

Application Possibilities and Consequences of Biological Assets and Agricultural Produce Reporting in Accordance with IFRS Principles in the Czech Republic

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Anotace

Česká národní právní úprava účetnictví není harmonizována s Mezinárodními standardy finančního výkaznictví (IFRS). Kvůli tomuto faktu, všechny finanční výkazy sestavené podle české právní úpravy jsou neporovnatelné s výkazy sestavenými dle IFRS. Mezinárodní uživatelé účetních informací, např. potenciální investoři, mají tudíž problém získat potřebné informace. Článek analyzuje oceňování, účetní zachycení a vykazování biologických aktiv a zemědělské produkce dle obou účetních systémů. Ilustruje základní rozdíly a vysvětluje jejich vliv na informace vykázané ve finančních výkazech. Na základě případové studie článek doporučuje jak implementovat IFRS principy do účetního systému podniků v České republice. Autoři doporučují používat členění výkazu zisku a ztráty dle účelového členění, které není v České republice běžně užíváno. Výsledky výzkumu ukazují na možné změny v právní úpravě účetnictví a daní České republiky, které by mohly vést k "věrnějšímu a poctivějšímu obrazu" poskytovaných účetních informací. Předložené návrhy by měly posloužit tomu, aby informace poskytované finančními výkazy sestavenými dle české právní úpravy byly identické z informacemi ve výkazech sestavených dle principů IFRS. Oproti této snaze, výsledky dotazníkového šetření ukázaly skepticismus ekonomů zemědělských podniků k použití reálné hodnoty jako oceňovací báze biologických aktiv a zemědělské produkce.

Klíčová slova

Mezinárodní standardy finančního účetnictví IFRS, rozvaha, výkaz zisku a ztráty, výnosy, náklady obecně, náklady účetní, příjmy/zisky, újmy/ztráty, změna stavu zásob, rozvahový den.

Abstract

The Czech national law regulating accounting is not harmonized with International Financial Reporting Standards (IFRS). Because of this, all financial statements compiled according to Czech regulations are not comparable with IFRS statements. International users of accounting information, e.g. potential investors, therefore have problems to find valid information. This article analyzes the evaluation, accounting recording, and reporting of biological assets and agricultural produce in both accounting systems. It illustrates the principal differences, and explains their impact on financial statements information. Based on a case study, the paper recommends how to implement IFRS principles to the accounting system in Czech agriculture enterprises. The authors recommend using income statements with expenses by function, which is not commonly used by Czech entities. The research findings indicate possible changes in the Czech accounting and tax laws, which may lead to a "more true and fair view" of provided accounting information. The proposals should cause that accounting information provided by financial statements compiled according to Czech law would be identical with accounting information in compliance with IFRS principals. A questionnaire survey revealed scepticism of economists agricultural companies to use fair value as the measurement basis for biological assets and agricultural produce.

Key words

International Financial Reporting Standards IFRS, statement of financial position, income statement, income (revenues), costs, expenses, gains, losses, changes in inventories, reporting date.

Introduction

The process of the worldwide integration and globalization leads to the need for harmonization of accounting and financial reporting at international level. Accounting harmonization has been defined as “the coordination of pre-existing rules of a different and sometimes conflicting nature“ (Van Hulle, 1989) also as “process of increasing the comparability of accounting practices by setting bounds to their degree of variation“ (Nobes, 1991). “Harmonization is concerned with reducing the diversity that exists between accounting practices in order to improve the comparability of financial reports prepared by companies from different countries“ (Murphy, 2000). Accounting harmonization should make easier the situation for the companies which expand their activities abroad (Šrámková, 2009). There are three major lines of international harmonization, International Financial Reporting Standards IFRS¹, European Union Accounting Directives (especially 4., 7. and 8) and, last but not least the United States Generally Accepted Accounting Principles US GAAP. Currently, International Financial Reporting Standards IFRS are considered to be in the compliance with the need for international harmonization of accounting (Kovanicová, 2004). The implementation of IFRS would reduce the information asymmetry between informed and uninformed investors (Bushman, Smith, 2001). More than 100 countries in the world have adopted IFRS (ISAR, 2009; Deloitte, 2012). From January 1, 2005, all companies domiciled in the European Union with shares listed on securities exchanges must prepare their consolidated accounts in accordance with International Financial Reporting Standards (IFRS) issued by the International Accounting Standards Board (IASB). This event presents an opportunity for accounting researchers to analyze trends in research on international accounting harmonization (Baker, 2007). The process of international accounting harmonization has entered into a new phase. “International Financial Reporting Standard for small and medium-sized entities (IFRS for SMEs) was published in July, 2009”. This standard is designed to meet the needs

¹ At the beginning (from the year 1974) standards were issued as “International Accounting Standards - IAS”, from the year 2001, the new standards are called “International Financial Reporting Standards” – IFRS (Dvořáková, 2011). Currently is used acronym IAS/IFRS or just IFRS.

and capabilities of entities which “do not have public accountability, and publish general purpose financial statements for external users” (IASB, 2009). Defined small and medium-sized entities are estimated to account for over 95 per cent of all companies around the world (Paseková, 2012). At present, “the European Commission analyzes data from surveys on this new standard and discussed its advantages and disadvantages”. However, it has not taken a single decision on whether to adopt and incorporate the standard into the European accounting legislation (Bartůňková, 2012).

