

## IFRS AND US GAAP CONVERGENCE IN AREA OF MERGES AND ACQUISITIONS

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### Abstract

The representation of business transactions was significantly different in the IFRS reporting system and in the US GAAP reporting system. Since transactions of this kind are mostly supranational transactions at the global level, it is important that their representation in the accounting and reporting system should be compatible. The objective of this paper is to point out the significant differences in the financial statements of a combining enterprise, which might arise if two different methodological procedures were used to record the business combinations. The theoretical section analyses the main reasons for the convergence of the accounting reporting systems in the area of business combinations and the approaches of the two basic global organizations in the area of regulation of accounting reporting. Firstly, IAS 22, IFRS 3 and SFAS 141 are analyzed. Analysis is concerned with the changes of this standards since 2001, when the Business Combination project started. Based on the comparative analysis of the both systems, there are defined the areas for biggest changes in amendments of both standards. The base for the identification of the differences represents US GAAP. Then the different approaches to Business Combinations reporting (pooling interest method and purchase method) are analyzed with respect to their impact on the balance and recorded profit or loss from this operations. In the end, the topical stage of the convergence process in this area is evaluated and areas for further convergence of business combination reporting are designed.

*Keywords:* Acquisition, Goodwill, IAS/IFRS, valuation.

### Introduction

Business combinations represent the take-over of one enterprise by another; it is a part of the activities referred to as Mergers and Acquisitions (M&A) Business combinations are one of the most important operations carried out in current capital markets; in the last decade, they have accounted for 8-10% of all transactions in capital markets. More than 13,000 M&A transactions were carried out world-wide in 2006 (IASB, 2006). Less than half of transactions, whose value was USD 1.49 billion, was carried out by enterprises, which use US GAAP to record and report transactions. The rest of the operations, with a total value of USD 1.82 billion, were carried out by enterprises using IFRS for accounting and reporting purposes or by enterprises planning to apply IFRS in the future.

Merges and Acquisition reporting under IFRS and US GAAP significantly differed. The International Accounting Standards Board (IASB), which is responsible for creating the International Financial Reporting Standards (IFRS), together with the Financial Accounting Standards Board (FASB) in the USA, worked on the "Business Combinations" project. This project aims to harmonise the reporting M&A operations for the purposes of global capital markets.

### Methodology

The main objective of this paper is to point out the significant differences in the financial statements of a combining enterprise, which might arise if two different methodological procedures were used to record the business combinations. The theoretical section analyses the main reasons for the convergence of the accounting reporting systems in the area of business combinations and the approaches of the two basic global organizations in the area of regulation of accounting reporting. Firstly, IAS 22 and its amendment IFRS 3 and SFAS 141 are analyzed. Analysis is aimed at the changes of this standards since 2001, when the Business Combination project started. Based on the comparative analysis of the both systems, there are defined the areas for biggest changes in amendments of both standards. The base for the identification of the differences represents US GAAP. Then the different approaches to Business Combinations reporting (pooling interest method and purchase method) are analyzed with respect to their impact on the balance and recorded profit or loss from this operations. In the end, the topical stage of the convergence process in this area is evaluated and areas for further convergence of business combination reporting are designed.

## **Comparative Analysis of the GAAP and IFRS Reporting Systems**

Up to now, it was difficult to carry out a comparison of the records on business combinations carried out in the USA and in the European Union because business combinations were reported in different systems. The differences result from the partial dissimilarities of the US GAAP and IFRS reporting systems. A detailed analyses of the impact of different reporting systems on financial statements is given by Weetman, Gray (1991). The following sections will describe the differences between the two systems and illustrate the problems that arise as a result of the two different accounting procedures.

The most significant difference between US GAAP and IFRSs is in the area of general approach. IFRSs are based on basic accounting principles with limited application guidance, US GAAPs are based especially on rules with specific application guidance. Weetman, Gray (1991) have investigated that the european reporting system is less conservative than US GAAP in terms of the impact on profits. Based on research of Ashbaugh (2001) IAS/IFRS system tends to be preferred to US GAAP. Harris and Muller (1991) provide evidence that IAS/IFRS reconciliation adjustment is more highly associated with prices, and US GAAP adjustment with price changes.

