

## US GAAP vs. IFRS – A COMPARISON OF REMAINING DIFFERENCES

### SUMMARY

*In spite of the on-going harmonization process, there are still some differences between US GAAP and IFRS. Currently, companies listed on the New York Stock Exchange, which are reporting according to IFRS, must still prepare the reconciliation to US GAAP, to show the financial statements compliant with US GAAP as well. This article presents an overview of the remaining major differences between US GAAP and IFRS, descriptive as well as table-wise. First, the standards compared are shortly introduced. This is followed by a presentation of details in the separate balance sheet categories, from property, plant and equipment, intangible assets, financial assets and liabilities, investment property, inventory, equity, debt, long-term provisions, employee benefits, deferred taxes and revenue recognition. For conclusion, a matrix of differences in the stated categories is prepared, enabling an easy reconciliation for financial statement users and preparers.*

**Key words:** *accounting standards, US GAAP, IFRS, harmonization, measurement, property, plant and equipment, intangible assets, financial assets, inventory, debt, provisions, employee benefits, deferred taxes, revenue recognition*

JEL: M41

### 1. Introduction

This paper explores the remaining differences between US Generally Accepted Accounting Standards (US GAAP) and International Financial Reporting Standards (IFRS). Despite the on-going harmonization process, which started with the historic joint meeting of Financial Accounting Standards Board (FASB) and International Accounting Standards Board (IASB) in Norwalk on 18th September 2002 (Gornik-Tomaszewski, 2003, p. 39), there are still some differences remaining. Currently, companies listed on the New York Stock Exchange, which are reporting according to IFRS, must still prepare the reconciliation to US GAAP, to show the financial statements compliant with US GAAP as well. By 2009 this should gradually be abolished as well.

The most important cause for the above mentioned differences is the measurement basis, which under IFRS is the fair value whereas US GAAP is still to some extent relying on historical costs measurement. Fair value measurements are based on true worth of an asset or liability, which in many cases is not easily obtainable and needs to be assessed by using valuation techniques. The use of the latter can vary significantly and can impact the income statement heavily, thus setting the reliability of the financial statements under question.

This paper skims through separate accounting categories and underlines the major differences between the two standards, descriptive as well as table-wise. Knowledge of the compared standards is assumed, since the paper does not go into basic valuation and measurement

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Članak primljen u uredništvo: 2.07.2007.

explanations. Based on this, a matrix of differences is prepared, enabling financial statements users and preparers to have an easy IFRS vs. US GAAP reconciliation.

## **2. Standards compared**

US GAAP are the most complex set of accounting standards, deriving from the country with the most developed financial markets, where the goal of accounting is the true and fair presentation of accounting information as the basis for investor decision-making. IFRS as the European alternative to US GAAP contain a strong Anglo-Saxon component, also making true and fair accounting as their main motive. A survey by Tarco in 2004 (2004, p. 60-91) has shown that the usage of US GAAP was higher than that of IFRS regardless of the fact that the latter are more politically neutral. Both sets of standards are based on the accrual principle and the going concern assumption.

## **3. Valuation of accounting categories according to US GAAP and IFRS**

### **a. Property, plant and equipment and intangible assets**

#### **i. Initial recognition**

In the field of initial recognition there are some differences arising mainly from the criteria for capitalization of certain intangible assets according to US GAAP and IFRS. US GAAP (SFAS 2) is very strict regarding development costs, which have to be expensed as incurred, whereas IFRS (IAS 38) allows capitalization of development costs under certain conditions. There are however two exceptions under US GAAP, where capitalization of development costs is allowed (again, only under certain conditions). The first one are computer software development costs (for internal use: SOP 98-1; for sale: SFAS 86) and the second are web site development costs (EITF 00-2).

The above is valid also for all internally generated intangible assets, which have to be expensed under US GAAP, whereas IFRS requires expensing only for internally generated goodwill and brands or similar assets, but for other internally generated intangible assets capitalization is allowed from the development phase onwards.

As opposed to the strict criteria above, US GAAP (SOP 93-7) requires capitalization of direct marketing costs and allows capitalization of other advertising costs under certain conditions, whereas IFRS requires them to be expensed as incurred.

#### **ii. Initial measurement**

##### **1. Purchased and constructed assets**

According to both US GAAP and IFRS assets retirement cost must be included in the cost value of the asset. There is an important difference in the measurement of asset retirement cost between US GAAP and IFRS. In case of discount rate change IFRIC 1 defines that the retirement liability (affecting the value of the asset as well) must be recalculated as if the new rate had been used initially (IFRIC Interpretation 1: Changes in Existing Decommissioning, Restoration and Similar Liabilities, 2005, p. 3). Under US GAAP however, the new discount rate is used prospectively. All other parameter changes are considered retrospectively under both sets of standards.