Czech accounting law is in conformity with the European Directives. (Bohušová 2008). The Amendment of the Act on Accounting of the Czech Republic, which entered into force on 1st January 2002, enabled the entities to prepare consolidated financial statements in accordance with IFRS. Another amendment entering into force on 1st January 2005, further progressed in the harmonization and requires the entities with shares listed on stock exchanges in the EU countries to prepare financial statements in accordance with IFRS. The European Commission Regulation No. 1606/2002 was applied in this way (Bohušová, 2008). However, any enterprise which has its registered office in the Czech Republic must calculate the income tax base without the influence of IFRS (Income Tax Act, 2013). Czech accounting law does not permit to keep accounting records according to IFRS for SMEs. The process of accounting harmonization seems to be an irreversible process. Despite of this fact, the most of the enterprises in the Czech Republic - about 1 million, which is about 99.84% of all enterprises (MPO, 2010), keep records according to Czech national rules. This causes the situation that information from Czech companies financial statements are not comparable with information provided by financial statements compiled according to IFRS. The basic financial statements are the statement of financial position² and the statement of income (Epstein, 2009; IASB, 2012), also called income statement³.

In 2000, The International Accounting Standard No. 41 - Agriculture was approved by the Committee for International Accounting Standards. This standard came into force for financial statements covering the period beginning on 1st January

² Formerly called balance sheet.

³ Can be also called statement of profit or loss.

2003 (Deloitte, 2000). Its aim was to establish a unified recording of farming activity, its reporting in the financial statements and the disclosure of the requested information. The reason for the issue of the standard for biological assets and agricultural produce was especially their specificity given by the fact that biological transformation is difficult to capture in accounting models based on historical costs (Dvořáková, 2011). Following the fair value orientation of IFRS, IFRS adoption is likely to introduce volatility in income statement and balance sheet figures and IFRS implementation leads to more value relevant accounting measures (Iatridis, 2010). The European Accounting Directives sets out a historical measurement model for biological assets and agriculture produce (EC, 2000). According to the EC (2000), fair value measurement is not in accordance with the European Accounting Directives. Due to the absence of the legislation of the Czech Republic, which would accept specificity of biological assets and agricultural produce reporting, it is necessary to analyze the possibilities and consequences of the application of the principles of IAS 41 reporting in the Czech Republic conditions.

The aim of this contribution is, in a theoretical line, to define the requirements of IAS 41 for reporting of biological assets and agricultural produce and convey the results of research focused on possibilities and consequences of the principles IAS 41 in the Czech Republic. Two problematic aspects of wide research are presented in this paper: the selection of appropriate forms for drawing up the statements and true & fair view of economic reality through statements.

Materials and methods

The article presents the results of the application case study focused primarily on biological assets and agricultural produce in the Czech Republic specific conditions of agricultural practice. The case study (to the possible extent without any software support) demonstrates the basic solution principles embodied in the international standards, which are largely different from the Czech Republic current legislation approach. The subjects under scrutiny being examined were formulated during the trial implementation of common accounting transactions performed according to IAS 41. Defining theoretical IAS 41 and IFRS for SMEs

requirements⁴ for biological assets and agricultural produce reporting precedes the research findings. IAS 41 requirements are analysed and applied in the Czech context. Impacts on financial statements are pointed out, and recommendations are formulated.

A trial implementation of agriculture activities recording and reporting according to the International Accounting Standard 41 - Agriculture was conducted within the doctoral dissertation entitled „Valuation of biological assets and agricultural production in the Czech Republic within the European Union Accession”⁵ (Hinke, 2006). The research is also related to the dissertation “Application of International Financial Reporting Standards into Small and Medium-sized Entities Reporting”⁶ by Stárová Marta (Stárová, 2013). Both doctoral dissertations were elaborated at the Department of Trade and Finances of the Czech University of Life Sciences Prague, Faculty of Economics and Management.

The research of the scientific literature on biological assets and agricultural produce in articles, dissertations, theses, national and international articles between 2006 and 2011 is conducted by de Sousa (2013). The results revealed that 11 articles on biological assets and agricultural produce have been presented in national conferences, three articles were published in national journals, and two national papers were found on this subject. It was further observed that 6 international articles on this topic were published in this period and that among the international productions on this subject, there were a dissertation and a thesis. It is concluded that 24 studies on biological assets and agricultural products were found in the period 2006 to 2011. Accounting and Thinking Universe published book, each one, an article on the subject, the authors had only one published paper and the themes of the research was the application of IAS 41 and accounting treatment for biological assets, the national papers were found from the graduate programs in Sciences statements (de Souza, 2013). The comparative analysis

⁴ The same basic requirements for biological assets and agriculture produce reporting are in IAS 41 – Agriculture and in IFRS for SMEs section 34. Section 34 – Specialised activities is simplified version of IAS 41.

