

## EVALUATION OF THE CHARACTERISTICS OF GOODWILL IN IFRS

**Kiss Ágota**

*University of Debrecen*

*Faculty of Applied Economics and Rural Development*

*Institute of Accounting and Finance*

[kissagota@agr.unideb.hu](mailto:kissagota@agr.unideb.hu)

**Abstract:** *Assessment is one of the most debated areas in accountancy, since the choice of valuation procedures, methods directly influence an entity's financial situation, alterations and performance. The applications of International Financial Reporting Standards are mandatory for quoted companies in the EU since 2005. In my study/paper I deal with a specifically treated area of accountancy, the regulation of goodwill's evaluation in the IFRS system. Since this area is jointly regulated by several standards, my goal is to provide a comprehensive view of standards regarding the evaluation of goodwill, their consistency paying particular attention to the hypothetical approaches and evaluation philosophy of IAS 36 Impairment of Assets standard. Since goodwill acquired in a business combination does not represent independent cash flow from other asset and group of asset, therefore its valuation requires specific accounting treatment. Standards determine the concept, the criteria for recognizing, the rules applied in initial measurement of goodwill, and later the limits of the impairment to be recognised derived from the subsequent period's price reduction of the goodwill and the related tax effects. My thesis details a specific set of concepts, which is connected to the determination of the goodwill's value. It includes the concepts of cash generating unit, recoverable amount, value in use and fair value less costs to sell. I give full details about impairment test, as a particular evaluation procedure, I introduce the internal and external source of information, which show evidence that the asset may be impaired, I also consider deferred tax effects resulted from the evaluation of goodwill and the identification of effects influencing the performance of the entity. Subsequently, I introduce the specific regulation of the goodwill's evaluation with the help of corporate examples. Having analysed the IFRS reports of three multinational companies, with different business activities, quoted in Budapest Stock Exchange I describe the corporate regulation in connection with the goodwill's evaluation, the effects of the factors applied in the impairment test and the scenario analysis made by enterprises. Due to the characteristics of goodwill's evaluation, it is a complex and complicated accounting procedure, which is considerably based on the estimations of the management, which comprises considerable uncertainty. Having used the financial data of the selected entities operating in different areas, I demonstrate what kind of specific indicators are used to determine the value of their cash generating units and which risks are being considered during the estimations.*

**Keywords:** IFRS; IAS 36; goodwill; cash-generating unit (CGU); impairment test

**JEL classification:** M41

## Introduction

Several high accounting standard systems run in parallel with national regulation in countries worldwide. IFRS is a principle-based standard system based on framework which is designed to regulate the single reporting obligation in companies under IFRS assuring the comparability of corporate performance. In the thesis my goal is to introduce the characteristics of specification and features of the valuation-related standards of goodwill. The objective of IAS 36 Impairment of Assets is to prescribe the procedures that an enterprise applies to ensure that its assets are carried at no more than their recoverable amount (Veress, 2006). According to the specification the assets under standard must be pointed out in accounting estimates.

## Literature review and research methodology

In terms of the evaluation goodwill is particularly a long-term managed asset of the enterprise since goodwill is a residual like tangible asset which cannot be valued separately from the enterprise because the acquiring company expects the prevalence over the prospective economic profit precisely from synergy and the efficiency derived from the business combination (Mackenzie et al., 2011).

According to other wording goodwill acquired in a business combination represents a payment made by the acquirer in anticipation of future economic benefits from assets that are not capable of being individually identified and separately recognized (Lakatos et al., 2013). According to Nobes and Norton (1996) the value of recognized goodwill at the company may develop from 2 main sources: on the one hand from buying assets, share acquisition, on the other hand from internal value established by the company oneself. Recognition of goodwill acquired in a business combination consequently deriving from internal values is allowable in every accounting system; however, it is not possible to detect internal goodwill in most systems (IAS 36).