##### **2. Donated assets**

In accordance with IAS 20 the asset can be measured at fair value or at nominal value, increased for costs needed to start operating it. The donation received can be deducted from the acquisition value or it can be presented as a long term provision, which is reduced along with the asset depreciation. The treatment under US GAAP (SFAS 116) is completely different. This standard focuses primarily on non-profit organizations, but can be used for other organization types as well. SFAS 116 determines that a donated asset's offsetting account are gains (Original Pronouncements, Volume II: FASB Statements 101-150, 2003, p. 1574).

### 3. Exchanged assets

Under IFRS and US GAAP assets obtained in an exchange transaction are measured at fair value of the asset received or the cost value of the asset given up. In APB 29 US GAAP defines the use of fair value for assets exchanged for a dissimilar asset, debt or equity investment (Original Pronouncements, Volume III: AICPA Pronouncements, FASB Interpretations, FASB Concept Statements, FASB Technical Bulletins, 2003, p. 316). In case of similar assets, the costs of the asset obtained equal the cost value of the asset given up, less potential impairment. EITF 86-29 depicts even more detailed rules for initial asset measurement, where the exchange transaction involves a cash payment as well. Since similarity or dissimilarity of assets is difficult to assess and additionally, it is possible that the exchange of similar assets can have gains recognition as a consequence and vice versa, IFRS opted for different fair value measurement criteria. Fair value measurement is used in all cases except in case the transaction lacks commercial substance or neither the fair value of the asset received nor the fair value of the asset given up can be reliably measured. Since IFRS and US GAAP use different rules for the measurement of exchanged assets, differences could arise.

#### iii. Subsequent expenditure

Subsequent expenditure handling is mostly relevant only for property, plant and equipment. Under IFRS the components approach is strictly followed (International Financial Reporting Standards (IFRS), 2004, p. 829). Assets must be split into individual components, which may have different useful lives and depreciation methods. The same has been discussed by FASB for a longer time, but so far it has not been implemented. The use or non-use of the components approach determines the method of subsequent expenditure handling, as depicted in Table 1.

**Table 1.**  
**Subsequent expense**

Subsequent expense	IFRS	US GAAP
Extensions, upgrades, improvements	Capitalization	Capitalization
Regular repair and maintenance	Expense	Expense
Major maintenance, inspection or overhaul	Capitalization	Capitalization
Components replacement	Capitalization and disposal of the old components	<ul style="list-style-type: none"> <li>• with similar components = expense;</li> <li>• with improved components = capitalization and disposal of the old component;</li> </ul>

Lit.: International Financial Reporting Standards (IFRS) (2004); Accounting Standards: Original Pronouncements (2003)

#### iv. Subsequent measurement

The differences between IFRS and US GAAP are much more distinguished when it comes to subsequent measurement. IFRS allows two measurement possibilities: subsequent asset measurement at cost less impairment or fair value measurement (International Financial Reporting Standards (IFRS), 2004, p. 833). In the latter case, the measurement must be done regularly, so the asset value does not deviate much from its fair value (most frequently the market price). The chosen method must be applied to groups of similar assets and not to individual assets only. The fair value method under IFRS implies that in case the fair value is higher than the assets costs, the difference from value increase is recognized in equity or in the profit and loss statement if the asset has previously been impaired. In case of value reduction, an expense is recognized unless the equity entry has previously been recognized. US GAAP only allows the subsequent measurement at cost less impairment (hence, the asset can never be measured higher than at its acquisition value).

#### v. Impairment testing

The assets must be tested for impairment in case of impairment signals or in some case annually (for assets under construction and for assets, which are not depreciated). Impairment is mandatory both under US GAAP as under IFRS. Under IFRS, the carrying amount of the asset or a group of assets is compared to the fair value less costs to sell or the value in use (based on discounted assets cash flows), whichever is higher. The test is always conducted in one phase.

US GAAP however, uses the one-phase test only for assets, which are not amortized (SFAS 142 – intangible assets) (Original Pronouncements, Volume II: FASB Statements 101-150, 2003, p. 2519). For all other assets, the testing comprises of two stages (SFAS 144 – impairment testing). First, the undiscounted cash flows from the use of asset are compared to the asset carrying value. Only if the undiscounted cash flows are lower than the carrying amount, the second step is done, where the carrying amount is compared to the asset's fair value (market price or value in use). US GAAP does not foresee a deduction of the costs to sell from the market price of the asset. Due to the two-phase impairment testing approach, we can expect more frequent impairments under IFRS.

Impairment testing can be done for a group of assets in case the recoverable amount of an individual asset cannot be determined or the individual asset does not generate cash flows largely independent from cash flows of other assets. The group can include also goodwill and corporate assets. US GAAP limits the inclusion of goodwill to a group of assets only to those groups, which represent a reporting unit (a segment or a level below). The impairment in a group is first assigned to goodwill and then proportionally to other assets in the group based on their carrying amounts. The value of the assets in the group cannot be reduced more than to their fair value. The excess is assigned proportionally to other assets.