⁵ Originally: “Oceňování biologických aktiv zemědělské produkce v rámci vstupu České republiky do Evropské unie”.

⁶ Originally: “Aplikace mezinárodních standardů finančního výkaznictví do účetnictví malých a středních podniků”.

of the currently applied Czech Republic law rules for agricultural activity reporting and the analysis of the current accounting treatment of agricultural activity under the International Financial Reporting Standards were the starting point of the research of Bohušová (2012). Review of the possibilities of the provisions implementation relating to agriculture in the frame of IFRS for small and medium sized entities into practice of entities concerned, whose subject is agricultural production and recommendation of appropriate application in practice, is mentioned in the article by Bohušová (2011). In the Czech Republic, the issue of biological assets and agricultural produce reporting was also elaborated in the dissertation: Dvořáková, Dana. „Open problems of accounting harmonization in agriculture“ in 2004. Dvořáková (2012) deals with the accounting and reporting of economic transactions arising as a result of agricultural production and forestry in accordance with the Czech legislation and with IAS 41.

Based on studies of expert sources the basic principles of valuation, recording and reporting of produced inventories, primarily biological assets and agricultural produce, are analyzed according to the Czech law, IFRS and IFRS for SMEs. The IFRS principles are applied into the Czech conditions. An appropriate form of financial statements is determined, reporting of unrealized gains/losses⁷ is analyzed and fair and true projection of reality is discussed.

Czech law does not distinguish produced inventories according to their origin. Inventories coming from non-agricultural and agricultural activities are evaluated by the same principle. Any production is initially measured by own costs and later on, as of the reporting date, the carrying amount⁸ is decreased to the selling price minus costs of sales (in case this value is lower than value recorded) (Accounting Act, 2013). In contrast, IFRS strictly distinguish inventories coming from agricultural activities from other activities. IAS 41 defines biological assets as living plants and animals controlled by the entity as a result of past events and agricultural produce as

the harvested product of the entity's biological asset awaiting sale, processing, or consumption (Epstein, 2009). IFRS philosophy is based on the fact that biological assets and agricultural produce are primarily intended for the market. Many of farm products are sold in the marketplace (at an auction or a grain elevator) (Wheeling, 2008). That is the reason for initial input evaluation at their fair value⁹ less costs to sell¹⁰. Biological assets should be reported in fair value (less sell costs) as of each reporting date. After initial recognition, agricultural produce evaluation is guided by IAS 2 (IASB, 2009, 2012). As required by IAS 2, inventories are measured in accordance with LCM principle (Lower of Cost or Market). The acquisition cost is considered the basis for the inventory valuation of IAS 2, however, the recording must not exceed the net realizable value¹¹ (Krupová, 2009). The gain or loss which is reported upon initial recognition of biological assets and agricultural produce, and also arising from changes in the fair value less estimated point-of-sales costs of biological assets, should be included in the net profit or loss for the period in which gain or loss arises (Epstein, 2009). The valuation of produced assets in the fair value requires the finding of such a system of accounts that would meet the requirements of the standard and allowed the reporting of quality accounting information (Dvořáková, 2011). Czech law does not permit production initially registered at the fair value, and also does not permit to increase the inventories value as of the reporting date to the market price (Accounting Act, 2013).

Another difference between the Czech legislation and IFRS is the way of operating expenses structure. Entities that keep accounting records according to Czech law commonly divide operating expenses by nature. Production increases are recorded on the credit side of the account “Changes in inventories” and production decreases (consumption, sale) are recorded on the debit side of the same account. The (balance of) account “Changes in inventories” is reported in operating

⁷ The definition of income encompasses both revenue and gains. Revenue is income that arises in the course of the ordinary activities, gains are other items of income. The definition of expenses encompasses losses as well as those expenses that arise in the course of the ordinary activities of the entity. (IASB, 2009).

⁸ Carrying amount is the amount at which an asset is recognized in the statement of financial position (Mackenzie, at al., 2013).

⁹ The entity shall use the fair value model for those biological assets for which fair value is readily determinable without undue cost or effort, for all other the cost model should be used (Epstein, 2009, IASB, 2009).

¹⁰ For agricultural produce is initial evaluation (acquisition cost) the fair value less costs of sale at the point of harvest (Epstein, 2009, IASB, 2009).

¹¹ Net realisable value is the estimated selling price in the ordinary course of business, less the estimated costs necessary to make the sale (Epstein, 2009, IASB, 2012).

revenues (Public Notice 500, 2013). Whereas IFRS and UAS GAAP prefer operating expenses to be structured by function. This classification usually provides more reliable and relevant information (Mládek, 2009). On the other side, IFRS permit operating expenses structure by nature. In this case the account “Changes in inventories” affects the operating expenses (Epstein, 2009). That is a result of a logical progression when unrealized production (produced but not sold) does not increase income, as in case of recording in accordance with the Czech law. It is expenses rearrangement according to IFRS, IFRS for SMEs, and also US GAAP.

