## **Comparison of Valuation of Financial Instruments according to the International and Czech Accounting Standards in the Context of Performance Reporting**

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Abstract: The paper is devoted to a comparison of the valuation of financial instruments according to the international and Czech accounting standards in the context of performance reporting of trade corporations. Differences in valuation and reporting of financial instruments are examined in connection with the upcoming amendments to the international accounting standards, which are currently the subject of scientific and expert discussions. The research focused on the comparison of classification methods of financial instruments according to the international and Czech standards and the resultant methods of recognition, valuation and reporting with the aim of identifying possible differences. The research arrived at the discovery of what causes the differences and the assessment of their impact on the financial statements of trade corporations. A different concept of accruals on long-term receivables and variant calculations of present value affected the amount of the reported balance sheet as well as performance. Calculations of specific values of differences in financial instruments are made in two model examples in the categories Held-to-maturity investments (HTMI) and Loans and receivables (L&R), both from the viewpoint of owners, as well as from the perspective of debtors. The development of these differences in time is described graphically. The differences in the reported values manifested themselves in overvaluation or undervaluation during the life of the financial instrument, but the values were identical at the time of their maturity. It has been proved that differences between the reported financial situation and the performance of trade corporations persist even after the amendment to the Czech accounting legislation, and it is necessary to take them into account in financial analvsis.

**Keywords:** financial instruments, models of valuation, recognition, Czech accounting legislation (CAL), International Financial Reporting Standards (IFRS), differences

**JEL codes:** M21, M41, G32

### Introduction

Accounting is generally considered a reliable instrument of financial management, which accurately shows assets and liabilities of trade corporations and their net income. It is based on principles and rules which are universally recognised and accepted all over the world. And it is the understanding of these principles and their implementation at international and national levels which causes the differences in valuation, ultimately leading to different reporting of performance of businesses (Brealey, R. A., Myers, S. C. and Allen, F., 2006), which is usually measured by the

profitability of paid-in capital, EVA (Economic Value Added) indicators, MVA (Market Value Added) indicators, or by SVA (Shareholder Value Added) indicators. The environment in which accounting develops and functions plays a key role (Sedláček, 2007). It is therefore logical that accounting is influenced by the economic, legal, social, political, and cultural environment in a given jurisdiction. Also the application of accounting principles in national rules (particularly for valuation) is different in each country. This occurs despite the ongoing efforts to harmonise accounting globally in the form of the International Accounting Standards (IAS) and the International Financial Reporting Standards (IFRS), including the interpretations of SIC (the Standing Interpretations Committee) and IFRIC (the International Financial Reporting Interpretations Committee).

The basic accounting principles involved in valuation methods in individual countries are particularly the following:

- the conservatism principle, which requires the use of immutable accounting methods,
- the prudence principle, which does not allow overvaluing assets and income of a trade corporation nor undervaluing liabilities and costs,
- the historical cost principle, which preserves past conditions because a trade corporation is obliged to record assets at their purchase price,
- the realisation principle, which requires reporting of the actually achieved (realised) profit only,
- the imparity principle, which on the one hand forbids to report unrealised profits, but on the other hand, it requires or allows reporting of unrealised losses,
- the true and fair view, which requires that a financial statement faithfully represents the financial situation of a trade corporation.

Furthermore, a problem arises from the fact that the individual principles contradict each other and it is up to the will of businesses to decide which principle is more important when valuing their assets and liabilities. The selected method of valuation then directly affects the amount of reported assets and liabilities of a trade corporation, it has an impact on the amount of costs (as asset consumption expressed in monetary terms) and revenues (as accrued assets expressed in monetary terms) as well as on the amount of reported net income of a trade corporation.

The international standards have gradually become globally applied accounting standards and they successfully respond to the current needs of economy globalisation and, in particular, to the development of world financial markets, which is under way without any limits (Pacter, 2015). Companies seek capital at the best price wherever it is available. Investors and lenders seek investment opportunities wherever they can get the best returns commensurate with the risks involved. To assess the risks and returns of their various investment opportunities, investors and lenders need financial information that is relevant, reliable and comparable across borders. The amounts of cross-border investment are enormous. To illustrate (see Fig. 1): the Organisation for Economic Co-operation and Development (OECD)

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estimates that the worldwide Foreign Direct Investment (FDI) outflows in 2014 were USD 1.372 trillion. The historically highest level was in 2007 (USD 2.170 trillion). As you can see in Tab. 1, cross-border ownership of stocks and bonds amounts to many trillions of US dollars. For example, foreign ownership of US equities, corporate bonds and treasuries amounted to nearly USD 14 trillion in 2013. And US investors held over USD 9 trillion of foreign corporate stocks and bonds in 2013.

