accounting, ratios, return on revenue, explanatory power

JEL Code: G31, M41, M48

Introduction

The amendment to the Act on Accounting, which came into force on the 1st January 2016 provides among other things a change in reporting items "Change in own inventories" and the "Capitalization" in the Income Statement based on expenses by nature. (Strouhal & Bonaci, 2014) Does new way of reporting of mentioned items in Income Statement affect the profitability and other indicators of operating revenues?

The manager of the company receives answers to the following questions during the reporting of expenses: what was consumed, which types of expenses were used? The primary external expenses of the company may be consumption of material, usage of tangible and intangible assets (depreciation), consumption of energy or services, the consumption of human work (wages). For expenses by nature, it is characteristic that in the case of operating expenses there is a mix of information connected with the production expenses, sales expenses, administrative expenses. In case of expenses by nature, the operating expenses influence the total production expenses and it does not matter whether the production has yet been sold. For this reason, it is necessary to adjust operating expenses for work in progress and finished unsold products and convert them to the balance sheet as work in progress or products at the end of the reporting period. (Strouhal, 2012) There may also occur a situation where all company manufactured products were sold during the accounting period, including products produced in previous accounting periods and, therefore, there must be captured the decrease of finished products in operating profit through the Change in own produced inventories. The problem arises with there is provided a comparability of expenses and revenues in case of expenses by nature. Produced products are recognized as operating expenses regardless of whether the production was sold during the accounting period. (Krabec, 2014)

In case where the produced outputs such as work in progress or finished products have not been sold during the accounting period, there is recognized a Change in own produced inventories as the reduction of expenses or it is possible to recognize this transaction as the increase of revenues. If the products were not sold, they should not be recognized as revenues. There is factually accurate solution – the work in progress and products should be recognized as the reduction of operating expenses. Only in this way, the company shall ensure that there will be recognized only those expenses that are connected revenues achieved during the accounting period the Income Statement. The International Financial Reporting Standards (IFRS) are based on mentioned methodology. (Strouhal, 2012)

1 Methodology

The Change in own produced inventories was reported as a revenue in the Income Statement in accordance with the valid Czech accounting legislation till the end of the year 2015. Unfortunately, there was not reflected the economic substance, because if the company produced inventories that were not sold, this transaction was recognized as the increase of inventories in the balance sheet and as increase of revenues in Income Statement. When the products were sold, the transaction was recognized as the decrease of inventories and the decrease of revenues. Expenses and revenues are different while ensuring substantive comparability of expenses and revenues through expenses or revenues. It is due to the fact that, operating expenses represent all expenses per accounting period and operating income represents income for realized performance +/- Change in own produced inventories. However, reported net profit will be the same in accordance with ensured substantive comparability of expenses and revenues through adjusting expenses or revenues. Here comes a question: Does it depend on the way of recognition of Change in own produced inventories if the operating profit is the same? Income statement based on expenses by nature (in accordance with the Czech accounting legislation valid till 31st December 2015) did not reflect economic substance. The financial analysis of the company was influenced by accounting information and then this effect influenced the results of the analysed indicators. The managers and owners of the company could obtain incorrect information about the financial performance of the company (Strýčková, 2015) as it is presented in Tab. 1. One of the most important indicator of financial analysis is the return on revenue or return on expenses.

Tab. 1: Return on revenue in accordance with different recognition of Change in own produced inventories

Operating profit	300	
Revenues (do not include Change in own produced inventories)	600	
Expenses (do not include Change in own produced inventories)	1100	
Change in own produced inventories (increase of produced products)	800	
Substantive comparability of expenses and revenues ensured by:	Version A: Expenses adjustment	Version B: Revenues adjustment
Revenues	600	1,400
Expenses	300	1,100
Return on revenues: Operating profit / revenues (1)	300 / 600 = 0.5 = 50 %	300 / 1,400 = 0.21 = 21 %
Return on expenses: Operating profit / expenses (2)	300 / 300 = 1 = 100 %	300 / 1,100 = 0.27 = 27 %

Source: own elaboration

The results are different but it is still the same company. These differences were caused by a different form of reporting item Change in own produced inventories. If there were two different companies, the managers, and potential investors would prefer the company in version A.

According to the valid Czech accounting legislation till the end of 2015, production of the products was recognized as revenue. (Act on Accounting, 1991), (Decree No. 500/2002 Coll., 2002) The produced output (recognized as a revenue) was compared with the own cost of the output. For this reason, it was necessary to remove the item Change in own produced inventories and modify operating expenses in the processing of financial analysis in the Czech Republic. These adjustments could be only made by a manager or entrepreneur who understand the information reported in financial statements.