The concept of changes in produced inventories as expenses correction is based on the basic elements of a conceptual IFRS framework, according to which:

- a) expenses are decreases of economic benefits during the reporting period in the form of outflows or depletion of assets or incurring liabilities that result in decreases in equity, other than those relating to distributions to equity participants.
- b) income is increases in economic benefits during the reporting period in the form of inflows or enhancement of assets that result in increases in equity, other than those relating to contributions from equity participants (IASB, 2009, 2012).

When including the account „Changes in inventories“ in expenses, the same value of total revenues and total expenses is achieved as in case of expenses structure by nature. Therefore, the same values of financial indicators (e. g. return on revenues, return on expenses) are achieved. Whereas in case of account „Changes in inventories“ included in revenues, the different values of financial indicators are achieved. The solutions of expenses structured by nature in accordance with the Czech law appear to be inconsistent.

The test implementation of accounting and reporting methods according to the provisions of the International Accounting Standard No. 41 — Agriculture was carried out in the Trade and Accounting Department of Czech University of Life Sciences, Prague within the framework of a doctoral dissertation: *The Evaluation of Biological Assets and Agricultural Production within the Framework of Accession of the Czech Republic into the European Union*. The application

case study focused primarily on biological assets and agricultural produce. Furthermore, it specifies the conditions of agricultural practices in the Czech Republic and demonstrates (to the maximum extent possible without having software support) the basic principles of solving problems within the international standards, which are considerably different from the present legal system according to the law of the Czech Republic.

The implementation, performed on a fictive accounting unit, resulted into the emergence of several problematic issues, all of which were selected for this second paper. Furthermore, in order to support the case study, a final questionnaire survey was conducted in a sample of 104 agricultural enterprises in the Pilsen and Central Bohemia Regions. The role of respondents was accorded to the economists of the aforementioned enterprises. This paper presents the conclusions of this survey, which are closely related to the selected problematic aspects.

Results and discussion

The case study of implementation of current operations and accounting and its implications in the context of biological assets and agricultural produce according to IAS 41 led to the evaluation of the following problematic issues:

- (1) selection of appropriate forms of formulating statements,
- (2) true and fair view of economic reality through these statements.

These problematic topics will be discussed in the following text.

1. Selection of appropriate form of the financial statements

Valid legislation of the Czech Republic stipulates a binding pattern of stating financial position, the form of which has been taken from The Fourth EU Directive – The First Pattern. This means it is based on the statement of financial position which equates assets with liabilities. The income statement is determined by the vertical form with a given content of each item.

Till 2002, this statement included only classification of expenses by nature (expenses were reported on the basis of their very nature: wages, depreciation, material usage, etc.). Since January 1st 2003 income statement in the Czech Republic can

be based on classifying expenses by function. This method (sometimes referred to as „cost of sales“) divides the costs according to their function (cost of production, cost of sales, cost of administration). The functional layout of the profit and loss statement is established in the accounting system solution for US GAAP, IFRS, in The Fourth EU Directive. This way of dividing costs was incorporated into the legal system of the Czech Republic with the view of promoting economic cooperation between European countries.

In order to implement the income statement by function into the legislation of the Czech Republic the conducted research examined the extent of utilizing the option which classifies expenses by function. The results of the processed survey are shown in the following graph 1.

The survey shows that 97 companies (93.27%) do not reflect expenses classification by function at all, 6 companies (5.77%) compile income statement with expenses classification by nature and disclose expenses classification by function in a footnote, and 1 company (0,96%) uses expenses classification by function.

Apparently, the classification of expenses by function is not used in the Czech agricultural practice. This is related to the problem of different perception of „changes in inventories“ in the operating costs by nature. While the IFRS accounting system considers this item as belonging to adjustment costs, in the accounting system

introduced in the Czech Republic „changes in inventories“ are featured as financial accounting income. The application of both concepts on a specific example (milk production) shows the inadequacy of the concept introduced in the Czech Republic:

Assumptions:

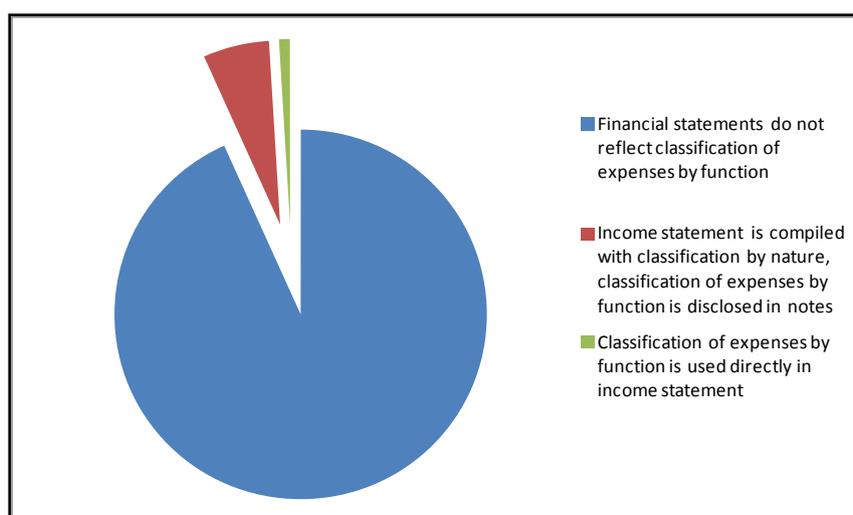
- the farm produces 100 l of milk per day,
- costs: 800 (unit production costs 8 monetary units/litre)
- 80 l of milk sold for 680 monetary units (sales price per unit is 8.50/l),
- all production costs are the cost of the product (1 l of milk).

