

COMPARISON OF LAND ACCOUNTING ACCORDING TO CZECH LEGISLATION AND INTERNATIONAL ACCOUNTING STANDARDS

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Abstract: The article analyses the currently valid accounting procedures for accounting for land that is not a commodity, according to both Czech legislation and International Accounting Standards. The method of process analysis and subsequent comparison is used. It is found that the accounting and valuation of land in the Czech Republic does not reflect reality as land is valued once and for all at historical cost and does not consider the effect of land price increases in the market or possible damage to the land as a result of an environmental accident. In the case of forest land, the value of the land and the forest cover is not accounted for separately. Increasing value due to a growth in timber mass is not taken into account. In contrast, under International Accounting Standards, the value of land must be revalued periodically in response to changing circumstances. In the case of forest land, this involves separate accounting for the land itself under IAS 16 Land, Buildings and Equipment, and for the forest cover under IAS 41 Agriculture. The procedures defined in the International Accounting Standards are more demanding and arduous but give the user significantly more accurate and up-to-date information on the market price of land than the procedures required by Czech legal standards. This enables users to make the right economic decisions. However, the obligation to revalue land periodically in Czech accounting could create a problem in terms of ensuring a sufficient number of qualified valuers.

Keywords: accounting; depreciation; land; plots

1 Introduction

According to Czech legislation, land is a fixed production factor that is not subject to wear and tear, and therefore cannot be depreciated. However, the real market price of land changes over time, both upwards and downwards. Nonetheless, the literature does not often deal with accounting for land that is not a commodity but a tangible fixed asset. Yet defining the accounting and valuation procedures so that the accounting gives a correct picture of the subject of accounting is essential, because, based on the accounting data, citizens and businesses decide on their next strategy when acquiring or using the land.

Accounting in the Czech Republic is regulated by Act No. 563/1991 Coll., On Accounting, Decree No. 500/2002 Coll., and Czech Accounting Standards. As the transnational market integration is becoming increasingly intense in Europe and the world, the need to harmonize the accounting and financial statements of entities in individual states arose several decades ago. It is necessary to achieve comparability of reported data, which is a fundamental requirement of potential investors. Therefore, several financial reporting systems have emerged. One of the most important is International Financial Reporting Standards - IFRS. The companies which issue securities registered on regulated markets of the European Union must prepare financial statements in accordance with IFRS.

Czech accounting has already approached IFRS in some minor areas, for example when accounting for provisions to be used in the event of a temporary decrease in the value of an asset. For the most part, there are nevertheless many differences between the two accounting methods.

The aim of the article is to characterise the differences between accounting for land that is not a commodity, according to both Czech legislation and International Accounting Standards.

The following questions are asked:

What are the differences in the accounting and valuation of non-commodity land, according to Czech legislation and International Accounting Standards?

Which system gives more accurate and more up-to-date information on this type of property?

2 Literature research

According to Pirngruber (2017), land as such can be viewed from several points of view. For example, from a literary point of view, land is often understood as the earth, while from an economic point of view, land as a factor of production has a much broader scope. According to the influential economist Marshall, land can be defined as "the materials and forces that nature freely provides to help man, in the earth and in the water, in the air, in the light and in the heat" (Boomgaard, 2009). According to Ortiz (2017), land is a resource that is a useful factor in production but is available in limited quantities. Land as a production factor can take various forms, from agricultural land to commercial real estate to resources available from a certain piece of land (oil, gold).

According to literature, economists have considered land (along with its related natural resources) as a key production factor for centuries (Rowland and Vrbka, 2018). Already the economist Smith (1776) in his book "The Wealth of Nations" argued that land, capital, and labour form the basic inputs from which all the economic value of convertible commodities is derived. While, over time, the economic literature has expanded to include the scope and role of these factors, the land, according to Krulický et al. (2020) remains a critical part of our economy and the environment on a larger scale.