International Financial Reporting Standards includes a comprehensive regulation in connection with the presentation and valuation of goodwill. In the course of goodwill acquired in the business combination does not establish a cash flow unrelated to other assets or asset groups, thus, valuation of goodwill requires specific accounting treatment. Goodwill arising in a business combination is measured as the excess of the cost of the combination over the acquirer's interest in the net fair value of the acquirer's identifiable assets, liabilities and contingent liabilities (IAS 36).

In IFRS regulatory environment goodwill is included in intangible asset assessed as having an indefinite useful life. Intangible asset with an indefinite useful life is cannot be identified clearly, therefore amortization is not possible. Although, their values need to be reviewed if necessary, impairment loss must be recognized.

Fair values of the identifiable assets and liabilities are determined as at the date of each significant step and goodwill is recognized from the date of acquisition. IFRSs as in the Anglo-Saxon legal systems are determined by the margin of the purchase price of the acquired assets and shares and the market value of the buying in net property while the cost of goodwill contrary to the national rules of the continental type of country is determined by the difference between the purchase price of acquirer's assets and shares and the carrying amount of acquirer's net assets (Matukovics 2004). After initial recognition, the acquirer shall measure goodwill acquired in a business combination at cost less any accumulated impairment losses. The estimation of the necessity of impairment is performed by impairment test. The first step of it is to find signals in-company and outside and that the asset may be impaired. If no indication of a potential impairment loss is present, this standard does not require an enterprise to make a formal

estimate of recoverable amount. If, its recoverable amount is less than its carrying amount, the recognition of an impairment loss is needed as the third step (Veress, 2006). Impairment test is performed to determine the value of goodwill is specifically interpreted. It was clearly underlined that goodwill does not generate cash flows independently from other assets or groups of assets and, therefore, the recoverable amount of goodwill as an individual asset cannot be determined. For the purpose of impairment testing, goodwill acquired in a business combination shall, from the acquisition date, be allocated to each of the acquirer's cash-generating units, or groups of cash-generating units, that is expected to benefit from the synergies of the combination, irrespective of whether other assets or liabilities of the acquire are assigned to those units or groups of units. Impairment testing is performed in case of cash-generating units that were assigned to goodwill arising on acquisition. Impairment test shall be carried out at least yearly, or more often.

A cash-generating unit is the smallest identifiable group of assets that generates cash inflows that are largely independent of the cash inflows from other assets or groups of assets (IAS 36). The unit shall be tested for impairment by the entity, whenever there is an indication that the unit may be impaired, by comparing the unit's carrying amount, excluding any goodwill, with its recoverable amount. Testing for impairment involves comparing the recoverable amount of a cash-generating unit with the carrying amount of the cash-generating unit.

Indications that an asset may be impaired derive from the source of information within or outside the entity.

The source of information outside the entity may be:

- evidence is available of obsolescence or physical damage of an asset;
- significant changes with an adverse effect on the entity have taken place during the period, or are expected to take place in the near future, in the extent to which, or manner in which, an asset is used or is expected to be used;
- evidence is available from internal reporting that indicates that the economic performance of an asset is, or will be, worse than expected

The source of information within the entity may be:

- during the period, an asset's market value has declined significantly more than would be expected as a result of the passage of time or normal use;
- market interest rates or other market rates of return on investments have increased during the period, and those increases are likely to affect the discount rate used in calculating an asset's value in use and decrease the asset's recoverable amount materially;
- significant changes with an adverse effect on the entity have taken place during the period, or will take place in the near future, in the technological, market, economic or legal environment in which the entity operates or in the market to which an asset is dedicated;
- The carrying amount of the net assets of the entity is more than its market capitalization (Lakatos et al., 2013).