Description of economic transactions:

1. Various costs (expenses) in the production process for 800 m.u. (monetary units).
2. Production of goods (products) and their transfer to a store (800 m. u.).
3. Unloading the goods for sale in a store (640 m. u.).
4. Sale of a part of the products (selling price 680 m. u.).

The example of milk production, leading to the income statement compilation using the classification by nature is recorded as follows (scheme 1 and 2).

The concept of „changes in inventories“



Source: own data

Graph 1: Usage of expenses classification by function in Czech agricultural companies.

Offset accounts	Wage costs	Products/milk	Change in inventories	
800	300	800	2	800
		640	3	640
		160		160
	Depreciation			
1	300			
	Material consumption	Money	Revenue form products	
	200	680	4	680

Source: own data

Scheme 1: Specified example of recording using classification of expenses by nature.

Profit and loss account			
The cost of milk production	800	Revenues from the sale of milk	680
		Changes in inventories	160
Profit	40		
	840		840

Source: own processing

Scheme 2: The concept of changes in inventories as income adjustment.

as an income of financial accounting (the concept valid in the Czech Republic) leads to a distorted financial analysis and a quantification of indicators such as:

- ▶ Return on revenues = profit/revenues = 40/840 = 0,048 m.u. (840 = 160 + 680)

The indicator compares the profit from the sale of milk with the sum of sales, including the still unrealized profitability costs

- ▶ Return on expenses = profit/expenses = 40/800 = 0,05 m.u.

The indicator compares again the profit from products made with the cost of all manufactured products.

The following solution leads to the proper solution suggested by these indicators (scheme 3):

- ▶ Return on revenues = profit/revenues = 40/680 = 0,059 m. u.

- ▶ Return on expenses = profit/ expenses = 40/640 = 0,063 m. u.

The income statement with classification of expenses by function eliminates the misused concept of changes in production reporting. In this concept, accounts “changes in inventories” and “activation” are not used, and all costs are recognized and recorded on statement of financial position accounts. The inventory costs (milk) are not taken into account until the moment of realization with the classification of expenses by function. The previous example of milk production, leading to the income statement compilation using the classification by function is recorded as follows (scheme 4):

Note 1: different classification of expenses must not change the total amount of profit or loss.

Note 2: the description of the economic transactions is identical with the description in scheme 1.

Profit and loss account	
The cost of milk production	800
Change in inventories.....	- 160
Profit	40
	680

Source: own processing

Scheme 3: The concept of changes in inventories as expenses adjustment.

Profit and loss account	
The cost of milk production	800
Change in inventories.....	- 160
Profit	40
	680

Source: own processing

Scheme 4: Specified example of recording using the classification of expenses by function.

It is clear from the information above that the expenses as defined in the Czech accounting system (in the fifth accounting group of Chart of accounts) and the revenues (designated by the sixth accounting group) do not correspond to the concept of cost-benefit of the accounting systems in the rest of the world.

The conclusion of the topic and formulation of recommendation

The need to complete the legal provisions which adjust accounting terminology (in particular the Czech Republic accounting law) by the missing definitions of the constituent elements of the financial statements can be inferred from the facts outlined above. This would be the basis for the harmonization of the concept of changes in inventories with the world's most respected views of both IFRS and US GAAP.

An interim solution is possible through a compilation of income statement with the classification by function. However, the concept of change in agricultural practices would mean editing the accounting software and increasing efforts of staff at the economics department, which according to the research carried

out appears to be redundant.

2. True and fair view of economic reality by means of financial statements

Universally recognized as the most superior accounting principle is the principle of a true and fair image of reality, since it plays a crucial role in determining current and potential users (owners, investors, and other entities). The objective of IAS 41 is capturing the agricultural activity as reported in the financial statements and publication in the context of the „true and fair view“.

In some cases, however, the strict application of the already defined principles and fair presentation of these efforts can lead to a disparate reporting assets and debt in the statement of financial position and it extends to disparate reporting of expenses and revenues in the income statement.

Likewise, compliance with the principles as defined in IAS 41 generates these problems as well. If the actual value on the date of revaluation is lower than the book value, the reduction in value of biological assets is recognised in the income statement as a loss. If this fact is recorded in the income statement, it reduces

the reported profit or loss, and it is a yet unrealized loss. This procedure can be described as correct, since it complies with the principle of caution.

However, if the actual value on the date of revaluation of the biological assets exceeds a set value so far used in books, then the increase in value is recognised (in the income statement) as a gain. If this gain is recognized in the income statement, it increases the economic result, which represents an unrealized gain. The problem is the risk of the company not achieving this gain in the future, as the terms and conditions may be changed. Due to the biological nature of the assets we cannot entirely ignore the fact that in the future there could be no gain in connection with losing the assets. The businesses should be financially secured against the loss, but the recognition of unrealized profits resulting from uncertain asset breaks the principle of caution and threatens the very existence of the company, as the uncertain unrealized gain may be divided at the expense of preserving the property substance of the business.