In 2002, the European Parliament and the European Council of Ministers passed a Regulation No. 1606/2002 that requires the adoption IFRS for all listed EU companies which prepare consolidated financial statements. The US Security and Exchange Commission demands reduction the disparity between accounting and disclosure practices of the United States and other countries, as well. Since 2001 IASB and FASB work on common convergence projects. The main projects are in the area of the recognition and measurement of financial assets and derivate financial instruments, impairment losses, provisions, employee benefits liabilities, income taxes, in the area of the accounting for business combinations and in the of disclosure of related party transactions and segment information.

### **Business Combination Project**

In 2001, the International Accounting Standards Board (IASB) launched the “Business Combinations” project, which aimed to ensure international harmonization the Business Combinations project, as a part of the joint IASB and FASB Convergence projects. In the area of business combinations, the harmonization work was divided into two phases and both phases started at the same time and were being carried out simultaneously until Phase 1 of the project was completed in 2004. On the part of the FASB, the result of this phase was the completion of the SFAS 141 Business Combinations standard, which significantly changed the approach to reporting business combinations and eliminated the possibility of using different methodologies for recording them in connection with the nature of the business combination. The IASB undergoing transformation responded to the IASB by creating an entirely new standard concerning business combinations – the IFRS, which replaced IAS 22 Business Combinations.

IFRS 3 was created as the result of the first phase of the IASB project dealing with business combinations and has replaced the formerly used IAS 22 Business Combinations and the related interpretations (SIC 9 Business Combinations – Classification either as Acquisitions or Uniting of Interests; SIC 22 Business Combinations – Subsequent Adjustment of Fair Values and Goodwill Initially Reported; SIC 28 – Business Combinations – Date of Exchange and Fair Value of the Equity Instruments). The principles contained in the IFRS 3 are based on the SFAS 141.

The main reason for replacing IAS 22 with a completely new standard in the first phase of the Business Combinations project was that IAS 22 permitted the use of two methodologies to report business combinations (the pooling interests method and the purchase method). The use of the pooling interests method was permitted only in limited situations. It was permitted when it was impossible to identify the acquirer. The use of two methodologies, which produced considerably different results, was criticised. The ban on the use of the pooling interest method in the US GAAP was an impulse to abolish this method in IAS/IFRS, as well.

Another significant difference between IFRS 3 and IAS 22 is the possibility to use only one methodology for valuing the acquired identifiable assets and assumed liabilities (a benchmark treatment and an alternative treatment). According to the benchmark treatment, the acquired identifiable assets and assumed liabilities were valued by the sum of their fair values (in the part corresponding to the share of the acquirer, which the acquirer acquired in the barter transaction) and their book values before the acquisition (in the part corresponding to the minority shares). According to the allowed alternative treatment, the acquired identifiable assets and the assumed liabilities were first valued according to their fair values as of

the date of the acquisition. The use of two possible treatments was limiting the comparability of the accounting information.

As a result of the introduction of IFRS 3 (2004), the recording and reporting of business combinations was harmonised in **methodologies for recording business combinations** (using only a single method to record business combinations regardless of their nature), **initial valuation** (the acquired identifiable assets and the assumed liabilities were first valued according to their fair values as of the date of the acquisition), **reporting liabilities arising from the termination or limitation of the activity of the enterprise being acquired, addressing the excess of the acquirer's share in the fair value of identifiable net assets over the acquisition costs of the business combination, recording the goodwill and intangible assets acquired through a business combination in the accounting books** (goodwill acquired in a business combination should not be amortized but should be tested for impairment).

IFRS 3 defines the requirements for financial reporting of business combinations, i.e. for situations in which separate accounting units are combined into one reporting unit. The result of such transactions is usually a situation where the acquirer acquires control over these accounting units. The purpose of IFRS 3 is to define business combinations sufficiently in general. A transaction is not a case of a business combination only if the acquirer acquires a group of assets, which do not form an enterprise.