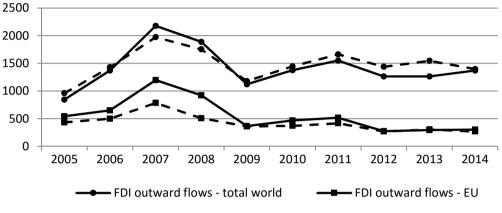


Figure 1 The development of the worldwide foreign direct investment (trillion USD)

The use of one set of high quality standards by companies throughout the world improves the comparability and transparency of financial information and reduces financial statement preparation costs. When the standards are applied rigorously and consistently, capital market participants receive higher quality information and can make better decisions. Thus, markets allocate funds more efficiently and firms can achieve a lower cost of capital. A comprehensive review of nearly 100 academic studies of the benefits of IFRS concluded that most of the studies provide evidence that IFRS has improved efficiency of capital market operations and promoted cross-border investment.

The purpose of this article is to compare the IFRS and CAL in the classification, initial recognition, measurement and presentation of financial instruments. The aims are to identify any differences and assess their impacts on the financial statements of business corporations, and, for selected financial instruments, quantify differences caused by different methods of valuation and accruals during the entire period of their maturity; especially to determine impacts on the financial position of the corporation that is the investor and a corporation that is the debtor.

Source: OECD statistics (2015)

Table 1 Foreign holdings of U.S. LTS and U.S. holdings of foreign LTS

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	2006	2007	2008	2009	2010	2011	2012	2013
Foreign holdings of U.S. LTS	7,162	9,136	9,463	8,492	9,736	11,561	12,451	13,532
U.S. holdings of foreign LTS	4,799	6,429	6,324	4,615	5,282	6,830	6,835	7,886
U.S holdings as a share of foreign holdings	0.67	0.70	0.67	0.54	0.54	0.59	0.55	0.58
Net position of LTS of U.S. residents	-2,363	-2,71	-3,139	-3,877	-4,454	-4,731	-5,616	-5,646
residents								

<sup>1</sup> (Billions of dollars)

**Source:** Federal Reserve Bank of New York (2014)

### 1 Problem Definition, Data and Methodology

The idea of creation and implementation of international accounting standards has contributed to the unification and comparability of financial statements over time and space. The standards are created by an independent professional organisation established in London in 1973, which provides them to individual jurisdictions for voluntary use. Although it has no formal authority to mandatory implementation of the standards, most jurisdictions already require the IFRS to be used when preparing domestic financial statements. According to Pacter from the IFRS Foundation, 130 countries have publicly pledged to adopt the IFRS as a single set of global accounting standards, 114 countries require their use in all or most public companies and their use in other countries is possible. The ongoing convergence of the US GAAP, which are oriented to the needs of corporations financed through financial markets (Bohušová, 2011), also contributes to the global nature of the IFRS. Accounting is thus becoming more and more international and national accounting is more and more pushed to the sphere of small and medium-sized trade corporations, in which it plays the role of recording for the tax purposes or commercial law. The International Accounting Standards Board (IASB) seeks to establish a coherent global system of accounting standards, but the way of their implementation in individual countries is still within the authority of national governments or economic groups. In the Czech Republic, being a member country of the EU, only those trade corporations which are traded on the public capital markets are obliged to submit financial statements according to the IFRS from 1st January 2005 onwards. Other corporations follow the Czech accounting legislation, which leads to inconsistent reporting of their financial and revenue situations on an international scale. On the basis of the amendment to the Accounting Act valid from 1st January 2011 onwards, the IFRS may also be used for the purpose of preparing individual financial statements by the trade corporations

<sup>&</sup>lt;sup>1</sup> Long-term securities.

which are a part of a consolidated unit preparing a consolidated financial statement in accordance with the IFRS.

It is clear that the differences in reporting according to the international and national accounting standards will be particularly affected by the economic and legal environment of individual countries. They will depend on how each country modifies the relationship between these two systems and how it will accept changes arising from the IFRS updates. The IASB permanently modifies and extends the IFRS depending on the evolving needs of the users of financial statements.