On the other hand, this concept also includes a positive contribution – if the equity capital of the company (through the income statement) increases due to growth in the fair value of the assets, the financial position of the holding improves (however, the improvement may be temporary). This means the company may be for example allowed to obtain the necessary financial resources (positive for agricultural holdings). Nevertheless, if there is a rapid and noticeable decline in these values soon after

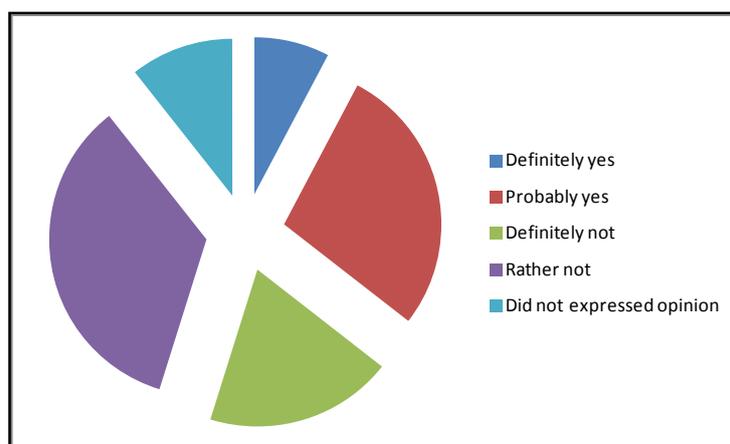
the revaluation at fair value, users of accounting information suffer losses arising from the fact that their views were built on a more favourable picture of the financial position of the company. For this reason in particular, it may not be always positive for external users of the fair value.

Respondents' views in agricultural enterprises of the valuation of biological assets and agricultural produce identify additional survey questions. The first examined issue inquires whether economists perceive fair value as beneficial for the true and fair view of economic reality. The processed responses are summarized in the graph 2.

For 8 respondents (7.67%) fair value is definitely beneficial, for 29 respondents (27.88%) fair value is probably beneficial, for 20 respondents (19.23%) fair value is definitely not beneficial, and for 36 respondents (34.61%) fair value is rather not beneficial to express an economic reality fair view. 11 respondents (10.58%) did not expressed their opinion.

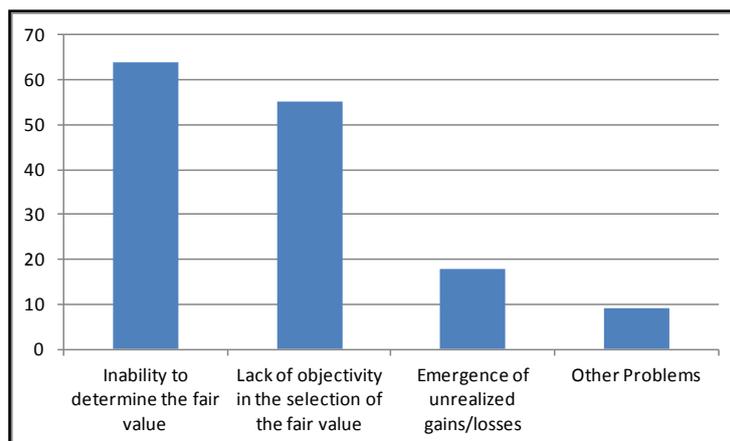
The question above was followed by another question which aimed at identifying the pitfalls of fair value (graph 3).

The respondents have pointed out problems such as the inability to determine the fair value (64 respondents - 61,54%), lack of objectivity in the selection of fair value (55 respondents - 52.8%), emergence of unrealized gains/losses (18 respondents - 17.31%), and other (9 respondents - 8.65%).



Source: own data

Graph 2: Evaluation of the benefits valuation of biological assets and agricultural produce at fair value.



Source: own processing

Graph 3: Identified pitfalls in the valuation of biological assets and agricultural produce at fair value.

Note 3: Among the other problems identified in the last category belong very low correlation between the fair value and the price at which the asset is sold and the fact that some of the assets or the sale need not be determined.

The conclusion of the problem topic and formulation of recommendation

Professional public in recent years has also been facing the problem of inconsistency in the valuation bases of basic financial statement – statement of financial position (i.e. statement of financial position when using multiple valuation models summarizes mutually incomparable values).

In general, this problem can be approached in two ways:

- a) to establish a unique valuation model which will be recognized as the most appropriate one
- b) to allow using more valuation models, since the use of different valuation models derives from the different nature of the items (for example it is necessary to distinguish between items of financial assets and debts on the one hand, and nonfinancial assets on the other).