Vochozka and Kabourkova (2008) believe that land plays a key role in economic and environmental accounting. Wentland et al. (2020) add that as an asset it occupies a unique position at the intersections of the System of National Accounts (SNA), the System of Environmental-Economic Accounting - Central Framework (SEEA-CF), and (as a spatial unit) the SEEA Experimental Ecosystem Accounting (SEEA), thus naturally becoming a kind of starting point for the development of natural capital accounts in general. However, despite its economic and environmental importance, land as an asset is significantly lacking in the national economic accounts of many countries around the world (Kabourkova et al., 2011).

Industrialised countries treat the world's resources as if they were disposable goods. With this approach, they ignore one of the world's basic economic assumptions - land, labour, and clean water are scarce commodities and their price must be reflected in every business decision. If governments were forced to include the consumption of natural resources in their calculations of economic activity, it would undoubtedly have a major impact on the strategy used (Epping, 2004).

It is very likely that the value of land in the world will increase significantly due to its limited size and the rising demand for land due to the growing needs of the ever-increasing population. We are already noticing an increasing trend in investing in land (Zdenek, Lososová, 2020).

Pursuant to Act No. 256/2013 Coll., on Cadastre of Real Estate (Cadastral Law), a plot is a part of the Earth's surface that is separated from adjacent parts by the boundary of a territorial unit or cadastral territory, the property boundary, the administration boundary, the boundary of the lien, the boundary of construction right, or the boundary of the type of land use. Act No. 89/2012 Coll., The Civil Code, states that a plot includes the space above and below its surface, buildings and other facilities set up on it (except temporary buildings), including all what is embedded in the land or fixed in the walls. However, Czech accounting regulations and tax laws strictly separate the land and the buildings on its surface.

Land does not include growing units of permanent crops, mineral deposits, cost of opening new quarries, sand pits and clay pits, the main water supply system, small construction, fencing, or construction of vineyards and hop gardens. Land is

reported and evaluated separately and cannot be depreciated. (Ryneš, 2021).

According to Kouřilová (2015), accounting currently appears to be in the dimension of data manipulation. This is evident from the fact that revaluation of assets can be purposeful. Earlier strict procedures, where the property was valued exclusively at historical prices, eliminated any doubts about the intentions of the property owner. Kovanicová (2012) states that the primary task of accounting is to provide users with reliable information about how an entity is economically viable, and its financial situation for a given accounting period.

When acquiring land with construction as a part of the purchase price, it is necessary to evaluate both and to record the building and the land separately in the accounting. Determination of acquisition prices for the land and construction can be done either by a proportional distribution of the purchase price according to expert opinions, or it is possible to value the land, for example, based on a local price map and the remaining part of the purchase price will be the price for the construction. The evaluation of the acquired land includes forest or planting of trees and shrubs unless they are growing units of permanent stands (Ryneš, 2021).

According to Decree No. 500/2002 Coll., land - unless it is a commodity - is a tangible fixed asset regardless of the estimated value. This does not include those parts of land that are depreciated and reported as constructions. Land itself is not depreciated.

The Czech Accounting Standard for Entrepreneurs No. 013 states that technical improvement is not accounted for in the case of assets in account group 03 - Tangible fixed assets not depreciated. Land is included in this group.

The accounting entity determines the actual condition of land by inventories, which must take place in both physical and documentary form, on the same date (Svobodová, 2013).

According to the Property Valuation Act, building plots are valued by multiplying the land area and the price per square meter in accordance with the price map of the municipality. Agricultural land is valued on the basis of rated soil ecological units. Reservoirs, streams and others are valued according to the relevant decree.

According to valid Czech legislation, land is reported and valued separately and is not depreciated (Ryneš, 2020). As a result, in some situations accounting does not give a true and fair presentation of an entity's assets. In reality, the value of the land is sometimes reduced, for example as a result of an environmental accident, when the land is temporarily or permanently damaged. Here it would be appropriate to account for either provisions or depreciation.

The International Accounting Standards in part IAS 16 define land as assets that an enterprise holds because of the need to use those assets in its production process. The useful life is longer than one accounting period. It is expected that these assets will bring economic benefits to the company in the future. It is necessary to measure reliably the cost of acquisition and thereby determine the cost when the land is included in the accounts. The land is valued at acquisition costs, which also include allocated costs. After initial recognition as an asset, the land is reported at a revalued amount, which is determined by the market price based on the estimate of a qualified expert. Revaluations should be performed on a regular basis.