The acquirer recognises all identifiable assets, regardless of whether these assets were reported in the balance sheet of the enterprise being acquired, liabilities and contingent liabilities of the enterprise being acquired in fair values as at the date of the acquisition, and the acquirer also reports the goodwill, which is tested for impairment at least once a year.

There is SFAS 141 – Business Combinations in US GAAP. SFAS 141 was completed in 2001 and replaced APB (Accounting Principles Board) Opinion No. 16 Business Combinations and SFAS 38. The development of SFAS 141 was an important moment in the reporting of business combinations. The most significant change was that it permitted only one method for reporting business combinations. The previous regulation on business combinations under US GAAP similarly to IFRS permitted the use of two completely different methods for recording and reporting business combinations.

The benefit of SFAS 141 is seen primarily in the fact that it has fundamentally changed the previous approach to reporting business combinations in the USA. The philosophy of SFAS 141 is based on the approach that all business combinations are acquisitions, therefore it is necessary to report them in the fair values of assets and liabilities, which were the subject of the business combinations. Only the purchase method meets this requirement.

The new approach to the costs associated with a business combination reporting can be seen as an important change, as well. The fair values of the acquired identified assets and the assumed liabilities, taken by the acquirer, and all the costs directly assignable to the business combination are allocated to the business combination. The other costs, such as general administrative costs, which cannot be directly allocated to the business combination, are not allocated to the business combination and they are recorded as period costs.

A business combination to which the rules defined in IFRS 3 and SFAS 141 are applied can take purchase of a share in the company's equity form (a parent company and a daughter company come into being) or purchase of the company's net assets, including the related goodwill form (in this way, no mutual parent-subsidiary relation comes into being).

### **Comparison of methodological approaches to Business Combinations reporting**

Former approach to business combinations reporting permitted two possible methods for business combinations reporting. There were purchase method and the merger method (the pooling interest method). The merger method was only usable if 12 criteria had been met. However, the criteria were defined in such a way that it was very difficult in some cases to identify operations, which were quite different economically, and on the other hand, economically similar operations could be recorded by means of different methods, which resulted in a dramatically different result in the financial statements and the impossibility to carry out a comparison. The pooling interests method also did not provide relevant information from the area of intangible assets because the enterprise, which was the result of the business combination, omitted to record intangible assets, which might bring economic benefits to the enterprise in future but which were not previously reported in the combined enterprise.

## The purchase method

The purchase method fully corresponds to one of the basic objectives of financial statements, which is to show the responsibility of the company management for the funds entrusted to them. The method provides information for assessing the investments made by the management because it provides a picture of the expected future cash flows assignable to the acquired assets and assumed and contingent liabilities.

This methodology is based on the initial identification of the acquirer who purchases net assets and reports the acquired assets and assumed liabilities and contingent liabilities, including those, which the enterprise being acquired did not report previously. The acquirer is the accounting unit, which gains control over the other accounting units.

The acquirer will identify the amount of the acquisition costs of the business combination as a sum of the fair values of the transferred assets, liabilities and issued equity instruments as of the date of barter, which the acquirer barter for the control of the enterprise being acquired; and all the costs directly assignable to the business combination; these costs are, for example, commissions, remunerations paid to accountants, experts, surveyors and lawyers carrying out the combination. If the settlement of the acquisition costs is deferred, it is necessary to identify the fair value of the deferred payment by discounting the outstanding amount to its current value as of the date of the barter.

In its balance sheet, the acquirer will report the acquisition costs of the business combination; this concerns the outflow of assets, formation of liabilities and increase of equity; on the other side of the balance sheet, the acquirer will put the acquired identifiable assets and the assumed liabilities of the enterprise being acquired in the fair value as at the date of the acquisition, with the exception of the long-term assets held for the purpose of sale, reported in the fair value reduced by the expected costs of the sale; the acquirer will also report the deferred tax liens and liabilities, which are reported in relation to the identifiable assets and liabilities during the acquisition. Within the identifiable assets, the acquirer, in accordance with IFRS 3 and SFAS 141, also reports intangible assets, which were not reported in the acquired accounting unit's balance sheet because they did not meet the applicable criteria for the accounting unit.