The Czech national accounting system is primarily based on rules which are codified in legislation. As a EU member country, it is a subject to the legislation of the European Union and therefore it has to carry out its obligations. The main pillar of the Czech accounting legislation in its broader concept is the Accounting Act, which is a basic, generally valid legislative norm with state-wide force, containing adjustment of accounting methods and reporting for all business units in the country ranging from the smallest to the largest (also multinational) ones, whose scope of business and purpose of foundation are fundamentally different. The form and content of the act are determined not only by the rules and the content of the European legislation, but also by the Czech legislative rules and the requirement for full compliance (both factual and terminological) with the other regulations of the Czech legal order. Considering the fact that the act is also designed for very small business units, e.g. the self-employed who cannot be expected to have broad theoretical knowledge in accounting and related fields, it is necessary to make the text as much comprehensible and clear as possible. The national accounting system is also influenced by the tax requirements, because the accounting net income is at the same time the basis for the assessment of corporate income tax. As a result, in practice the management makes a lot of estimates when preparing accounting statements with regard to the potential tax implications of the particular accounting procedure. This may lead to adoption of an accounting stance based on tax counts and not considerations about how it is to be expressed in fair and true view of a transaction in its essence. Although the Czech accounting legislation (hereinafter CAL) has gradually taken over a wide range of procedures from the IFRS and it is continuously updated in the form of amendments, there are still differences resulting from the different priorities and principles. Identification of the differences between the two accounting systems and examination of their causes is the subject of many research studies, see e.g. papers by audit companies Ernst and Young (EaY, 2013) and PricewaterhouseCoopers (PwC, 2013). The IASB projects, whose aim is to meet the needs of users resulting from the dynamically developing financial markets, are currently discussed. The solution lies in simplification and clarification of reporting of financial instruments (IFRS 9). The key issue is the valuation of financial assets and liabilities or equity instruments.

Valuation in accounting should generally be derived from the benefit which an asset or liability will bring to the owners. It is basically the right choice between two extreme approaches based on the one hand on historical costs, and on the other hand on fair prices. Both approaches have their pros and cons and that is why the choice of an appropriate valuation variant is always problematic and ambiguous. To identify the differences in the valuation of financial instruments between the IFRS and CAL it is necessary to first analyse the valuation models and conditions of their use.

# **1.1** Models for Valuation of Financial Assets and Liabilities under the IFRS

Procedures for valuation of financial instruments are governed by several international standards, which define their recognition, valuation, reporting, and disclosure. The following standards are concerned in particular:

- IAS 39 Financial instruments: recognition and measurement
- IAS 32 Financial instruments: presentation
- IFRS 7 Financial instruments: disclosures
- IFRS 13 Fair value measurement
- IFRS 9 Financial instruments

The specific method for the valuation of financial instruments is determined by the categorisation of financial assets and liabilities according to the business model used by the trade corporation for the management of financial instruments. The IAS 39 standard distinguishes four categories of financial assets:

- Financial assets or financial liabilities at fair value through profit or loss (FVTPL)

   are assets or liabilities which are intended for trade or were classified as an
   instrument at fair value through profit or loss by the accounting unit at initial
   recognition.
- Held-to-maturity investments (HTMI) are non-derivative financial assets with fixed or determinable payments and a fixed maturity which a trade corporation intends to and is able to hold to maturity.
- Loans and receivables (L&R) are non-derivative financial assets with fixed or determinable payments which are not quoted in an active market.
- Available-for-sale financial assets (AFS) are non-derivative financial assets which categorised as available for sale by the accounting unit and do not fall under any of the above mentioned categories.

Two categories of financial liabilities are distinguished:

- Financial liabilities at fair value through profit or loss (FVTPL) are defined in a similar way as financial assets in this category.
- Other financial liabilities these include other liabilities not included in the previous category.

Two models for valuing individual categories of financial assets and liabilities can be used:

- Fair value, which is defined as the amount for which an asset could be exchanged or a liability settled in transactions between knowledgeable and willing parties under normal conditions.
- Amortised cost, i.e. the amount at which financial assets or liabilities are valued at initial recognition, less principal repayments and (using the effective interest method) plus or minus any unamortised original premium or discount

(the difference between the initial value and the value at maturity), and further less (directly or through an adjustment) the amount by which the value of the assets or liabilities has decreased as a result of their impairment or uncollectibility.

