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Post-implementation Review: IFRS 3 *Business Combinations*

Dear Mr. Hoogervorst,

We welcome the IASB's initiative to carry out a Post-implementation Review on IFRS 3 *Business Combinations*. For many companies, acquisitions and dispositions of businesses form an integral part of the operating activities. It is therefore pivotal that the accounting for business combinations provides decision useful information to users of financial statements. Among the changes introduced by IFRS 3, arguably, the application of the impairment-only approach is most controversial. Constituents take different views on whether the impairment-only approach is conceptually superior to an amortisation approach, or not. And the post implementation review will likely not conclude this discussion. In fact, the arguments made seem not to be different to the ones exchanged when the impairment-only approach was first introduced.

In light of the perceived deadlock, we consider it beneficial to focus on the constraint that the IASB postulated when it voted for the impairment-only approach: the implementation of a rigorous and operational impairment test. The attached paper illustrates the inevitable subjectivity inherent in the impairment-only approach and lays out the complexity in practically applying the approach.

Please do not hesitate to contact Dr. Nikolaus Starbatty (nikolaus.starbatty@siemens.com, phone: +49 89 636 36371) if you wish to discuss any of the issues. Feel free to exchange this letter and the attached paper with your fellow Board members. In light of the recently started FASB project on this issue we include Russell G. Golden, Chairman of the Financial Accounting Standards Board, into the correspondence.

Sincerely yours,

Siemens Aktiengesellschaft

Dr. Ralf P. Thomas
Member of the Managing Board & Chief Financial Officer

Dr. Jochen Schmitz
Corporate Vice President and Controller

cc

FASB – Russel G. Golden

ASCG/DRSC – Dr. h.c. Liesel Knorr

Accounting for goodwill – Practical implementation of the impairment-only approach

Introduction

The efficiency of capital markets depends on the information that market participants have access to. Financial reporting, arguably, provides the most relevant source of information when it comes to the provision of resources to companies. The use of globally accepted financial reporting is, therefore, pivotal to efficient capital markets. In the past ten years, the International Accounting Standards Board (IASB) has achieved an unprecedented track record in that regard. The European Union's decision to adopt the International Financial Reporting Standards (IFRS) triggered similar processes in many countries. By now, more than 100 jurisdictions have adopted IFRS or require the use of accounting standards that are close to IFRS.

For financial reporting to be decision useful to investors, the information provided must be relevant and faithfully represent the activities of the company. In the IASB's view, financial reports are not designed to show the value of a company; however, they shall provide information to help investors in estimating the value of a company (IASB *Conceptual Framework*, OB7). Some constituents claim that financial reports to a growing extent cannot explain the market capitalisation of companies (Financial Reporting Council. 2014, 15). The International Integrated Reporting Committee, for example, argues that intangible factors make up for an increasing part of a company's value and in many instances, those intangibles are not reflected in financial statements (International Integrated Reporting Committee 2011, 4). For companies preparing IFRS financial statements, IAS 38 *Intangible Assets* specifies criteria that apply to the recognition of intangible assets. Importantly, these criteria are more rigorous than the recognition criteria applying to tangible assets. Apparently, the IASB considers information on intangibles less reliable in nature so that recognition may sometimes be misleading. Nonetheless, the perceived discrepancies to a company's market capitalisation raise the issue whether the IASB's current guidance on the accounting for intangible assets results in useful information.

Financial Statements prepared in accordance with IFRS already evidence the application of less rigorous recognition criteria to some intangibles. In a business combination, intangible

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items and goodwill acquired always meet the criteria for separate recognition (IAS 38.33).[1] In the IASB's view, the acquisition in an arm's length transaction provides sufficient information to measure reliably the fair value of these elements (IAS 38.35). For example, an in-process research project of the acquiree meets the recognition criteria, irrespective of whether the asset has been recognised by the acquiree before the business combination. Subsequent to the initial recognition by the acquirer, the accounting depends on the useful life of the intangible assets. An intangible asset with a finite useful life is amortised over its useful life (IAS 38.88). In contrast, intangible assets with indefinite useful life shall not be amortised. They are tested for impairment annually and whenever there is an indication for impairment.