Both systems require to measure identifiable assets acquired and liabilities assumed at their acquisition-date fair values. IFRS 3 provides guidance on determining fair value of particular types of assets and liabilities.

There is SFAS No. 157 – Fair Value Measurements for fair value identification in US GAAP. SFAS No. 157 places heavy emphasis on the inputs used in fair value measurement. Appropriate implementation of fair value accounting requires a knowledge and understanding of the characteristics that identify these inputs. Specifically, fair value inputs should be (1) based on timely information, (2) generated from independent sources, and (3) used by marketplace participants in pricing decisions. SFAS No. 157 prioritizes fair value measurement inputs, thereby setting the standard that fair value measurement inputs used should be those at the highest priority level.

Fair value measurement requires the use of valuation techniques that are deemed appropriate in the circumstance. It may be appropriate for a reporting entity to use multiple techniques as opposed to the use of one technique for reporting entity. Market approach uses prices and other relevant information generated by market transactions. In income approach valuation techniques to convert future amounts (e.g., cash flows or earnings) to a single present amount (discounted) are used. Cost Approach is based on the amount that currently would be required to replace the assets, i.e., current replacement cost.

The difference between the acquisition costs of a business combination and the share of the acquirer in the net fair value of identifiable assets, liabilities and contingent liabilities is, in accordance with SFAS 141 and IFRS 3, reported as a goodwill asset; this is valued as the excess of the acquisition costs of the business combination over the share in the net fair value of identifiable assets, liabilities and contingent liabilities of the enterprise being acquired. The goodwill, which comes into being in connection with the business combination, thus represents the payment made by the acquirer in connection with the expectation of future economic benefits from the assets, which cannot be identified individually and reported separately. If the acquired net assets are reported in a value higher than the costs of the business combination, it is negative goodwill. However, a situation in which negative goodwill comes into being, mostly indicates incorrect valuation or over-valuation of the acquired assets. Therefore, according to IFRS 3, it is necessary to review the correctness of the valuation before reporting negative goodwill. If negative goodwill is actually reported, it is reported as a gain in profit and loss.

### Merger Method

In cases where it was impossible to identify the acquirer, a business combination formerly used to be recorded as a pooling of interests in accordance with IAS 22 or APB Opinion No. 16. The merger method (pooling interests method) is based on reporting the items of the accounting statements of the combining enterprises as if they had been merged from the beginning of the oldest presented period. Every difference between the amount reported as the issued common stock plus every additional amount in the form of cash or other assets and the amount reported as acquired common stock is adjusted in relation to the equity. When the pooling interest method is used, the combining enterprises are recorded and reported as if they carried on with their individual business activities in the same way as before the combination. Therefore, when the pooling interests method is used, the book values of the assets and liabilities of the individual combining enterprises are used as the basis and there are only a minimum number of changes in the aggregated accounting statements. Since no revaluation is carried out as of the date of the business combination, no goodwill comes into being in connection with the combination, and the effects of mutual transactions between the combining enterprises are also excluded in the preparation of the financial statements of the combined unit. When this method is used, all the costs incurred in connection with the business combination are recorded as the costs of the period in which they were incurred.

In the following part are compared the two methodological approaches to the business combination reporting on empirical data. Acquisition took place October, 30th. The parent company acquired 18,000 shares in the subsidiary, which represented 100% of its registered capital (common stock). The nominal value of the shares was 101,25 monetary units (m.u.) per share; the market value of the shares was 1012,50 m.u. per share as of the date of the acquisition. The direct costs associated with the business combination were 2 227 500m.u.; and the miscellaneous overhead costs, which were incurred in connection with the acquisition and which could not be allocated directly, amounted to 1 518 750 m.u.