The choice of a valuation model also depends on the period in which the valuation of financial instruments is performed. All financial assets and liabilities are valued at fair value at initial recognition. The fair value of a financial instrument is standardly represented by the transaction price, i.e. the amount of the consideration given or received. In some situations, however, the price of a transaction does not show its fair value. It is then necessary to determine the fair value using market data about the same or similar instrument, or using valuation techniques which refer to market data.

Subsequent valuation of financial instruments depends on their initial classification. All financial assets are subsequently valued at fair value, except for loans and receivables, held-to-maturity investments and, in rare cases, non-marketable equity instruments whose fair value is not reliably measurable, or derivatives related to such instruments, which will be repaid by these non-marketable equity instruments.

Loans and receivables and held-to-maturity investments are subsequently valued at amortised cost. The amortised cost of financial assets and liabilities is determined using the effective interest rate.

Available-for-sale financial assets are valued at fair value. Changes in fair value are recognised in the other comprehensive income (fair value through other comprehensive income – FVTOCI). The interest arising from available-for-sale debt instruments is recognised in the financial revenue using the effective interest rate method. The dividends arising from an available-for-sale capital instrument are recognised in profit or loss at the time when they are granted to the holder.

Derivatives (along with embedded derivatives reported separately) are valued at fair value. All changes in fair value are recognised in profit or loss, with the exception of the case in which derivatives are classified as hedging derivatives for hedging of cash flows. Financial liabilities are subsequently valued at amortised cost using the effective interest rate method, unless they are classified as being valued at fair value through profit or loss. Those financial assets and liabilities which are designated as hedged may require additional adjustments based on the requirements for hedge accounting.

All financial assets are the subject of impairment testing with the exception of those valued at fair value through profit or loss. If there is objective evidence that a financial asset has been impaired, an adjustment is calculated or a one-time write-off is made, which are recognised in profit or loss.

Table 2 shows the valuation of financial assets in individual categories, including the impact on the corporate net income.

Portfolio	Acquisition	Subsequent revaluation	Impact on the net income			
FVTPL	Fair value	Fair value	Profit and loss			
НТМІ	Fair value	Amortised cost	Profit and loss			
L&R	Fair value	Amortised cost	Profit and loss			
AFS Fair value		Fair value	Other comprehensive income			

**Table 2** Valuation models of financial assets in individual portfolios, including theirimpacts

Source: IFRS 2014

## **1.2 Valuation Models of Financial Assets and Liabilities according to the CAL**

In the Czech Republic, procedures for valuation of financial assets and liabilities are codified by legislation, namely the Accounting Act (Act no. 563, 1991), the Implementing Decree (Decree no. 501, 2002) and also the national accounting standards, which, however, are not legally binding for trade corporations. Within financial instruments, the CAL distinguishes the following valuation models:

- Acquisition cost this is the price for which a financial instrument was acquired, including related transaction costs.
- Fair value which is determined by the value set by a regulated market, a qualified estimate, an expert report, valuation according to specific rules.
- Historical costs which represent the acquisition cost modified by the interest income or expenses, and at the same time they take into account all foreseeable risks and potential losses, as well as impairment according to the principle of prudence.
- Equivalence which expresses the degree of participation of a trade corporation in the book value of the company, which is a controlled person or a person under significant influence.
- Nominal value.

Similarly to the IFRS, valuation models are bound to a particular portfolio, which is directly related to the way of difference recognition at the time of when the financial statements are prepared. Under the CAL for non-financial corporations<sup>2</sup>, any financial instrument may at its initial recognition be valued by acquisition cost or nominal value, depending on the category in which it is classified. Subsequently, when a financial statement is prepared, financial assets and liabilities classified in the FVTPL portfolio are revalued at fair value and the differences in valuation are reflected in profit or loss in the same way as Table 2 shows.

 $<sup>^2</sup>$  Legislation applicable to financial corporations (the Implementing Decree no. 502/2002 to the Accounting Act and national accounting standards) is closer to the IFRS rather than to the legislation applicable to non-financial corporations.