The International Accounting Standards Board has developed a revised Conceptual Framework for Financial Reporting, according to which there are two valuation bases, namely historical cost and present value.

The historical cost is based on the transaction price, while the present value includes fair value, value in use, and current costs. (www.iasplus.com).

A significant violation of the rule of a fair presentation of reality in Czech accounting is evidenced by accounting practices in accounting for forest land. In the case of a forest, the value of the land and the vegetation on it is recorded as a single item and does not change over the years. Bartůňková states that the interested party can obtain more detailed information only in an annex to the financial statements.

According to Bartůňková, if the principles of the current Czech legislation are followed, it is not possible to obtain a true picture of the management of the accounting unit in the case of accounting for forest stands, as it is not possible to capture the actual value of the growing stock of timber on forest land.

Čermáková (2013) states that the presentation of forest in Czech accounting is based on the definition of forest according to the Forest Act. In it, a forest is defined by forest stands with their environment and land intended to fulfil forest functions (Section 2, paragraph 2 of the Forest Act).

The generated forest production, i.e., harvested timber, self-grown seedlings, Christmas trees, etc. is accounted for in the accounting unit in the category of inventories - products (Čermáková, 2013).

In contrast, International Accounting Standards recognise and value forest land and vegetation separately. Here, forest land is treated as a biological asset up to the point of harvest and must be revalued to its current value at the time the financial statements are prepared.

It is obvious that according to the valid Czech legislation, the value of land, and especially the value of forest land, is not stated in accountancy statements in the updated real amount. This violates Act No. 563/1991 Coll., On Accounting Section 7.

The aim of the article will be achieved by a procedural analysis of the accounting procedures for land according to the Czech Accounting Standards, and a comparison with the procedures that are valid according to the International Accounting Standards. According to Act No. 563/1991 Coll., on Accounting, a presentation is fair if the content of items in financial statements corresponds to the actual situation, and the presentation is in accordance with the accounting methods set out in this Act.

3 Data and Methods

First, using the process analysis method, the currently applicable accounting and valuation procedures for land in the Czech Republic will be analysed. The relevant parts of Act No. 563/1991 Coll., on Accounting in Section 7, Czech Accounting Standards in Section 005 Provisions, 013 Tangible and Intangible Fixed Assets and 019 Costs and Income will be analysed. The output will be valid account codes.

Furthermore, it will be examined how the price of these assets develops over time, in the event of temporary or permanent devaluation of land or, conversely, as a result of rising land prices in the market. The output will be an assessment of the current situation.

The next step will be to analyse this issue according to International Accounting Standards, namely IAS 16 - Property, Plant and Equipment and IAS 41 - Agriculture. The output will be a comparison of Czech legal standards in this area and International Accounting Standards.

4 Results

Accounting for land in the Czech Republic is regulated by Act No. 563/1991 Coll., on Accounting, and the Czech Accounting Standards for Businesses. It states that land is a tangible fixed asset that is not depreciated. The Accounting Act is implemented

by Decree No. 500/2002 Coll., according to which land is a tangible fixed asset regardless of valuation, unless it is a commodity. These assets, unless self-invested, are valued at the cost of the price at which they were acquired, including related costs. When land is added to the entity's assets, or in the case of newly identified assets not yet recognised in the accounts, the replacement cost shall be used.

Table No. 1: Accounting for land according to Czech legislation

Economic operation	Account code - valuation
Purchase of land from the supplier	031/321 - purchase price - acquisition
Land addition in the company by an individual entrepreneur	031/491 - purchase price determined by an expert opinion
Sale of land - decommissioning	541/031 - purchase price
Revenue recognition for land sold	311/641 - selling price - market
Activation of wood mass in the forest after harvesting	1xx/58x - calculated own costs
Issued invoice for the sale of timber	311/601 - market price

Source: Own processing.

For the entire period since the acquisition of land and its recognition in the entity's assets, plots of land are recorded in the balance sheet account 031, and there is no change in the valuation. Upon their sale, they will be derecognised from account 031 at their acquisition cost, and the costs will be increased through account 541 - long-term intangible and tangible assets sold. At the same time, the price at which the land was sold is recorded in the revenue account 641 of sales of intangible and tangible fixed assets. The difference between accounts 541 and 641 is the profit or loss from this economic transaction (Czech Accounting Standard No. 019 - costs and revenues).