- Numerous studies evidence the high relevance of intangibles and goodwill acquired in a business combination for financial statements. Houlihan Lokey, in their 2012 Purchase Price Allocation Study, reviewed U.S. public filings for 1,173 completed transactions in 2012 (Houlihan Lokey 2013).[2] On average, intangible assets and goodwill account for 31 percent and 39 percent, respectively, of the purchase consideration. That is, the net assets acquired and liabilities assumed – other than intangible assets and goodwill – on average explain only 30 percent of the purchase consideration. Accordingly, intangibles and goodwill make up for a significant and increasing portion of total assets in many companies. At the same time, the accounting for intangibles and particularly goodwill becomes an increasingly controversial issue. The controversy is primarily on whether, or not, goodwill and intangibles should be amortised. The accounting for goodwill illustrates the different aspects of the debate.

Accounting for goodwill

In a business combination, an acquirer recognises goodwill as the excess of the consideration transferred over the net amounts of the identifiable assets acquired and liabilities assumed, measured at their acquisition-date fair values (paragraph 18 and 32 of IFRS 3 *Business Combinations*). Thus, goodwill is a residual amount, capturing all items that do not meet the criteria for separate recognition (from goodwill). According to the IASB, goodwill can be split into two components (IFRS 3.BC313):

(a) ability of the established business to earn a higher rate of return on an assembled collection of net assets, resulting from the synergies of the net assets of the business, as well as from other benefits (eg barriers to market entry) and

[1] The IASB defines goodwill as a residual, not providing a view on the nature of the asset. Accordingly, constituents refer differently to goodwill. Some view goodwill as part of intangible assets, some view goodwill as a separate item. The latter view applies in this paper.
[2] Because the IFRS guidance is almost identical to the US GAAP guidance on the accounting for intangibles and goodwill in a business combination, the findings are also indicative for companies preparing their financial statements in accordance with IFRS.

(b) expected synergies and other benefits from combining the acquirer's and acquiree's businesses.

Despite the fact that goodwill is inextricably linked to an assembled collection of net assets and hence, cannot be sold separately, most constituents agree on the recognition of goodwill as a separate asset in financial statements. The alternative would be to immediately expense goodwill or to charge goodwill against equity without affecting profit or loss. Many object to those approaches because it would impediment the relevance of financial ratios. Financial metrics frequently compare profitability across companies based on the amount of capital employed. A popular financial ratio that measures a company's profitability and capital efficiency is *return on capital employed* (ROCE). ROCE is typically calculated as *earnings before interest after tax* divided by *capital employed*. Not recognising goodwill as an asset reduces a company's *capital employed* and hence, impacts any related financial ratios.

While there seems to be agreement on the initial recognition of goodwill as an asset the subsequent measurement of goodwill is more controversial. Discussions about the treatment of goodwill go back to the 1970s and have led to paradigm shifts over time. The debate focuses on whether goodwill is consumed over time similar to other assets and if yes, on the appropriate method to amortise goodwill. In 1983, the predecessor body of the IASB, the International Accounting Standards Committee (IASC), issued IAS 22 *Business Combinations* providing preparers of financial statements with an option: Goodwill was either to be amortised over its useful life not exceeding 20 years or alternatively charged to equity on the acquisition date (without affecting profit or loss). In 1993, the IASC revised IAS 22 eliminating the option to charge goodwill directly to equity. It was only in 2004 that the IASB introduced the impairment-only approach with the publication of IFRS 3 *Business Combinations*. Since then, goodwill is no longer amortised over its useful life but tested annually for impairment.

It is of note that the IASB introduced the impairment-only approach despite respondents to the Exposure Draft 3 *Business Combinations* generally supporting a straight-line amortisation (combined with an annual impairment test). The Basis for Conclusions to IAS 36 *Impairment of Assets* names three arguments that are put forward in support of a straight line amortisation:

(a) acquired goodwill is an asset that is consumed and replaced by internally generated goodwill. Therefore, amortisation ensures that the acquired goodwill is recognised in profit or loss and no internally generated goodwill is recognised as an asset in its place, consistently with the general prohibition in IAS 38 [Intangible Assets] on the recognition of internally generated goodwill.