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Financial assets held with the intention and ability to hold to maturity (HTMI) include the assets with fixed and determinable payments and maturity. At initial recognition, they are valued by the acquisition cost and then revalued by the amortised cost, as in the IFRS. Costs and revenues are reported as a profit or loss. The method of effective interest yield is only required for financial institutions, entrepreneurs recognise by contractual interest.

Loans and receivables are financial assets generated by providing money, goods and services directly to a debtor, e.g. bonds, loans to customers and credit. They are valued at nominal value, and in financial institutions they are subsequently revalued using the method of effective interest rate and reported in the same way as Table 2 shows. Receivables and trade payables in non-financial trade corporations are classified as clearing relations and only contractual interest is usually reported. Accruals on long-term trade and other receivables or liabilities are not considered a financial instrument by the Czech accounting legislation.

Available-for-sale financial assets are all debt and non-financial assets which do not fall under the three categories mentioned above. They include equity securities, with the exception of those classified as held for trading. At initial recognition, they are valued by acquisition cost and then they are revalued at fair value in the same way as Table 2 shows. Changes in fair value are recognised directly in equity funds in the form of valuation differences. Available-for-sale equity instruments<sup>3</sup>(e.g. shares or shares in companies with limited liability) are initially valued by acquisition cost and subsequently revalued using the method of equivalence at the time when financial statements are prepared. The model of equivalence is an alternative to the acquisition (historical) cost, which a trade corporation can choose. If the trade corporation decides to do so, then it must apply this valuation model to all assets classified in this category. Changes in valuation by the method of equivalence are recognised on balance sheet just as the changes in fair value of available-for-sale assets.

# 1.3 Comparison of Valuation Models according to the IFRS and the CAL $% \left( \mathcal{A}^{\prime}\right) =\left( \mathcal{A}^{\prime}\right) \left( \mathcal{A}^{\prime}\right$

The scope of the international standards is very wide. The standards cover all types of financial instruments, including receivables, payables, investments in bonds and shares, loans and derivatives. They are also applied to certain contracts for the purchase or sale of non-financial assets (such as commodities), which can be settled on a net basis in cash or by another financial instrument. The gradual amendments to the Czech accounting legislation have contributed to a considerable convergence with the IFRS, particularly regarding recognition and valuation of derivatives and the area of hedge accounting. Despite the advanced harmonisation in the area of financial instruments, the national accounting system retains a certain degree of autonomy, which is reflected in its valuation models as well as in the ways of reporting.

<sup>&</sup>lt;sup>3</sup> These represent the net share of the issuer's assets less all liabilities or they in another way free the issuer of the obligation to hand over money or other financial asset to another company.

Differences have emerged from the comparison of international and national systems, and these are subsequently transferred to the financial situation of trade corporations and their performance. Particularly the following differences come to the forefront:

- in the classification of financial instruments,
- in valuation models at initial recognition of financial instruments,
- in the use of valuation models in subsequent revaluation of financial instruments.

If business entities are taken into account, the main difference in classification occurs in long-term receivables from business relations and other long-term receivables, which are considered to be clearing relations in the Czech accounting, not financial instruments. This also results in a different method of valuation, recognition and reporting in the statement of profit and loss compared with the IFRS.

At initial recognition of financial instruments, the IFRS require that all financial instruments are valued by the fair value valuation model or their nominal value, whereas the CAL does not allow for fair value. Instead, the CAL uses the acquisition cost model, in which the value of a financial instrument is determined by the cost of the transaction, i.e. the amount of the consideration given or received. In certain situations the acquisition cost will obviously not correspond with the fair value, which is based on market data about the same or similar instrument or is determined using valuation techniques based on market data. Moreover, Czech conditions lack a liquid and active financial market. The differences from the initial valuation then affect the balance sheet total, as well as the value of the equity of the trade corporation.

Models for the subsequent valuation of financial instruments are determined by their initial classification and are basically identical for both accounting systems in question. The differences arise in the assets and liabilities applying the model of amortised cost, in which different time value of interest income or costs incurred is determined. While the IFRS apply the effective interest rate model, the CAL uses the linear model. The effective interest rate model discounts more accurately the estimated future cash payments for the expected duration of the financial instrument.

The IFRS do not allow at all for the model of equivalence designed by the CAL as an alternative to subsequent valuation of equity instruments with control or substantial influence. Instead, the IFRS require revaluation of these instruments using the fair value model. The differences in the calculated value when using different models are reflected in the other comprehensive income (OCI) or in the reported equity according to the CAL.