The recoverable amount of a cash-generating unit is the higher of its fair value less costs to sell and its value in use. Fair value less costs to sell is the amount obtainable from the sale of cash-generating unit in an arm's length transaction between knowledgeable, willing parties, less the costs of disposal. Value in use is the present value of the future cash flows expected to be derived from cash-generating unit (IAS 36). If there is no reason to believe that an asset's value in use materially exceeds its fair value less costs to sell, the asset's fair value less costs to sell may be used as its recoverable amount. It may be possible to determine fair value less costs to sell, even if an asset is not traded in an active market.

IFRS 13 Fair value standard contains a recommendation to determine the real value of a cash-generating unit. Relying upon this finding, first level inputs in fair value hierarchy are quoted market prices in an active market of equivalent assets or obligations to which the entity can access at the measurement date.

In a cash-generating unit real value almost never can be applicable directly and available without any corrections. The second level of hierarchy input is in connection with CGU-related complex valuation indicator which can be deduced from market data in which operating, financial and non-financial effects are also taken into consideration. For example lead valuation index which is observed prices in affairs concerning a comparing business activity. In the absence of, the tertiary level input in the course of the valuation of cash-generating units. Failing that, the tertiary level input generates a financial forecast in the course of the valuation of fair value in cash-generating units with the help of the own data of it. For example the cash flows of cash-generating units or the financial report made about its results (IFRS 13).

As a result of impairment test, as much as an impairment loss should be recognized for a cash-generating unit if, and only if, its recoverable amount is less than its carrying amount, the allocation of impairment loss is performed in a specific sequence. First, to reduce the carrying amount of any goodwill allocated to the cash-generating unit (group of units) and then if it is necessary the carrying amount of the cash-generating unit must be scaled down. An impairment loss recognized for an asset in prior years should be reversed if, and only if, there has been a change in the estimates used to determine the asset. If this is the case, the carrying amount of the asset shall, except -as described in paragraph -, be increased to its recoverable amount, if there is an indication that an impairment loss recognized for an asset other than goodwill may no longer exist or may have decreased. If fair value decreased by the cost of disposal is determined by the method of discounted cash flow projections, the entity shall disclose the information regarding with the cash flows, the growth rate used to extrapolate cash flow projections beyond the period covered by the most recent budgets/forecasts and discount rate applied to cash flow projections predicted by the management. Entities can put to use every company specific indicators and information in the course of testing cash-generating units with goodwill for impairment leading to more secure estimations based on management's discretion. If we examine the impact of evaluation on corporate performance, the impairment loss of goodwill should be recognized as an expense in the same way as in the dissimilar financial systems resulting lowering effect. However, IFRSs include particular regulation in the aspects of tax purposes (Lakatos et al., 2013).

Many taxation authorities do not allow reductions in the carrying amount of goodwill as a deductible expense in determining taxable profit. In such jurisdictions, goodwill has a tax base of nil. Any difference between the carrying amount of goodwill and its tax base of nil is a taxable temporary difference. A deferred tax liability shall be recognized for all taxable temporary differences of goodwill because it is measured as a residual and the recognition of the deferred tax liability would increase the carrying amount of goodwill (IAS 12).

### **Practical appliance**

I have chosen 3 multinational companies quoted in Budapest Stock Exchange to examine the valuation of goodwill realized in corporate business and due to its dissimilar fields they apply different practices.

Firstly, I introduce the philosophy in connection with the valuation of goodwill at a telecommunication company (Magyar Telekom Plc.). For this company, goodwill acquired in a business combination shall, from the acquisition date is ordered to cash-generating units (CGUs), which identify the cash-generating units at the levels of the enterprise operating segments. Goodwill impairment testing is performed every year. The operating