Czech Accounting Standard No. 013 for Entrepreneurs states in Part 4 that tangible fixed assets are depreciated according to Decree No. 500/2002 Coll., § 56. However, this legal standard does not allow land to be depreciated, and therefore there is no way of documenting the impairment of land.

It is not possible to deduce from any legal norms whether it is possible to create provisions for land. The Czech Accounting Standard for Entrepreneurs No. 005 - Asset Provisions states that provisions can be made for depreciated fixed assets, the value of which is commonly reduced by wear and tear. This would therefore preclude the possibility of creating provisions for land. In practice, however, there may and do occur situations where the land is permanently or temporarily degraded, for example, because of an environmental accident.

The opposite is such a situation where the actual market value of the land has become much higher now than when acquired and registered. This is quite common nowadays, as there is consistently high interest in land purchases.

A fundamental discrepancy between the accounting price and the actual price arises in the case of forest land. When forest land is acquired, the entire purchase price, including the cost of the forest cover, is charged to the account 031 Land. Here, the price of the land itself and the price of the forest cover can be separated in the form of analytical records. However, it is not possible to account for the increase in price due to the growth of the timber mass in Czech accounting.

One of the important tasks of accounting is to show the true state of an entity's assets. However, it follows from the above that the current Czech accounting system is in fact in contradiction with Act No. 563/2001 Coll., on Accounting § 7. It states that accounting entities are obliged to keep accounts in such a way that the financial statements are drawn up based on the accounts in a comprehensible manner, and that they give a true and fair view of the subject matter of the accounts and the financial position of the entity so that the person using the information can make economic decisions based on it. However, according to the current Czech legislation, land is booked once and for all at historical prices and changes in its value cannot be captured in accounting according to Czech standards. The only option is to

include significant differences between the book value and the market price in the appendix of the financial statement.

The objective of the International Accounting Standards was to harmonise the reporting of accounting entities in individual countries so that the data presented are comparable. Since the end of 2003, new and updated standards have been issued under the IFRS designation. Land, and forest land where applicable, is governed by International Accounting Standard IAS 16 - Land, Buildings and Equipment. Timber harvested from forests is covered by IAS 2 - Stocks. The established forest stand, the growing stock of timber and the harvested forest stand at the time of harvest are biological assets under IAS 41 Agriculture.

IAS 16 Property, Plant and Equipment values land at acquisition cost, which is the purchase price including taxes, at the time of recognition. Land is recognised as an asset when it is probable that future economic benefits associated with it will flow to the entity and the cost of the item can be measured reliably. The cost of an item of land represents the cash equivalent of the cost at the date of recognition. The carrying value of land may be reduced by government grants.

Land whose fair value can be reliably measured is subsequently recognised at a revalued amount upon initial recognition as an asset. This should be the fair value of an asset at the date of revaluation less subsequent propositions. Revaluations should be made with sufficient regularity so that the current carrying amount is not significantly different from the fair value that would be determined at the end of the reporting period.

The real recorded price of the land should correspond to the market price based on an estimate prepared by a qualified expert. When an item of land is of a special nature and its market price cannot be substantiated, as similar items are rarely sold, the fair value of the land will have to be estimated.

The frequency of revaluation depends on the frequency of changes. In some cases, it is necessary to revalue land annually, in others an interval of up to five years is sufficient.

Because land has an indefinite useful life, it cannot be depreciated (IAS 16 - paragraph 58). However, there are exceptions where the land itself may have a limited useful life. In such a case, it shall be depreciated in a manner that reflects the benefits derived from it. This is the case when there is a building on the land that will be removed, and the land will be restored.

If the land is impaired, IAS 36 Impairment of Assets is applied. This paragraph defines an impaired asset as an asset whose carrying amount is greater than its recoverable amount. If there is an indication that an asset may be impaired, the entity formally estimates the recoverable amount. If the recoverable amount of an asset is less than the carrying amount, then the carrying amount shall be reduced to that amount and the reduction shall be an impairment loss. Where there is an indication that an impairment loss recognised in prior years is no longer justified, the loss is reduced or reversed.