#### vi. Goodwill

Under IFRS (IFRS 3), goodwill is the difference between the cost of the business combination and the acquirer's interest in the net fair value of the identifiable assets (including so far not recognized identifiable intangible assets), liabilities and contingent liabilities. Conversely, in goodwill measurement under US GAAP (SFAS 141), the contingent liabilities are not included, which can represent a significant difference in the goodwill measurement between the two standards. In case goodwill turns out negative, IFRS requires a renewed measurement of the fair

values of assets, liabilities and contingent liabilities and subsequently the recognition of gains. US GAAP however, requires proportional allocation of negative goodwill to values assigned to acquired assets (with some exceptions) and the recognition of the remainder as an extraordinary gain.

Goodwill is not amortized but tested for impairment annually or more frequently if necessary. The testing is conducted in asset groups, to which goodwill is assigned. Under US GAAP (SFAS 142) two-phase test is applied (Grünberger, Grünberger, 2004, p. 21). First the fair value of the asset group including goodwill is compared to its carrying amount. Only in case the fair value is lower than the carrying amount of the asset group, the second step is applied. The carrying amount is compared to the group's implied fair value (determined by allocation of the group's fair value to all assets and liabilities in the group, including not recognized intangible assets, as though the group was consolidated for the first time). The impairment identified reduces only goodwill. Under IFRS however, the test is conducted in one phase only by comparing the carrying amount of the group with its recoverable amount. Also, the impairment identified reduces not only goodwill (as under US GAAP) but also the values of other assets in the group proportionally. Once impaired, goodwill cannot be re-established neither under US GAAP nor under IFRS.

## vii. Leasing

### 1. Lease classification

Under finance lease all significant risks and rights in connection with the use of asset are transferred to the lessee. All leases, which are not finance leases, are operating leases. In order to distinguish the two lease types, US GAAP (SFAS 13) and IFRS (IAS 17) offer the following criteria for finance lease in Table 4.

**Table 2.**

#### Finance lease criteria

Finance lease criteria	IFRS	US GAAP
Transfer of ownership to the lessee by the end of the lease term	X	X
Bargain purchase option for the lessee at the end of the lease term	X	X
Lease term covers most of the asset's useful life	X	X
Present value of the minimum lease payments is substantially equal to the fair value of the leased asset	X	X
Assets are specialized	X	
Lessor's losses caused by the lease termination by the lessee are born by the lessee	X	
Gains/losses due to the change in asset's fair value are born by the lessee	X	
The lessee can extend the lease for one more term for a bargain payment	X	
Collectability of the minimum lease payments is reasonably predictable		X (valid for the lessor's accounting)
No important uncertainties surround the amount of unreimbursable costs yet to be incurred by the lessor under the lease		X (valid for the lessor's accounting)

Lit.: International Financial Reporting Standards (IFRS) (2004); Accounting Standards: Original Pronouncements (2003)

## 2. Finance lease accounting

There are no major differences in recognizing finance leases between US GAAP and IFRS on the lessee side. On the lessor side, there is a difference regarding initial costs. Under IFRS they are recognized as a part of the receivable, except for producers or dealers as lessors, who can recognize initial costs as expenses when recognizing sales. Under US GAAP all lessor's initial costs have to be expensed.

## 3. Operating lease accounting

As for finance leases, the difference can be found in the treatment of initial lease costs by the lessor, which are deferred under US GAAP and are expensed gradually over the lease term unless insignificant (in this case they are expensed immediately). Instead, IFRS require inclusion of initial costs into the carrying amount of the leased asset, which are then recognized as an expense over the lease term.

## 4. Sale and lease-back transactions

There are significant differences in accounting for sale and lease back transactions under IFRS and US GAAP. IFRS distinguish transactions per lease type. In case of a finance lease, IFRS require the gain from sales (excess of sales price over the carrying value of the asset) not to be recognized immediately, but to be deferred in the lease term (the transaction is a purely financing transaction and not a sales one). The loss is recognized immediately. Sale and lease-back transactions under US GAAP are covered in SFAS 28 (Original Pronouncements, Volume II: FASB Statements 101-150, 2003, p. 318). The basis for recognition of gains or losses from sales is not the subsequent lease types, but the scope of rights on the asset, which the vendor obtains when leasing the asset back. The present value of fair lease payments criteria is used. If the present value is equal or over 90% of the fair value of the asset sold, then the vendor has retained all significant rights on the asset. The gain can be recognized immediately. The gain however must be deferred in case the vendor keeps less than 10% of rights on the assets sold. For cases in between 10% and 90% of retained rights, the gain is recognized in the amount, which exceeds the carrying value of the leased assets. As under IFRS, the loss is recognized immediately.

Under IFRS, for operating lease-back the gain or loss is recognized depending on the value of the transaction. If the transaction is based on the fair value, the gain or loss is recognized immediately, since it is a common sales transaction. The same goes for sales under fair value, where the loss can also be deferred in the expected useful life of the asset, if it will be compensated with future lease payments, which are lower than market. In case the sales price is higher than the asset's fair value, the excess is deferred in the period in which the asset is expected to be used. US GAAP defines for operating lease-backs the same as for finance lease-backs.