## 2 Results and Discussion of the Problems

The time factor may be considered one of the causes of the differences identified between the two accounting approaches to the valuation of receivables and liabilities (both financial and non-financial) held to maturity. Liabilities (including reserves) and receivables held to maturity are in principle valued at discounted value (with the exception of those financial receivables and liabilities revalued at fair value), which happens continuously starting from the time of their inception. Discounting is not necessary only when the impact of the time factor is insignificant, which may be the case of short-term liabilities and receivables. This is then the amortised cost method,

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receivables and liabilities are at the time of recognition recorded as discounted in the accounts, their value is increased over the time (using the method of effective interest rate) by adequate interest expense in the case of a liability, or by interest income in the case of receivables, so at maturity they are valued at nominal value which is to be reimbursed. The projection of the time factor makes it possible to differentiate in terms of time the interest falling into individual accounting periods (based on the principle of material and temporal commensurability of costs and revenues and the accrual principle), in which the resources are used (in the case of liabilities) or in which the trade corporation lends money, e.g. by deferring the maturity date. To calculate the amortised cost, it is possible to use the basic equation for the present value, which discounts future net cash flows:

$$x_0 = \frac{x_n}{(1+i)^n} \tag{1}$$

$$i = \sqrt[n]{\frac{x_n}{x_0}} - 1 \tag{2}$$

Where: x<sub>0</sub> - present value

x<sub>n</sub> – future value

i – effective interest rate

n - term to maturity

Under the CAL, long-term receivables and liabilities are valued at the nominal value or the acquisition cost, and this value does not change from the moment of realisation. The revenue is then the sales or costs in full, without separation of the time value of money. The impact on profits or losses of a trade corporation may then be illustrated on e.g. receivables from a supply of goods in the amount of CZK 1 million payable in three years, when the discount would be 5% if paid in cash. It is clear from Fig. 2 that while the value of receivables remains constant throughout the whole period of maturity, the supplier reports the revenues from sales of goods in full amount at the time of realisation in the Czech accounting, i.e. a higher amount compared to the discounted receivables.

This leads to overvaluation of receivables and reporting higher sales in the first period compared to the IFRS, which in terms of time differentiate revenues (costs in the case of liabilities) by the method of effective interest rate. The cause of the differences identified in the category of HTMI is primarily not the issue whether or not accruing at recognition of assets or liabilities is applied, but it is the method of its calculation. The IFRS apply – just as with the L&R category – the model of amortised costs, whereas the CAL distinguishes revenues or costs in a linear way in non-financial corporations.

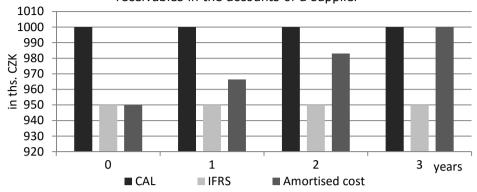
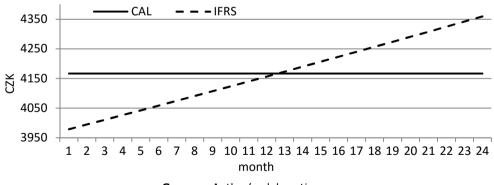


Figure 2 The development of the initial and subsequent valuation of long-term receivables in the accounts of a supplier

**Source**: Author's elaboration

The calculation of the differences may be shown on the example of bonds held to maturity, when the costs are different from the nominal value of the bond – the bond is sold (at the time of bond issuance) with a discount or with a premium. Both the price reduction and discount are split into individual periods (for the issuer as well as the investor) in the same way as it is in the case of interest in the above-mentioned case. These are bonds in the nominal value of CZK 0.5 million with a two-year maturity acquired with the discount of CZK 62,000. The differences in the time value of the bond and the value of interest recognised in profit or loss are shown in Fig. 3 and 4.