The calculation is quite complex and therefore IAS 36 does not require an annual test. In preparing the test, an entity must consider all information available, both internal and external, such as changes in the legal or market environment.

IAS 41 defines farm-managed biological conversion. It defines the above-mentioned as the processes of growth, degeneration, production, and reproduction, when qualitative and quantitative changes occur in a biological asset, which is a living animal or plant. In the case of a forest, this is the stage of stand establishment and growth, and ends when the timber is harvested. The forest is considered a consumable biological asset as it is intended to be harvested, and thus the growth of the trees ceases.

According to IAS 41, biological assets should be measured at fair value at the time of recognition based on market prices, less estimated costs to sell. In the Czech Republic, however, this is a problem as there is no active market for forest land.

It is clear from the above that the International Accounting Standards, unlike Czech accounting, allow the actual value of land to be shown in the accounts by increasing or decreasing it.

Table No. 2: Comparison of Czech legislation and International Accounting Standards

Czech legislation	International Accounting Standards
Does not give a true picture of the current value of the land	Does give a true picture of the current value of the land
Significantly less time-consuming and costly	Time-consuming and costly
Out-of-date information can harm the user	Up-to-date information will help the user make the right decisions
No need to secure a qualified valuer	Need to work with a qualified valuer
Does not provide a true picture of current land value	Provides a true picture of current land value
Significantly less time-consuming and costly	Time-consuming and costly

Source: Own processing.

5 Discussion

The first research question dealt with the comparison of the differences between the accounting and valuation of land that is not a commodity according to Czech legal norms and International Accounting Standards.

According to Czech legislation, land is recorded at its historical cost and there can never be a change in the valuation of the land. It is not possible to account for a decrease in the value of the land, e.g., as a result of an environmental accident, nor for an increase in the value of the land resulting from the market situation. Utterly false figures occur in the case of forest land, where the land itself and the forest cover are not separated and where there is no accounting at all for the increase in timber mass, and the following increase in the value of the respective land.

Thus, the financial statements do not give a true and fair view of the subject matter of the accounts.

International Accounting Standards, on the other hand, directly require updating land prices in the accounts according to the market price. A qualified valuer reassesses the market price of the relevant land according to its current condition and the market situation.

In the case of forest land, International Accounting Standards distinguish between the land itself and the forest stand, which is considered a biological asset. An established forest stand, growing stock of timber and harvested forest stand is a biological asset that an entity must measure and recognise at fair value, less estimated costs to sell at the time of harvest.

The second research question asked which of the two systems provides more accurate and up-to-date information. It is clear from the above that the Czech accounting system does not provide current data in the area of land accounting, as it does not reflect the current physical condition of the land or its present market price at all. As far as forest land is concerned, the user does not get separate information about the value of the land itself and the value of the forest cover.

In contrast, International Accounting Standards require regular updating of the value of land in the accounts. The users receive information on the real value of land and, in the case of forest land, separate information on the value of the land and the growing stock of timber. The information provided here is therefore much more accurate and up-to-date, and the users can make the right decision based on it.

6 Conclusion

The aim of the paper is to analyse the accounting procedures for accounting for land according to Czech legislation and International Accounting Standards, and to compare both procedures.

It was found that according to current Czech regulations, land is registered once and for all at the price at which it was acquired, regardless of possible changes in the physical condition of the land and the changing situation on the land market. In the case of forest land, the current state of the land and the vegetation cover on it is not taken into account at all.

This approach is advantageous to entities because they do not have to deal with revaluations and incur the costs associated with the services of a qualified valuer. However, users of the financial statements receive less and less current information and may make incorrect economic decisions as a result.

According to the International Accounting Standards, it is necessary to assess the current value of relevant land regularly, and then include the data in the accounting. In the case of forest land, the land itself and the forest vegetation - the biological asset - on it must be separated in the accounts.

This provides users of the financial statements with up-to-date information about the entity's financial position and enables them to make the right economic decision. The problem however may be securing the services of a qualified expert and the fees charged.

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