In the case of statement of financial position the world widely accepted opinion has been to ensure that assets and debts of a company are reported in the statement of financial position in a manner that would help to reflect the economic effects of the most quantifiable terms (e.g. the effect of inflation, changes in interest rates, foreign exchange rates) and other factors (the risk

of State interference, the weather) on these items. This goal cannot be achieved without the application of multiple valuation models, including the concept of fair value of assets and liabilities, concerning not only biological and agricultural produce. The aforementioned concept of increasing explanatory power of the statement of financial position, however, introduces a different understanding of income statement. While this statement should bring information leading to an accurate assessment of the company's financial performance during a relevant accounting period, the result of profit or loss should include not only realized gains (which are, however, in accordance with the principle of caution), but also unrealized gains (or losses); it means any additions/disposals values created by the holding during the accounting period.

The amount of profit or loss reported in this way would not be relevant to the calculation of the tax liability with regard to income tax, but it would help to express the earned value of the reference accounting period.

Profit or loss would not be suitable for division on all its levels either; as a part of the unrealized profits - in case of the profit distribution - it would break the concept of maintenance of business capital. This means the division could result in the erosion of the financial substance of the business.

Basic financial statements described according to IFRS are based on the idea of providing correct information about the economic value

of the company to all interested parties. It is, however, a figure reported by a specified date (usually on the statement of financial position date, on the date of initial recognition of an asset, etc.) reflecting the current market conditions and in case of unexpected changes in the conditions in agricultural practice, users of this information can suffer losses. Nonetheless, from the statement of financial position and income statement convergence of economic and accounting concepts of capital is visible and as is the economic value of the company as a whole.

These statements are not designed as a data source for tax purposes; however, they may serve as an alternative view on the economic value of agricultural enterprises (and not just in the case of sale or liquidation of enterprises, but also to ensure smooth business activities).

Conclusion

The paper compares financial reporting of agriculture activities according to the Czech law and IFRS. The results of research in the application of IFRS principles of biological assets and agriculture produce recording and reporting in the Czech Republic are presented. Biological assets and agriculture produce evaluation, recording and reporting are stated in IAS – 41: Agriculture and in IFRS for SMEs section 34 (IASB, 2012; IASB, 2009). The International Accounting Standard IAS 41 has been a full-fledged part of the whole of international financial reporting standards since 2003. In 2009, the International Financial Reporting Standard for Small and Medium Enterprises (IFRS

for SMEs) was created. Its activity is also a simplified version of IAS.

The paper pointed to the rare utilization of the presentation of the income statement in the functional classification of expenses which would remedy the problem with the incorrect conception of changes in inventories of own activities as income account. The incorrectness of this concept has been demonstrated in the financial analysis. In addition, a questionnaire survey revealed scepticism of economists within agricultural companies to use fair value as the measurement basis for biological assets and agricultural produce.

The reasons are apparent mainly in the impossibility of detecting or the lack of objective fair value. The potential application of IAS 41 in the Czech Republic would therefore face considerable difficulties in both these aspects.

The current development shows the growing influence of IFRS and its expansion into financial reporting of small and medium-sized entities.

In case that the elements of IFRS or IFRS for SMEs were introduced for the continuation of the process of harmonization with the EU and the Czech Republic, or for getting finances from the European Union, agricultural enterprises should be eligible for support, initially on the level of education and awareness (trainings or publications) and then on the legislative level through the gradual introduction of a solution of the IAS 41 into accounting (and correspondingly into the tax) legislation of the Czech Republic.

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References

- [1] Accounting Act. Law No. 563/1991 Col. on accounting, as amended 2013.
- [2] Baker, C. R., Barbu, E. M. Trends in research on international accounting harmonization. *The International Journal of Accounting*, 2007, 42, No. 3, p. 272-304. ISSN 0020-7063.
- [3] Bartuňková, L. Are companies in the Czech Republic ready to implement ifrs for SMEs? *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis*, 2012, 60, No. 7, p. 39-44. ISSN 1211-8516.