## viii. Biological assets

IAS 41 defines that biological assets are initially and subsequently measured at fair value (based on prices on the most relevant active market) less estimated costs to sell (dealer commission, taxes, customs duties, but not transportation costs to deliver the product to the market)

(International Financial Reporting Standards (IFRS), 2004, p. 2061). Changes in fair value represent income or expense of the period. The only exception is the initial measurement of these biological assets, which have no market price or there is no alternative fair value measurement possibility. In this case, the assets are measured at cost less accumulated depreciation.

Under US GAAP (SOP 85-3), biological assets are initially measured at cost, increased by direct and indirect costs. Subsequently, the biological assets are measured at fair value or costs, whichever lower.

## b. Financial assets

### i. Classification

Financial assets are classified into three categories under IFRS: assets measured at fair value through profit and loss, assets held to maturity and assets available for sale. Also US GAAP provides for three categories under SFAS 115 (Scott, 2003, p. 219), with the only difference that the first category is called »trading«, which is a narrower definition as under IFRS, since trading assets are only a part of the fair value through profit and loss category.

### ii. Initial measurement

Initial measurement of financial instruments differs only regarding equity investments. US GAAP does not provide any guidance for measurement of equity investments in stand-alone financial statements, since in case the consolidation criteria is fulfilled since consolidated statements can offer more detailed information. In APB 18 (before partially overruled by SFAS 94) there were provisions that equity investments in associates and companies in the group as well as joint ventures are shown under equity method, but SFAS 94 discharged these provisions since consolidated statements are more adequate and informative (Original Pronouncements, Volume I: FASB Statements 1-100, 2003, p. 1035). IFRS (IAS 27) defines valuation at cost or IAS 39 (based on 3 categories).

### iii. Subsequent measurement

In financial assets subsequent measurement, there are three identifiable differences in the IFRS and US GAAP treatment, both regarding impairment. The first one is related to the measurement of the impairment. Apart from comparing the asset's carrying amount with the present value of estimated future cash flows (Benston, Wall, 2005, p. 22), US GAAP also allows impairment measurement based on the market price of debt or fair value of collateral, with which the debt is insured (Original Pronouncements, Volume II: FASB Statements 101-150, 2003, p. 1536). This method is used when the creditor considers it possible that the debt will be repaid exclusively by sale of pledged assets.

The next difference is in assets grouping when measuring impairment. US GAAP defines that individual financial assets must be tested for impairment (except for large groups of smaller-balance homogenous loans, which may be tested collectively) whereas IFRS requires individual testing for all significant assets and group testing for all individually not significant assets (if significant assets are not impaired individually, they must be included in the group for impairment testing).

Impairment loss recognized under US GAAP cannot be reversed, whereas under IFRS reversals are allowed.

#### iv. Derivative instruments

Derivative instruments under IFRS are financial instruments or other contracts, which do not require a significant initial net investment, the values of which change in response to a change in underlying and which are settled at a future date (International Financial Reporting Standards (IFRS), 2004, p. 1651). According to US GAAP however, the derivative must also fulfil the requirement of net settlement. This means that under IFRS more financial instruments will be classified as derivatives (those without net settlement will be included).

Further differences derive from the embedded derivatives treatment, more specifically from the separation criteria of embedded derivatives from the host contract, for example (IFRS / US GAAP comparison, 2005, p. 800):

- contracts that are out of scope of FAS 133 because they meet the definition of a normal purchase or sale are not assessed for embedded derivatives under US GAAP, whereas under IFRS may require separation of embedded derivatives even if the host contract is outside the scope of IAS 39;
- IAS 39 does not require an embedded currency derivative to be separated if a contract is denominated in a currency that is commonly used in contracts to purchase or sell non-financial items in the economic environment in which the transaction takes place;
- options that extend the term of debt instruments are not considered embedded derivatives under US GAAP if they do not significantly extend the term of debt host contract and the interest rate is reset to approximate market rates, whereas IFRS may still require a separation;
- under IAS 39, a call, put, or prepayment option embedded in a host debt contract or host insurance contract is not closely related to the host contract unless the option's exercise price is approximately equal on each exercise date to the amortized cost of the host debt instrument or the carrying amount of the host insurance contract, whereas SFAS 133 requires separation in under certain conditions.

#### v. Hedge accounting

The first difference between US GAAP and IFRS relates to the exceptions from using certain instruments as hedge instruments and differences in exceptions from hedged items. Typically, IFRS offers more flexibility in the hedging designation as US GAAP.

Next, in addition to the general criteria for hedge accounting (hedge effectiveness, documenting of hedge relationship and formal measurement) US GAAP and IFRS give further detailed restrictions on the use of fair value hedge accounting, which may lead to differences in qualification or non-qualification for hedge accounting. For measuring hedge effectiveness, US GAAP offers the so called "short-cut" method for certain types of hedge relationships, which greatly simplifies the calculation required to estimate the hedge effectiveness. There is no equivalent in IAS 39.