The second crucial item of the Income Statement is “Capitalization”. The recognition of this item was modified in accordance with the Czech accounting legislation from the 1st January 2016. This item is recognized when the accounting entity produces tangible or intangible assets by itself (e. g. a construction company builds a garage for the purposes of the company) or the company realizes a service (installation, assembly, transport for the purposes of the company). In these cases, the company incurs expenses in this production (service). The expenses of the company are influenced by the expenses connected with the production of a garage, expenses connected with the realization of the service. However, these assets must be removed from the expenses and must be capitalized in assets of the company. The account Capitalization was created for this purposes. Capitalization can be recognized as an expense (in accordance with the IFRS) or a revenue (Czech accounting legislation till 31st December 2015).

Under the new Czech accounting legislation, there is a change in the reporting of the item "Change in inventory”. (Decree No. 500/2002 Coll., 2002) This item includes expenses or reductions of expenses due to increases or decreases of own produced inventories during the current accounting period. Changes in own produced inventories, products or young and other animals are newly recognized as expenses. These items may be reported as well as a negative value in the Income Statement. A fundamental change in the recognition of the item "Capitalization" was adopted to the Czech accounting legislation. The Capitalization is newly recognized as expense too. It includes reduction of operating expenses in case of production of inventories or intangible and tangible assets from itself; the expenses associated with the production of these assets are recognized as a reduction of expenses. This item has a negative value.

From the beginning of the year 2016, the recognition of Change in own produced inventories and Capitalization in Income Statement in the Czech Republic is the same as it is in IFRS. Does it depend on the way of recognition of the item Capitalization if the operating profit is the same?

Profitability is a financial indicator that tells to users of the financial analysis what is the ratio between the funds that flow from activities of the company, and the funds that have been spent on these activities. (Jáčová, 2011) Profitability is a key indicator for investors and entrepreneurs. (Čámská, 2013) The return indicator is widely used when the management decides what activities must be stopped, or vice versa, in the case of business plans, what activities will be done in the future. Profitability could be also part of the motivation component of remuneration of management. (Čámská, 2014)

2 Results

The main aim of the research was to verify the impact of legislative changes in presentation of a Change in own inventories and Capitalization on operating revenues of the company in the automotive industry in the Czech Republic. The analysis was conducted from 200 randomly selected financial statements of the companies in the automotive industry for the year 2014. There were selected 121 companies from this sample, that presented signs of worsening financial health compared to the years 2011, 2012 and 2013. Selected companies were split into companies that fulfilled their legal obligations and published their financial statements in the Collection of Documents on the portal www.or.justice.cz and to the companies which financial statements were not published in the Collection of Documents. Companies that did not publish their financial statements for the year 2014 were excluded from the analysis. Tab. 2 presents this situation.

Tab. 2: General sample used for the analysis

Sample of the companies	200
Selection of the sample in accordance with preset parameters	121
Companies that did not publish their financial statements	9
Sample used for the analysis	112

Source: own elaboration

In further research, the companies were divided into the audited companies and companies that were not audited as it is presented in Tab. 3. This division of the companies did not influence the following research and had not any impact on it. It represented only other information that resulted from the research.

Tab. 3: Division of companies

Sample used for the analysis	112
Audited companies	90
Companies that were not audited	14
Companies that did not present information if the company was audited	8

Source: own elaboration

Furthermore, the companies were divided into those that recognized items Change in own inventories and Capitalization in Income Statement as it is presented in Tab. 4.

Tab. 4: Recognition of items Change in own inventories and Capitalization in Income Statement

Sample used for the analysis	112
Companies that did not recognize items change in own inventories and capitalization	28
Companies that recognized items change in own inventories and capitalization from which	84
Recognized item Change in own inventories	76
Recognized item Capitalization	49
Recognized items Change in own inventories and Capitalization	41

Source: own elaboration

There were excluded companies that did not recognize items Change in own inventories and Capitalization in Income Statement in 2014 from the analyzed sample on the basis of processed analysis. Tab. 5 presents the companies that recognized items Change in own inventories and Capitalization in 2014.

Tab. 5: Sample used for the analysis

Sample used for the next analysis from which:	84
Companies with positive Change in own inventories	55
Companies with negative Change in own inventories	21
Companies that recognized only Capitalization	8
Companies that recognized only Change in own inventories	35
Companies that recognized Capitalization	49

Source: own elaboration

3 Discussion

From the analysis, we can see that 55 companies presented positive item Change in own inventories in 2014 and that is why these enterprises presented higher operating revenues in Income Statement in accordance with methods valid in 2015. Due to legislative changes valid from the beginning 2016, the revenues had to be decreased and this process resulted in the increase of revenues.

The return on revenue was increased as a consequence of this transformation. 21 companies presented negative item change in own inventories in 2014. After modifying the applicable method valid from the 1st January 2016, 21 of the analyzed companies had to increase operating revenues that resulted in negative impact on return on revenue.