segment as separated cash-generating units determines the recoverable amount at the fair value decreased by the selling cost of the operating system. Using information analysing discounted cash flow and option selling model derived from market transaction recently is considered such method where the function of market factor maximum while business specific factors are considered as little as possible. In impairment test the corporate uses the Weighted Average Cost of Capital (WACC) and the perpetual growth rate (PGR) depending on where and what features of market it operates. WACC is determined by the model of capital rate using the average beta indicator of firms in industries, the 10-year-old zero coupon, and the debt ratio. The debt ratio is in accordance with the average indebtedness of quoted telecommunication companies while the perpetual growth rate is consistent with the long-term growth rate in the given telecommunication sector. The group performs the impairment test by the 10-year-old future cash flow projections which valuations are based on the market players of the management and the best valuation of industry event. As a result of the impairment test, Magyar Telekom Plc. determined 31 390 million Forints to be impaired of Macedonian cash-generating unit. The main reason of the impairment is that because of the unfavourable economic environment and in the stronger-than-expected mobile market competition, the earnings plan conducted in 2011 had to be decreased by 7-19 % considering the previous term. All these have caused a significant price reduction and substantially higher handset subsidies. The management used the results of the impairment test to counterbalance the loss deriving from cash inflow deficit. Nevertheless, it was unable to counterbalance the foreseeable reduction of revenues by the reduction of operating costs and the cut of investments.

Magyar Telekom Plc. is making a sensitivity analysis in parallel with the impairment loss, in which relating to goodwill allocated to cash-generating units it points out how much impairment and further impairments should be determined in so far as the sensitivity parameters are changed in the impairment test.

The first chart shows the scenario analysis in which it can be clearly seen hat level of impairment may be generated in goodwill in the case of a 2% increase in WACC and a 5 % decrease in growth rate.

Table 1: Sensitivity analysis in 2011

| CGU                    | WACC                |                            |  | PGR                 |                            |  |
|------------------------|---------------------|----------------------------|--|---------------------|----------------------------|--|
|                        | <i>Applied rate</i> | <i>Modified rate (+2%)</i> | <i>Possible impairment loss (million Ft)</i> | <i>Applied rate</i> | <i>Modified rate (-5%)</i> | <i>Possible impairment loss (million Ft)</i> |
| <b>Telekom Hungary</b> | 12,99%              | 14,99%                     | 33969  | 1,00%               | -4,00%                     | 15771  |
| <b>T-systems</b>       | 13,27%              | 15,27%                     | 0  | 1,50%               | -3,50%                     | 0  |
| <b>Macedonia</b>       | 12,11%              | 14,11%                     | 9170   | 0,50%               | -4,50%                     | 7240   |
| <b>Montenegro</b>      | 10,54%              | 12,54%                     | 0  | 0,00%               | -5,00%                     | 0  |

Source: Own compilation based on the financial statements of Magyar Telekom Plc.

It can be seen that in case of a 2 % points increase for capital cost, an additional 9,17 million Forint would need to be determined to impair supposing CGU in Macedonia.. The recoverable amount of cash-generating units is determined at fair value less costs to sell; calculation of value in use is not carried out. Namely, the value in use method involves a valuation without any future investments, therefore, neither the further capital investments (CAPEX), nor the future income or profit connected to the previous can be considered. In the telecommunications sector long-term insurance of future incomes considerably depends on the future investments. In the case of the group, 80 % of the capital



investments is new investments, thus, application of the method of use-value on a long run would lead to a significant reduction in future cash flows, so it would be distorting effect of accounting estimates.

Secondly financial information of Danubius Hotel and Spa Plc. is presented to introduce the goodwill assessment. In the case of the company cash-generating units are allocated as acquisition, goodwill arising in that business combination which arose in connection with the acquisition of. In the case of the group the recoverable amount in the course of the regular usage of cash-generating units will be determined by the discounting of the expected cash flows. The future cash flows will be determined by the actual operating profit and the five-year-old business plan assuming a 3 % growing rhythm. Evolving the discount rate on the risk-free interest rate, market risk premium, industry beta and the company's indebtedness will be taken into account.