In accordance with IFRS and US GAAP in a fair value hedge the gain or loss from fair value change of both the hedge instrument and the hedged item are recognized as financial income or loss (Kuhn, Scharpf, 2005, p. 330). The change in fair value of the hedged item usually corrects the carrying amount of the hedged item, whereas under IFRS it can also be shown as a separate line in assets or liabilities but only in case of a fair value hedge of interest rate change for a portfolio of financial assets or liabilities (Jones, Venuti, 2005, p. 33).

Furthermore, there is a difference also in the treatment of cash-flow hedges of forecasted transactions. If the hedge is followed by recognition of a financial or non-financial asset or liability, the related gains or losses from equity are transferred to the income statement in the



period when asset or liability have an impact on the income statement. In case the company expects the loss or a part of the loss from equity is not recovered in one or more future periods, it must be transferred to the income statement immediately. In case of a non-financial asset or liability IFRS defines that the company can transfer the gain or loss from equity and recognize them as part of the purchasing value of the asset or liability (basis adjustment). US GAAP does not foresee this option, but the standards can be compliant in case the first option is chosen.

#### vi. Investment properties

US GAAP does not include any guidance on how to treat investment properties (land and buildings). They are measured as regular property, plant and equipment (owned or under finance lease or given to operating lease). Under IFRS, these assets are financial assets, which are measured at fair value through profit and loss or at cost, less accumulated depreciation. Even assets under operating lease can be classified as investment properties, but only when they use the fair value model. The fair value reflects currently available information and the expectation of the market participants and relevant factors for these participants, which is different as the revaluation model, where the fair value reflects the currently available information and expectations of the company and company specific factors.

#### c. Inventory

##### i. Initial measurement

The only difference in the inventory measurement is the treatment of service contracts treatment. IFRS classifies service contracts as inventory whereas under US GAAP they are a part of the deferred costs.

##### ii. Inventory costing methods

Under IFRS the following methods of inventory costing are allowed: FIFO or weighted average methods. US GAAP also allows LIFO. Under IFRS LIFO is not allowed regardless of the fact that it can be used for tax purposes since the tax legislation provisions do not give appropriate conceptual basis for the choice of accounting treatment. Hence, it is not appropriate to choose inferior accounting treatment only due to the tax provisions and advantages (International Financial Reporting Standards (IFRS), 2004, p. 627).

##### iii. Subsequent measurement

IFRS follows the strict lowest value principle in inventory measurement. Inventory must be written-down in case its carrying amount is higher than its net realizable value (selling price in the ordinary course of business less the costs of completion and estimated selling cost) (International Financial Reporting Standards (IFRS), 2004, p. 620).

As opposed to the above, under US GAAP impairment loss is generally accomplished by recording inventory at the lower of cost or market. Market means current replacement cost (ceiling), except that it should not exceed net realizable value and should not be less than net realizable value reduced by an allowance for an approximately normal margin (floor) (Delaney et al., 2002, p. 256). In case the replacement value is between ceiling and floor, the carrying amount is compared to replacement value. In case the replacement value is above the ceiling, the carrying amount is compared to ceiling and in case the replacement value is below the floor, the carrying amount is compared to floor.

Additionally, US GAAP does not allow reversal of impairment as opposed to IFRS, where the inventory impairment can be reversed.

iv. Construction contracts

Construction contract costs (recognized as inventory) under IFRS include (International Financial Reporting Standards (IFRS), 2004, p. 707) costs relating directly to the contract (e.g. location work, material costs, equipment depreciation), costs which can be assigned to contractual work in general and can be allocated to the contract (e.g. insurance, design and technical support, overhead construction costs) and other costs, which can be invoiced to the customer based on the contract (e.g. general administrative costs and development costs).

US GAAP (ARB 45) provisions are more restrictive, since overhead administrative costs can be capitalized only in case of completed contract method. Borrowing costs capitalization is assumed mandatory since the construction takes more periods.

Contract preparation costs are assigned to contract costs under IFRS if they can be identified and measured reliably and if it is probable that the contract will be signed. US GAAP (SOP 98-5) defines such costs as start-up costs, which are expensed immediately (only costs after the contract signing are capitalized). Contract preparation costs can only be capitalized only if connected to existing contract and if incurred to obtain an additional contract.

Both IAS 11 and SOP 81-1 recommend the usage of percentage of completion method, but alternative methods used when the contract outcome cannot be estimated reliably differ. IAS 11 offers the incurred costs method, where revenues are recognized only in the amount of costs incurred (costs invoiced to the customer). Costs are expensed as incurred, but no contractual margin is recognized. US GAAP offers completed contract method, where the revenue is only recognized when the contract is substantially finished. Both costs and revenues are deferred in the balance sheet in the meanwhile.

d. Equity

Differences in equity mainly derive from the differences in the recognition criteria and valuation methods of assets and liabilities. The main difference can be identified in the revaluation adjustments, as defined in the table below:

**Table 3.**

**Revaluation adjustments of equity**

Component	IFRS	US GAAP
Revaluation of PPE	Yes	No
Revaluation of intangibles	Yes	No
Revaluation of FI	Yes – only for financial assets available for sale	Yes – only for financial assets available for sale
Retirement liability	No	Yes – in case of minimal liability