49 companies from the analyzed sample of 84 companies presented item Capitalization in Income Statement. In accordance with the valid methodology to 31st December 2015, the item Capitalization was recognized as a revenue in operating revenues and negatively influenced return on revenue. These 49 companies from the analysed sample registered lower operating revenues that positively influenced return on revenue since the change of the methodology of recognition of items Change in own inventories and Capitalization as expenses.

The return on revenue was influenced by the change of the methods connected with the recognition of the items Change in own inventories and Capitalization in case of 66 companies of the selected sample in amount of 84 companies. On the other hand, only 18% of selected companies registered impact that influenced an increase in operating revenues and decrease of return on revenue. Conversely, the change in methodology led to a decrease of operating revenues and increase of the return on revenue in less than 82% of companies. The total amount of the Change in own produced inventories contributed an average of 72.8% and the amount of Capitalization of 27.2% in these changes (Tab. 6).

Tab. 6: Influence of the Amendment on the Act on Accounting on Revenues

Influence of the Amendment on the Act on Accounting on Revenues	Totally		Change in own produced inventories		Share of Change in own produced inventories versus Capitalization on Change on revenues	
	Companies	%	Companies	%	Change in own produced inventories	Capitalization
↗	12	18.2	15	25.4	18.2	x
↘	54	81.8	44	74.6	54.6	27.2

Source: own elaboration

Conclusion

Although the recognition of item Change in own produced inventories has the effect on the growth of revenues in 15 cases, the whole process has led to reduction of the return on revenue, and overall revenues were increased (and thus return on revenue was decreased) only in case of 12 companies. The reason is that in case of three companies the item Capitalization exceeded the item Change in own produced inventories.

It can be mentioned that the maximum change in the profitability indicator in assessing the reporting methodology applicable in 2015 and the methodology applicable in 2016 is 5.2%. Maximum change in revenues represents + 8.7% and the minimum change in revenues -44.7%.

The amendment that came into force on the 1st January 2016 will undoubtedly have an impact on the level of operating income of the company. It removes the inconsistencies based on the recognition of expenses and revenues between recognition of expenses by nature and function at the same time. The legislative change in reporting will ensure a better presentation of the financial statements and results of financial analysis based on expenses by nature and function.

Acknowledgment

This paper was written as one of the outputs of the research project entitled “Analysis of violations of going concern assumption in the financial statements of business entities in the

Czech Republic” which was conducted at the ŠKODA AUTO University.

References

563/1991 Coll., Act on Accounting (1991).

Čámská, D. (2013). Predicting financial distress of companies Operating in construction industry. *AMIS 2013*, 642-657.

Čámská, D. (2014). *Requirements for Models Predicting Corporate Financial Distress*. In: Loster, T., Pavelka T. (Eds.), 8th *International Days of Statistic and Economics*, Slaný: Melandrium, 316-323

Decree No. 500/2002 Coll., implementing certain provisions of Act No. 563/1991 Coll., on Accounting for entities that are entrepreneurs, using the double-entry bookkeeping (2002).

Jáčová, H. (2011). Improvement of the Company Performance by Means of Successful Implementation of the Balanced Scorecard Model. *Finance and the Performance of Firms in Science, Education, and Practice*, 204-215.

Krabec, T. (2014). Asset Valuation Standards: A Functional-Institutional Approach. *Prague Economic Papers, 23*(4), 531-540. doi:10.18267/j.pep.511

Strouhal, J. (2012). Applicability Of Ifrs For Smes In The Czech Republic. *Ecoman ECONOMICS AND MANAGEMENT, 17*(2). doi:10.5755/j01.em.17.2.2166

Strouhal, J. (2012). Applicability of IFRS in the Practice of Czech SMEs: Insight of Czech Accounting Profession Representatives. *European Financial Systems 2012*, 214-219.

Strouhal, J., & Bonaci C. G. (2014). *Facing current trends in accounting harmonization: on case of Czech professional accountants*. In: Alver, J. (Ed.), 8th *International conference on accounting, auditing, and taxation (ICAAT 2014)*, 315-323

Strýčková, L. (2015). Factors determining the corporate capital structure in the Czech Republic from the respective of business entities. *E+M Ekonomie a Management, 18*(2), 40-56. doi:10.15240/tul/001/2015-2-004

Contact

Jiřina Bokšová
ŠKODA AUTO University
Na Karmeli 1457
293 01 Mladá Boleslav
Czech Republic

jirina.boksova@savs.cz

Josef Horák
ŠKODA AUTO University
Na Karmeli 1457
293 01 Mladá Boleslav
Czech Republic

josef.horak3@savs.cz

Monika Randáková
ŠKODA AUTO University
Na Karmeli 1457
293 01 Mladá Boleslav
Czech Republic

randakova@is.savs.cz

Michal Vejvoda
ŠKODA AUTO University
Na Karmeli 1457
293 01 Mladá Boleslav
Czech Republic

xvejvoda@is.savs.cz