- [4] Bohušová, H. Harmonizace účetnictví a aplikace IAS/IFRS. Vybrané IAS/IFRS v podmínkách českých podniků. Prague: ASPI, 2008, ISBN 978-8-7357-366-9.
- [5] Bohušová, H., Svoboda, P., Nerudová, D. Biological assets reporting: Is the increase in value caused by the biological transformation revenue? *Agricultural Economics*. 2012. 58, No. 11, p. 520-532, ISSN 0139570X.
- [6] Bohušová, H., Svoboda, P. What does the implementation of IFRS for SMEs bring for agricultural enterprises? *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis*, 2011, 59, No. 7, p. 81-90. ISSN 12118516.
- [7] Bushman, R., A. Smith, A. Financial accounting information and corporate governance. *Journal of Accounting and Economics*, 2001. 32, No. 1-3, p. 237–333. ISSN: 0165-4101.
- [8] de Souza, F. J. V., da Costa, C.B., Araújo, A. O., da Silva, M. C. Scientific production of biological assets and agricultural products: A study between 2006 and 2011. *Custos e Agronegocio*. Brasil: Universidade Federal Rural de Pernambuco, 2013, 9, No. 1, p. 91-118. ISSN: 1808-2882.
- [9] Deloitte. IFRS in your pocket, Deloitte, 2012. [Online]. Available: <http://www.iasplus.com/en/publications/global/ifrs-in-your-pocket/ifrs-in-your-pocket-2012> [Accessed: 21 Apr. 2013].
- [10] Deloitte. IAS 41 – Agriculture, Deloitte, Dec. 2000. [Online]. Available: <http://www.iasplus.com/en/standards/ias41> [Accessed: 21 Apr. 2013].
- [11] Dvořáková, D. Finanční účetnictví a výkaznictví podle mezinárodních standardů IFRS. Brno: Computer Press, 2011, p. 329. ISBN: 978-80-251-3652-2.
- [12] Dvořáková, D. Specifika účetnictví a oceňování v zemědělství. Prague: Wolters Kluwer, 2012, p. 156, ISBN 978-80-7357-961-6.
- [13] EC, European Commission. Comment Letter on Exposure Draft E65 – Agriculture No. 58, 2000, [Online]. Available: <http://www.media.ifrs.org/CommentsE65.zip> [Accessed: 20 Apr. 2013].
- [14] Epstein, B. J., Jermakowicz, E. K. IFRS 2009: Implementation and Application of International Financial Reporting Standards. New Jersey: John Wiley & Sons, 2009. ISBN: 978-0470-28609-8.
- [15] Hinke, J. Oceňování biologických aktiv a zemědělské produkce v rámci vstupu České republiky do Evropské unie. Doctoral thesis, FEM CULS in Prague, 2006.
- [16] IASB, International Accounting Standard Board. International Financial Reporting Standard for Small and Medium-sized Entities, 2009 [On-line]. Available: <http://www.ifrs.org/IFRS-for-SMEs/Pages/IFRS-for-SMEs.aspx> [Accessed: 28 Apr. 2013].
- [17] IASB, International Accounting Standards Board. International Financial Reporting Standards 2012. London: IFRS Foundation Publications Department, 2012, ISBN 978-1-907877-45-2.
- [18] Income Tax Act. Law No. 586/1992 Col., on income taxes, as amended 2013.
- [19] ISAR. United nations conference on trade and development. ISAR Experts mark 25th anniversary session, 2009, [On-line]. Geneva: UNCTAD, 2009. Available: <http://www.unctad.org/Templates/WebFlyer.asp?intItemID=4709&lang=1> [Accessed: 9 Dec. 2012].
- [20] Iatridis G. International Financial Reporting Standards and the quality of financial statement informatik. *International Review of Financial Analysis*. 2010, 19, No. 3, p. 193–204. ISSN: 1057-5219.
- [21] Kovanicová, D. Jak porozumět světovým, evropským, českým účetním výkazům. Prague: Bova Polygon, 2004, ISBN: 80-7273-095-9.
- [22] Krupová, L. IFRS Mezinárodní standardy účetního výkaznictví: Aplikace v podnikové praxi. Prague: Vox, 2009, ISBN: 978-80-86324-76-0.

- [23] Mládek, R. Postupy účtování podle IFRS. IFRS Policies and Procedures. Prague: Leges, 2009, ISBN: 978-80-97212-13-4.
- [24] Mackenzie, B., Coetsee, D., Njikizana, T., Chamboko, R., Colyvas, B., Hanekom B. IFRS 2013: Implementation and Application of International Financial Reporting Standards. Hoboken, New Jersey: John Wiley & Sons, 2013, ISBN 978-1-118-27727-0.
- [25] MPO, Ministerstvo průmyslu a obchodu. Zpráva o vývoji malého a středního podnikání a jeho podpoře v roce 2009. [On-line]. Available: <http://www.mpo.cz/dokument76280.html>. [Accessed: 4 Apr. 2013].
- [26] Murphy, A. B. The Impact of Adopting International Accounting Standards on the Harmonization of Accounting Practices. *The International Journal of Accounting*, 2000, 35, No. 4, p. 471-493. ISSN: 0020-7063
- [27] Nobes, Ch. W., Parker, R. *Comparative International Accounting*, New York: Prentice-Hall. 3rd ed., 1991, ISBN 978-80-0131562905.
- [28] Paseková, M. Implementace IFRS do malých a středních podniků. Prague: Wolters Kluwer, 2012, ISBN 978-80-7357-866-4.
- [29] Lainez, J. A., Callao, S., Jarne, J. I. International Harmonization of Reporting Required by Stock Markets, *International Journal of Accountancy*, 1996, 31, No. 4, p. 405 – 418, ISSN 10944060.
- [30] Stárová, M. Aplikace mezinárodních standardů finančního výkaznictví do účetnictví malých a středních podniků, Doctoral thesis, FEM CULS in Prague, 2012.
- [31] Šrámková, A. Janoušková, M. Vojáčková, H. Mezinárodní standardy účetního výkaznictví – praktické aplikace. Prague: Institut Svazu účetních, 2009, ISBN 978-80-86716-61-9.
- [32] Wheeling, B. *Introduction to Agricultural Accounting*. USA: Thomson Delmar Learning, 2008. ISBN 978-1-4180-3834-2.
- [33] Public Notice. Public notice No. 500/2002 Col., which applies some provisions of the Law No. 563/1991 Col., on accounting, as amended 2013.