Lit.: International Financial Reporting Standards (IFRS) (2004); Accounting Standards: Original Pronouncements (2003)

e. Debt

i. Classification and measurement

IFRS requires initial classification of debt into two categories (International Financial Reporting Standards (IFRS), 2004, p. 1651): debts measured at fair value through profit and loss (debts for trading and other debts classified to this category) and other debts measured at amortized cost with effective interest rate method (Kuhn, Scharpf, 2005, p. 202). At initial recognition debts are measured at fair value usually corresponding to transaction price, which in case of other debt is increased for transaction directly attributable costs. US GAAP does not know debt classification. Debts are initially measured at present value of future cash flows, discounted at market interest rate (APB 21 and Concept Statements 5), hence at cost.

f. Long-term provisions

i. Measurement

The term »provision« can be found in IFRS. US GAAP does not use this term but from the content point of view a similarity can be found in conditional obligations, which have to be recognized on the balance sheet in accordance with SFAS 5 (Original Pronouncements, Volume I: FASB Statements 1-100, 2003, p. 33).

What US GAAP and IFRS have in common, is the method of defining the provision amount, but differ in the method of calculation the value as such. The provision amount is the best management assessment of costs needed for settling the obligation based on the assessment of risks and uncertainties, which inevitably accompany the events and circumstances and based on the experience in similar circumstances and expert opinion. Apart from this, US GAAP defines that in case the best estimate (highest probability) is not possible, minimum amount in the spread of possible liabilities (FIN 14) is recognized and the maximum amount is disclosed. In case of group of units with lower risk, IFRS however proposes the use of weighted average of probabilities (International Financial Reporting Standards (IFRS), 2004, p. 1540). When individual liability is measured, most probable outcome is used but other outcomes are used as well (if mostly higher or lower the assessment is adjusted accordingly).

Next, IFRS defines that future events can influence the provision amount (IAS 37.48) if there is enough evidence that they will occur. In SOP 96, US GAAP only defines that changes of prices until liability settlement are included in the calculation.

IFRS defines discounting of the provision amount if the effect is significant (discount rate before taxation is used since it reflects market assessment of time value of money and the risks specific to the liability not included in the best estimate of the liability amount). US GAAP does not define discounting accurately (in some cases it is mandatory and in others not). Discount rate used is the rate used for transferring the liability to a third party.

If some or all expenses related to settle the obligation will be settled by a third party IFRS requires the recognition of refunds only in case they are certain. They are treated as separate assets and should not exceed the liability amount. Also this is not defined accurately in US GAAP but mostly, the gross principle is applied (APB 10 and SAB 92) – the asset is recognized separately. FIN 39 defines that in rare cases the asset can be settled with the liability.

g. Employee defined benefit plans

i. Defined benefits plans

There are four types of pension costs, the determination of which reveals some differences between IFRS and US GAAP:

- current service and interest costs: A difference between US GAAP and IFRS can be found in the applied discount rate used for calculating interest costs of the pension plans.
- return on plan assets and actuarial gains and losses: The expected return as the component of net cost of pension plan is calculated based on the fair value of plan assets under IFRS whereas US GAAP requires the usage of the adjusted asset fair value as the basis. In case not recognized actuarial gains or losses exceed the 10% corridor, the excess is deferred and amortized over average remaining service period of active employees or remaining life expectancy of inactive employees under IFRS whereas US GAAP (SFAS 87.33) additionally requires the use of minimal depreciation rate when the minimal amortization is higher than the systematic one. Additionally, US GAAP does not limit the amount of net assets shown, but IFRS does.
- past service costs: US GAAP requires distribution of past service costs in expected average service period of active employees or average remaining life expectancy of inactive employees by taking into consideration the interest accrual, but simplified methods can be used, whereas IFRS requires the recognition of past service costs on a straight-line basis in the average period until the benefits become vested (hence, if benefits vest immediately, the costs are shown in the income statement immediately).
- transition costs: Transition costs incurred at initial recognition of defined benefit plans can be deferred under US GAAP (SFAS 87) and amortized on a straight-line basis over the average service period of active employees, average remaining life expectancy of inactive employees or over 15 years, if shorter. Under IFRS however, the excess from initial recognition over already recognized obligation can be expensed or amortized on a straight-line basis over the period of up to 5 years. US GAAP also defines the recognition of the minimal pension liability (Grünberger, Grünberger, 2004, p. 74), which does not exist under IFRS. Minimal liability is the excess of pension liability based on current salary level over the fair value of plan assets.

#### ii. Other employee benefits

Under IFRS the method described in IAS 19 is used also for other rights of employees after retirement (e.g. health insurance). US GAAP however has introduced another standard (SFAS 106) for these rights, which is similar to SFAS 87 and 88, but nevertheless slightly differs in certain areas (Evans, 2003, p. 305). Furthermore, US GAAP also introduced SFAS 112, which refers to the recognition of other employee benefits at contract termination but before retirement. Under IFRS, the obligation would be measured using the IAS 19 principles, as for post-employment benefits.