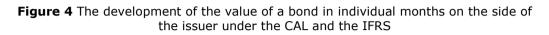
Figure 3 The development of monthly amortisation of a discount for the owner of a bond under the CAL and the IFRS

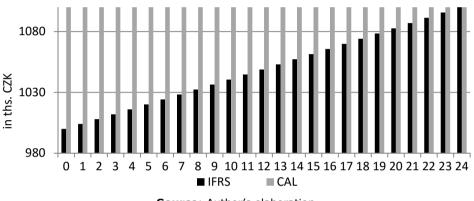


Source: Author's elaboration

For a corporation which owns the bond (the investor), the difference between the national and the international approach is caused by the use of different variants of a valuation model. The chart in Figure 3 shows the constant development of the discount amortisation as a result of the linear model applied in the Czech accounting, unlike the rising curve resulting from the model of the effective interest rate under the IFRS. It is obvious that under the IFRS, the owner reports lower yields in the first

half of the maturity of the bond and higher yields in the other half. The different development of discount amortisation then influences not only the reported profits of the trade corporation during the bond tenure, but also the bond value reported in the balance sheet, which grows linearly under the CAL or by a convex curve under the IFRS. Upon maturity of the bond, the values of the asset and the reported profit are equal and the use of different models therefore does not affect the total financial situation of the corporation, nor its performance.





**Source**: Author's elaboration

In a trade corporation issuing a long-term bond, the liability under the CAL is recognised at the nominal (future) value, which is not adjusted in any way over the course of time. As a result of the gradual amortisation of the discount, reduction in costs for next periods and thus also in the total balance sheet occurs. In contrast, the IFRS value a bond at the present value which is gradually increased by amortisation (see Fig. 4). Amortisation is at the same time recognised as an expense in profit or loss and, therefore, the total balance sheet does not change. Allocating the discount in the profit or loss of a corporation has a similar effect as on the investor, arising from the different models used (linear vs. effective interest rate models).

If a trade corporation chooses the model of equivalence to value capital instruments, it then reports any differences in subsequent valuation as differences from overvaluation, which will affect the value of the equity as well as the total value of assets. Influence may be significant due to the high volumes of equity investments reported in the Czech industrial corporations e.g. from sector of manufacturing industry or sector of electricity, gas and water, see Tab. 3. In place of equivalence, the IFRS apply the model of fair value and the changes in fair value are reported in FVTOCI (similarly to the Czech accounting). The differences arising from the different approaches to valuation instruments could be possibly quantified by means of a case study elaborated for a particular trade corporation, but owing to the individual conditions, a generalising criterion can hardly be found.

Table 3 Volumes of equity instruments in the sector of manufacturing industry (SMI)
and the sector of electricity, gas and water (EGW) in millions of CZK

	2007	2008	2009	2010	2011	2012	2013	2014
Equity instruments in SMI (total)	184224	175797	111118	124230	125090	128235	198120	190552
Equity instruments in EGW (total)	259464	240035	327199	337339	343074	325231	297611	439379
Equity instruments in SMI (held in PLC)	48272	62737	45697	46061	41647	45155	88226	79864
Equity instruments in EGW (held in PLC)	102735	101943	128404	145097	144660	151843	160192	281133

Source: Ministry of Industry and Trade of the Czech Republic (2015)

### **3** Conclusions

Global financial markets require adequate financial instruments and new approaches to their recognition and valuation. The IFRS have gained a global position and are gradually adopted (completely or partially) by economic groups and individual jurisdictions. The Czech Republic has adopted the IFRS for some trade corporations and the other corporations are bound by the national accounting legislation. Despite the continual amendments to the Czech accounting legislation, which follow the amendments to the IFRS and which basically absorb their newly adjusted versions, some differences remain in the recognition and valuation of financial instruments. This fact in effect restricts their mutual comparability. The difference is then reflected in reporting of the financial situation and performance of trade corporations.

The results of the conducted research have confirmed the differences in reporting, which are particularly caused by different categorisation of financial instruments and the associated method of their valuation. Different classification of a financial instrument in individual accounting systems and the associated method of recognition and model of valuation are the primary causes of the differences. Depending on whether the IFRS or the CAL are followed, a different balance sheet or profit or loss of a trade corporation are stated in the financial statements.

In long-term trade receivables, the value of difference arising from the method of acquisition cost versus the model of amortised costs was at the level of the time value of the interest income or expense. The differences quantified in the area of long-term bonds are caused by the methods of discount amortisation based on a calculation of the present value or on the model of the effective interest rate. Depending on whether it is the owner or the issuer of the bond, the total reported in the balance sheet and in the profit and loss statement will be influenced.

It is necessary to assess individually the differences caused by using the model of equivalence, which is applied by the CAL, but not by the IFRS.

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