In practice, the acquisition recorded by means of the purchase method would look as follows:

**Table 1.** Balance sheet of the parent company before the acquisition

Item	Book value in monetary units [m.u.]
Assets	
Cash	10 125 000
Inventories	20 250 000
Other current assets	15 795 000
Long-term tangible assets – plant (net)	26 325 000
Total assets	72 495 000
Liabilities and shareholders' equity	0
Liabilities	26 932 500
Common stock	5 062 500
Capital funds (APIC)	20 250 000
Retained earnings (R/E)	20 250 000
Total	72 495 000

Source: Author's own calculation

**Table 2.** Balance sheet of the subsidiary

Item	Book value [m.u.]	Fair value [m.u.]
Assets		
Long-term tangible assets, net value	17 415 000	19 541 250
Inventories	9 720 000	11 137 500
Other current assets	5 265 000	5 265 000
Total assets	32 400 000	35 943 750
Liabilities		
External resources	17 718 750	
Common stock	2 025 000	
Capital funds	5 062 500	
Retained earnings	7 593 750	
Total	32 400 000	

Source: Author's own calculation

The company, which was the subject matter of the acquisition, did not report a formulation created through its own activity, the fair value of which was 202,500 m.u. The corporate income tax rate was 20%.

A change in the amount of the deferred tax related to the subsidiary in the acquisitions arisen from the valuation of assets and liabilities of the company being acquired in the fair values, which were different, in a number of cases, from the value in which the assets, liabilities and contingent liabilities were reported in the balance sheet before the acquisition; the book value was considered to be the tax basis; the deferred tax also arose from reporting intangible assets which were not reported at all in the original statements of the company being acquired and which were reported for the purposes of the parent company; the tax basis of the company being acquired was zero. The change in the amount of the deferred tax was another identifiable asset or liability, which needed to be taken into account in the quantification of the goodwill when the purchase method was used.

**Table 3.** Calculation of deferred tax

Deferred tax	Book value [m.u.]	Tax value [m.u.]	Difference[m.u.]	Deferred tax [m.u.]	Asset/Liability
Long-term tangible assets, net value	19 541 250	17 415 000	2 126 250	425 250	Liability
Formulation	202 500	0	202 500	40 500	Liability
Inventories	11 137 500	9 720 000	1 417 500	283 500	Liability
Other current assets	5 265 000	5 265 000	0	0	
External resources	17 718 750	17 718 750	0	0	
Common stock	2 025 000	2 025 000	0	0	
Capital funds	5 062 500	5 062 500	0	0	
Retained earnings	7 593 750	7 593 750	0	0	
Deferred tax				749 250	Liability

Source: Author's own calculation

**Table 4.** Adjusted balance sheet of subsidiary at the time of the acquisition

Item	Fair value [m.u.]
Assets	
Long-term tangible assets, net value	19 541 250
Formulation	202 500
Inventories	11 137 500
Other current assets	5 265 000
Total assets	36 146 250
Liabilities	
External resources	17 718 750
Deferred tax liability	749 250
Total liabilities and equity	18 468 000

Source: Author's own calculation

**Table 5.** Calculation of the goodwill when the purchase method is used

Item	Value [m.u.]
Net assets of the subsidiary	17 678 250
Price of the acquisition	20 452 500
Goodwill	2 774 250

Source: Author's own calculation

It is apparent from the tables shown above that the balance sheet total of the company being acquired is considerably different when an individual balance sheet is prepared and when balance sheet items are reported for the purposes of the parent company when the purchase method is used, which results primarily from the function fulfilled by the purchase method – this method is used to provide an overview of what net assets, valued at their fair value, the acquirer will acquire in the acquisition, regardless of what valuation basis the company being acquired uses in its accounting statements.