IFRS however, introduces simplification procedures for other long-term employee benefits (e.g. long-term compensated absences, jubilee payments and other long-term payments), since compared to pensions they are not subject to such high uncertainty and their initial recognition and subsequent changes rarely lead to significant costs of past services. Immediate expensing of actuarial losses and gains as well as costs of past services is introduced.

#### iii. Share-based payments

IFRS does not contain any share-based payments recognition exemption, whereas US GAAP's standards SFAS 123 and APB 25 provide for exemption in case of »non-compensatory« share purchase programs (Original Pronouncements, Volume II: FASB Statements 101-150, 2003, p. 1756), which are not primarily established for employee rewarding.

##### 1. Equity-settled share-based payment transactions

Equity-settled share-based payment transactions are recognized in equity according to IFRS 2 and US GAAP. Under US GAAP, there are two possibilities for the recognition of equity-settled share-based payment transactions – based on APB 25 or more recent SFAS 123. APB 25 defines the increase of equity for employee transactions at intrinsic value as per date, when the number of equity instruments and their price are known (Original Pronouncements, Volume III: AICPA Pronouncements, FASB Interpretations, FASB Concept Statements, FASB Technical Bulletins, 2003, p. 286). The application of APB 25 may result in incomplete accounting statements since fixed share-based programs will primarily not be recognized (intrinsic value at grant date is zero). SFAS 123 however, requires fair value measurement at grant date (Dyson, 2005, p. 31), thus being comparable with IFRS. In exceptional conditions, when fair value cannot be measured, both IFRS 2 and SFAS 123 allow intrinsic value measurement at date of goods receipt or service performance. Additionally, SFAS 123 allows minimal value measurement for non-quoted companies (share price fluctuations are not considered).

Under IFRS 2 other than market conditions are not considered when measuring the fair value of shares or options, but the number of equity instruments included in the measurement is adjusted accordingly. SFAS 123 however, allows the company at grant date to choose whether they will recognize the received employee services based on the estimated number of options, which will vest and adjust the estimate regularly (same as under IFRS 2) or take the standpoint that the employees will obtain the right to all instruments and show the impact of benefits curtailment when it occurs. This option derives from APB 25 and FIN 28, IFRS does not allow it.

SFAS 123 and IFRS 2 do not instruct how to define the period when the opposite party is obtaining the rights in case of market conditions linked to the result or non-market conditions, whereas APB 25 refers to the conditions of the employee program and past experience when estimating the period length. IFRS requires that in case of market conditions the period estimate is not subsequently changed, whereas in case of a non-market condition the estimate is regularly adjusted. SFAS 123 requires no changing of the initial estimate (except the estimate of number of instruments expected to vest, and even this is optional). Consequently, under US GAAP the fair value recognized will remain unchanged from the grant date forward, whereas under IFRS the fair value stops changing only from the date of vesting.

## 2. Cash settled share-based payment transactions

IFRS 2 and SFAS 123 require the measurement of received goods or services and the related liability at fair value of the liability. Until the liability is not settled, it must be re-measured on balance sheet dates with changes reflected in the income statement. FIN 28 and APB 25 require measurement at intrinsic value.

## 3. Share-based payment transactions with the option to choose the settlement method

In case the right to choose the settlement method belongs to the opposite party (employees or vendors), IFRS 2 defines the transactions as compound financial instruments with a debt (right to payment in cash) and equity component (right to payment in shares) (International Financial Reporting Standards (IFRS), 2004, p. 141). For third party transactions (fair value of goods or services is measured directly), the equity component is measured as the difference between total fair value and fair value of the debt component at the date of goods or services receipt. In case of other transactions, the company first measures the debt component and then the equity component by taking into consideration that the opposite party must give-up the right to payment in cash to obtain the equity instrument. Debt component is measured as debt, and the equity component increases equity in the period of goods delivery or rendering of services. In

case of settlement in equity instruments, the debt component is measured at fair value on settlement date and transferred to equity. In case of cash settlement, the equity component remains in equity and the payment is only applied to the debt component.

In APB 25 US GAAP defines that transactions, where the opposite party has the right to choose the settlement method are recognized fully or partially as debt or equity depending what the opposite party will most likely choose. If no evidence of the opposite is available, cash payment is foreseen and debt is recognized. SFAS 123 defines that always debt is recognized since it is assumed that the opposite party will always prefer cash payment.

#### h. Deferred taxes

##### i. Measurement

Under IFRS and US GAAP, deferred tax balances should be calculated based on the enacted tax laws and tax rates that are expected to apply to taxable income in the periods in which they are expected to be settled. IAS 12 requires enacted or “substantially enacted” tax rates and tax law to be used. Although SFAS 109 only discusses details of the enactment date of a US federal tax bill, the concept of enacted (versus substantially enacted) is applicable in all jurisdictions and is not influenced by the likelihood of enactment or the perception that the enactment is perfunctory.

IAS 12 additionally specifically states that when measuring deferred taxes, the company should take into account the manner in which it intends to settle or recover the carrying amount. There is no such requirement in SFAS 109.