During the analysed period the group did not recognize an impairment loss in respect of goodwill, however, the management also identified a number of key parameters that would be required in case of recognition impairment. Sensitivity analysis conducted by Danubius Hotel Plc. differs from the Telekom's that projected cash-generating units are the key assumptions determined by the value of the recoverable amount and the carrying of the unit to show a match between changes. Table 2 shows how the main assumptions should change to the proportion of that value and the recoverable amount carrying amount of the same place.

Table 2: The necessary changes of Danubius Plc. to harmonize with the required value and the recoverable amount,

| Cash-generating unit           | Key assumptions        | 2010   | 2011   | 2012   |
|--------------------------------|------------------------|--------|--------|--------|
| <b>Lécebnéláznéa.s.</b>        | Post tax discount rate | 67,0%  | 44,0%  | 94,0%  |
|                                | EBITDA                 | -8,1%  | -6,2%  | -9,0%  |
| <b>Gundel Ltd.</b>             | Pre tax discount rate  | 29,0%  | 34,0%  | 47,0%  |
|                                | Revenue                | -2,2%  | -2,7%  | -3,1%  |
| <b>Egészségsgiget Ltd.</b>     | Market value of land   | -12,5% | -12,5% | 14,8%  |
| <b>Preventiv-Security Plc.</b> | Post tax discount rate | 60,0%  | 46,0%  | 26,0%  |
|                                | EBITDA                 | -4,8%  | -8,3%  | -28,0% |

Source: Own compilation based on the financial statements of Danubius Plc.

Gundel Ltd. for the cash-generating unit is the pro-tax discount rate and the change in income is taken into account in the estimates. For Lécebnéláznéa.s. and the Preventive Security Ltd. after-tax discount rate and EBITDA change, whereas in the case of Egészségsgiget Ltd.: factors applied to the market value of the land changes in the estimates, which changes are most vulnerable to future cash flows changes. For larger-scale change in the impairment factors would be necessary. In the third case, the Mol financial statements prepared in accordance with IFRS Plc are analyzed. MOL Group has a number of cash-generating units; the study in terms of the selection of a CGU took place. The allocation of goodwill in terms of operating is largely Austrian market Roth Group's wholesale activities independently form a cash-generating unit.

Table 3: Factors used in the impairment test of Roth Group

| Roth Group            | 2006    | 2007    | 2008  | 2009   | 2010  | 2011  | 2012  |
|-----------------------|---------|---------|-------|--------|-------|-------|-------|
| <b>Period</b>         | 3 years | 3 years | 1year | 1 year | 1year | 1year | 1year |
| <b>Rate of growth</b> | 3%      | 2%      | 2%    | 2%     | 1%    | 1%    | 1%    |
| <b>Discontrate</b>    | 8-9%    | 7-8%    | 7-8%  | 7-9%   | 8-9%  | 8-9%  | 8-9%  |

Source: Own compilation based on the financial statements of MOL Plc.

It can be clearly seen from the chart that up to 2007 cash flows from the cash-generating unit is taken based on an estimate of flows projected three-year financial plans, compared to the 2008 period decreased from one year. The assumed growth rate also shows a steady decline, in 2006 3%, 2% from 2007 to 2009, while after 2010 only a 1% growth rate is assumed in the estimates. The discount rates used ranged from an average of 7-9% in the period under review. There are changes of key assumptions, which result the equality in the carrying amount of the cash-generating unit and its recoverable amount. In the case of CGU, no impairment loss has been recognized in the period under review. The first line of Table 4 shows the values by which the recoverable amount exceeds the carrying amount. The second and third row includes a sensitivity analysis in which the value and the recoverable amount, the carrying amount of the same result if the parameters used in the estimates would modify the value in the table. In case of a greater change of these values the recoverable amount falls below the carrying amount, so impairment is need to be recorded. The discount rate is determined by the estimates of current and expected risk-free interest rate and the risks specific to the cash-generating unit.