**Table 6.** Balance sheet after the acquisition – purchase method and merger method comparison

Item	Purchase method	Structure	Merger Method	Structure
	Value [m.u.]	%	Value [m.u.]	%
<b>Assets</b>				
Cash	6 378 750	5.92	6 378 750	6.31
Inventories	31 387 500	29.15	29 970 000	29.63
Other current assets	21 060 000	19.56	21 060 000	20.82
Long-term tangible assets (net)	45 866 250	54.64	43 740 000	56.76
Total current assets		42.60		43.24
Formulation	202 500	0.19		0.00
Goodwill	2 774 250	2.58		0.00
Total fixed assets		45.36		43.24
Total assets	107 669 250	100.00	101 148 750	100.00
<b>Liabilities</b>				
External resources	44 651 250	41.47	44 651 250	44.14
Deferred tax liability	749 250	0.70		0.00
Total external resources		42.17		44.14
Common stock	6 885 000	6.39	6 885 000	6.81
Capital funds (APIC)	35 133 750	32.63	25 515 000	25.23
Retained earnings (R/E)	20 250 000	18.81	24 097 500	23.82
Total equity		57.83		55.86
Total liabilities and equity	107 669 250	100.00	101 148 750	100.00

Source: Author's own calculation

**Table 7.** Comparison of the selected ratio indicators when the purchase method and the pooling interests method are used

Ratio indicator used to assess the capital structure	Purchase method	Pooling interests method
Equity ratio = the ratio of equity to the total capital	0.58	0.56
Capitalization ratio = long-term liabilities / fixed assets in net value	2.20	2.31

Source: Author's own calculation

It is apparent from Tables 6 and 7 that the use of the individual methods leads to differences in both the asset structure and the capital structure of the combined unit. The differences arise particularly from the different method of valuing assets and liabilities in the application of the individual methods. In most cases, when the purchase method is used, the value of the assets is increased. This increase results from the use of the fair value in the valuation of balance sheet items and from the inclusion of the identifiable assets from the acquirer's point of view, which might not have been reported among the assets of the combined accounting unit. The use of the fair value usually leads to an increase of the valuation of the individual asset items because these items were previously reported in historical prices, which show the situation at the moment of their acquisition and do not take into account the changes in the price level after the moment of their acquisition. When the purchase method is used, the value of the assets is increased by the item of the difference between the net value of the assets being acquired and the value of the acquisition – goodwill (in most cases, the value of the acquisition exceeds the net value of the assets being acquired; if the opposite is the case, the negative goodwill is not recorded in the balance sheet but the amount of the difference is reported immediately in the profit/loss statement). The amount of the goodwill is not only influenced by the said difference but, as Table 5 shows, its amount is also influenced by a change in the deferred income tax, which results from the differences in the valuation of balance sheet items in the accounting statements of the enterprise being combined and of the combining enterprise. As a result of the revaluation based on the fair value, changes occur in the amount of the equity of the combining unit (an increase). When the pooling interests method is used, the balance sheet items are not revaluated according to their fair value and the combining enterprise still reports these items in historical prices. This means that the assets are reported in

lower values. There is no goodwill created; there are no changes in the aggregate amount of equity. When the two methodologies are assessed through selected ratio indicators, there are differences in their amounts; the level of the differences is influenced mainly by the difference between the historical valuation and the valuation based on the fair values of the balance sheet items of the enterprise being combined

### **Conclusion**

The Business Combination project contributed to Merges and Acquisition recording harmonization and to comparability of financial statement in the area of business combinations. There was solved the most significant problem – two methods for business combinations recording in the first phase. In January 2008, IASB completed Phase 2 of the “Business Combinations” project. The aim of the project was to create a simple high-quality standard to record and report business combinations, which would also be compatible with the standard used to record business combinations in US GAAP (SFAS 141 Business Combinations). The result of this Phase was a revision of IFRS 3 and SFAS 141; the focus of the revision was on making the process of measuring goodwill more simple and identifying and reporting the costs of acquisition.

Basic changes were made in SFAS 141 in order to make it compatible with IFRS 3. Other changes concerned the two regulations for recording business combinations; the changes were based mainly on the experience with the application of IFRS 3 in the past years (2005-2007). However, there are still some differences in the reporting practices defined in IFRS and US GAAP, which result from the general differences between IFRS and US GAAP. There are still following differences between IFRS3 and SFAS 141. They are different approaches to non-controlling interests in an acquiree and differences between other IFRSs and US GAAP.

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