##### ii. Presentation

IAS 12 requires current and deferred tax movements to be included in the income statement for the period, except if they relate to items that have been recognized directly in equity in the same or a different period (IFRS / US GAAP comparison, 2005, p. 818), whereas SFAS 109 requires equity classification only for tax effects of the current period and not for previous periods.

Under IFRS, deferred tax liabilities and assets are displayed separately on the balance sheet, but not split according to their term (all are shown as long-term assets or liabilities) (International Financial Reporting Standards (IFRS), 2004, p. 752). US GAAP requires the classification of deferred taxes as current or non-current based on the classification of the related asset or liability on the balance sheet.

##### iii. Deferred taxes in share-based payment transactions

Deferred taxes (assets) arise when tax deductible amount of share-based payment transactions is temporarily different from the total cost in the income statement. Under US GAAP (SFAS 123), the cumulative amount of any tax deductible compensation cost is treated as a deductible temporary difference, what can lead to overvaluing or undervaluing of tax assets (since it is not probable that tax deductible costs will ever be equal to the cumulative amount of compensation costs). In case the tax deductible cost is higher than the total cumulative amount in the income statement, income is recognized for the amount of compensation cost in the income statement and the excess is treated as capital reserves (Cook et al., 2005, p. 623). In the opposite case, tax asset is reduced for the difference, except there are still some capital reserves available from previous periods.

Under IFRS, the difference between the tax base of the employee services and its carrying amount (nil) is a deductible temporary difference. If the tax deductible cost is lower or equal to the cumulative compensation cost in the income statement, the related tax benefit is recognized in the income statement (International Financial Reporting Standards (IFRS), 2004, p. 225). In the opposite case, the excess is shown in equity. This allocation enables the tax benefit in the income statement not to exceed the expected tax benefits, which will actually be realized. SFAS 123 method however, allows in some cases that the not used part of the deferred tax asset is written-off directly from equity.

i. Revenue recognition

IFRS offers only one standard regarding revenue recognition, IAS 18. In contrast, under US GAAP there are many individual pronouncements that cover particular categories of transaction or particular industries. It can be said that the IFRS guidance is very general, whereas US GAAP rules are very prescriptive (and often rigid). Differences between the two standards will arise especially due to this rigid application of detailed US GAAP rules and not because of a significantly different approach to revenue recognition. Differences can however be avoided if the company decides to follow the detailed US GAAP guidance, if they correspond to IAS 18 general principles.

#### 4. Conclusion

Although much has been done in the harmonization process of IFRS and US GAAP, the presented paper has shown there are still several differences remaining. Mostly, the differences are hidden in the details, which make it even harder for the financial standards preparers and readers to identify them. There are, however, also some bigger differences remaining, which are reflected mostly in two areas: subsequent assets valuation and impairment. IFRS allows the revaluation model, which is not allowed under US GAAP. IASB has committed to abolishing the valuation and measurement choices, but has so far not succeeded in doing it. US GAAP remains loyal to the historic cost model, which might prove not so bad, since the fair value estimations are becoming more and more complex and thus their reliability may be questioned. Additionally, US GAAP also does not allow any kind of impairment reversals, which are possible under IFRS. Impairment reversals may be performed if the entity has sufficient evidence that the fair value of the asset has grown again. Again, the question of fair value measurement reliability arises.

US GAAP are known as the most complex set of accounting standards, which offers the most detailed guidance on any possible issue. On the other hand, IFRS are more general and thus flexible. Only time and practice will tell which will prove better.

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## US GAAP vs IFRS – USPOREDBA PREOSTALIH RAZLIKA

### SAŽETAK

*Usprkos procesu usklađivanja, još uvijek postoje razlike među US GAAP i IFRS standarda. Trenutno, tvrtke na listi njujorške burze koje koriste IFRS, još uvijek moraju izraditi usklađenje s US GAAP-om, kako bi prikazali vlastite financijske izvještaje usklađene i s US GAAP-om. Ovaj članak donosi pregled preostalih značajnih razlika između US GAAP i IFRS standarda, kako opisno tako i kroz tablice. Prvo donosimo kratki uvod i usporedbu dvaju standarda. Zatim slijedi prezentacija pojedinosti u odvojenim kategorijama financijskih izvještaja, od imovine do postrojenja i opreme, nematerijalne imovine, aktive i pasive, imovinskog ulaganja, inventara, običnih dionica, dugova, dugoročnih odluka, pogodnosti za radnike, odgode oporezivanja i priznavanja prihoda. U zaključku donosimo pregled razlika u navedenim kategorijama koji olakšava usklađivanje kako za korisnike tako i za one koji izrađuju financijske izvještaje.*

**Ključne riječi:** *Računovodstveni standardi, US GAAP, IFRS, usklađivanje, mjerenje, imovina, postrojenje i oprema, nematerijalna imovina, financijska imovina, inventar, dug, odluke, pogodnosti za radnike, odgoda oporezivanja, priznavanje prihoda.*