**Table 4:** Factors used in the sensitivity test of Roth Group

|  | 2006  | 2007  | 2008   | 2009  | 2010  | 2011  | 2012 |
|--|-------|-------|--------|-------|-------|-------|------|
| <b>Differences in the carrying amount of the cash-generating unit and its recoverable amount (mFt)</b> | 2 767 | 586   | 6 338  | 476   | 1 487 | 1 789 | 267  |
| <b>Growth in discount rate</b>   | 2,3%  | 0,5%  | 5,0%   | 1,1%  | 1,3%  | 1,2%  | 0,1% |
| <b>The difference between the selling price and direct costs</b>                                       | -4,0% | -5,2% | -12,3% | -4,5% | -     | -     | -    |

Source: Own compilation based on the financial statements of MOL Plc.

Management has reviewed the differences between the selling prices and direct costs lower than the dissimilarity to 2009 that because of increased competition and as a result may be that the group is unable to pass on higher direct costs for its customers. It could be seen in these the analysed company that the cash-generating units are determined by different aspects to which the goodwill is allocated. This fact alone shows the goodwill, as the difficulty of evaluating assets together. All companies have highlighted uncertainties and risks associated with estimates, but special attention was paid to filter these uncertainties. Simulations attempt to quantify the impact of changes occur in the assumptions applied in the estimations.

## Conclusions

My aim in this study was a special assessment area, the presentation of the evaluation of the regulatory environment of goodwill with the International Financial Reporting Standards. The corporate practice of valuing a tangible asset is based on uncertain estimates, making it particularly difficult task for an intangible asset. Because the goodwill acquired in the business combination does not generate cash flows independently of other device, so self-assessment is not possible. The most commonly used in the discounted cash flow method in this case, determining the value of the cash-generating units to which goodwill was allocated to the acquisition date. However, the companies serving different factors emphasis that should be taken into account when estimating the recoverable amount is determined by management. Looking at the example of three multinational

companies found that a number of factors and these factors affect the amount of goodwill. However, these factors reflect estimates of management concerning the future; thus, they carry a high degree of uncertainty. As we have seen for some factors, small changes in the factors can have a significant effect on the recorded value of assets and likely to affect the financial position of the enterprise and income-generating capacity.

## **Bibliography**

International Accounting Standard 12 Income Taxes

Available:

[http://ec.europa.eu/internal\\_market/accounting/docs/consolidated/ias12\\_en.pdf](http://ec.europa.eu/internal_market/accounting/docs/consolidated/ias12_en.pdf)

(3 April 2014)

International Accounting Standard 36 Impairment of Assets

Available:

[http://ec.europa.eu/internal\\_market/accounting/docs/consolidated/ias36\\_en.pdf](http://ec.europa.eu/internal_market/accounting/docs/consolidated/ias36_en.pdf)

(3 April 2014)

Európai Unió (2012) *IFRS 13 Valós értéken történő értékelés*, Az Európai Unió Hivatalos Lapja, L360, pp. 108-110.

Lakatos, P., Kovács, D., Madarasiné, Sz. A., Mohl, G. and Rózsa, I (2013) *A Nemzetközi Pénzügyi Beszámolási Standardok elmélete és gyakorlata 2013*, MKVKOK, pp. 553-567.

Matukovics, G. (2004) *A tulajdonosi érték meghatározásának egyes kérdései Magyarországon*, BME, pp. 58-60.

Mackenzie, B., Coe Tsee, D., Njikizana, T., Chamboko, R. and Colyvas, B. (2011) *Wiley IFRS 2011. Interpretation and application of International Financial Reporting Standards*. Wiley. Hoboken.

Nobes, C. W., Norton, J. (1996) „*International Variations in the Accounting and Tax Treatments of Goodwill and the Implication for Research.*” *Journal of International Accounting, Audit & Taxation*, No. 5(2), pp. 179-196.

Veress, A. (2006) *Az IFRS-ek rendszere. Nemzetközi Számviteli Tankönyv*, MKVKOK, pp. 305-336.