(b) *conceptually, amortisation is a method of allocating the cost of acquired goodwill over the periods it is consumed, and is consistent with the approach taken to other intangible and tangible fixed assets that do not have indefinite useful lives. Indeed, entities are required to determine the useful lives of items of property, plant and equipment, and allocate their depreciable amounts on a systematic basis over those useful lives. There is no conceptual reason for treating acquired goodwill differently.*

(c) *the useful life of acquired goodwill cannot be predicted with a satisfactory level of reliability, nor can the pattern in which that goodwill diminishes be known. However, systematic amortisation over an albeit arbitrary period provides an appropriate balance between conceptual soundness and operationality at an acceptable cost: it is the only practical solution to an intractable problem.* (IAS 36.BC131D)

The IASB did acknowledge these arguments but voted for the impairment-only approach weighing more strongly the following aspects (IAS 36.BC131D): To result in a faithful representation the amortisation of goodwill requires predicting its useful life. Estimating an appropriate pattern is not possible and hence, any amount amortised in a period can at best be an arbitrary estimate. In addition, the IASB did not think that the amortisation of goodwill would result in decision useful information, when the internally generated goodwill replacing it is not recognised. In their view, anecdotal and research evidence would support this. Instead, an impairment-only approach provides more useful information to investors if it is combined with a rigorous and operational impairment test.

IFRS 3 – Post-implementation Review

Ten years post the introduction of the impairment-only approach the accounting for goodwill remains a controversial issue. Consistently, the *Post-implementation Review* on IFRS 3 that started in 2013 identifies the accounting for goodwill as one area that will be addressed during the review. Respondents to the *Post-implementation Review* were asked to provide their comments until May 2014. However, it is not to expect that the feedback from constituents and the IASB's analysis will reveal arguments that were not considered in the past. In fact, the above mentioned aspects continue to reflect the main arguments in the debate. Likewise, it seems academic research has not provided evidence that the impairment-only approach is superior to an amortisation approach or vice versa. While the IASB staff conclude that academic research is generally in support of the impairment-only approach, a paper prepared by staff of other standardsetters advocates the amortisation of goodwill with reference to academic research (IASB 2014; Accounting Standards Board of Japan, European Financial Reporting Advisory Group and Italian Standardsetter 2014). In light of the different views, the experiences in practically applying the impairment-only

approach may play an important role in the IASB's review on the accounting for goodwill. Indeed, in its decision to introduce the impairment-only approach the IASB did rely on the assumption that a rigorous and operational impairment test can be implemented (as pointed out above).

Many studies have analysed the practical implementation of the impairment-only approach since its introduction in 2004. The European Securities and Markets Authority (ESMA) in 2013 issued a report on the impairment of goodwill and other intangible assets in IFRS financial statements (ESMA 2013). The report contains interesting insights because it evaluates a large sample of financial statements during the financial crisis (235 European issuers in 2011 and 2010). In addition, the report reflects the view of a regulator on the application of the current IFRS guidance on the accounting for goodwill. For the sample selected, the report observes in 2011 an impairment rate of 5 percent on the amount of goodwill. The financial service industry experiences the highest impairment rate amounting to 25 percent, leaving the remaining sample with an average impairment rate of 3 percent. Based on these findings, ESMA challenges the rigour of the practical implementation of the impairment test. ESMA concludes that

> *...the increased equity/market capitalisation ratio compared to 2010 [...] can call into question whether the level of impairment in 2011 appropriately reflects the effects of the financial and economic crisis.* (ESMA 2013, 11)

The statement reflects a general scepticism on the practical implementation of the impairment-only approach that is shared by many enforcers, evidenced in their enforcement priorities and enforcement actions. Notably, even members of the IASB publicly take a position on the implementation of the impairment-only approach. Hans Hoogervorst, Chairman of the IASB, made a remarkable statement at the June 2012 IAAER conference:

> *Although our accounting standards do not permit the recognition of internally generated goodwill, our standards do require companies to record the premium they pay in a business acquisition as goodwill. This goodwill is a mix of many things, including the internally generated goodwill of the acquired company and the synergy that is expected from the business combination. Most elements of goodwill are highly uncertain and subjective and they often turn out to be illusory.*
>
> *The acquired goodwill is subsequently subject to an annual impairment test. In practice, these impairment tests do not always seem to be done with sufficient rigour. Often, share prices reflect the impairment before the company records it on the balance sheet. In other words, the impairment test comes too late. All in all, it might be*

a good idea if we took another look at goodwill in the context of the post-implementation review of IFRS 3 Business Combinations. (Hoogervorst 2012)

While these two statements only represent a small excerpt of the many views on the impairment-only approach they adequately reflect the general critique on the practical implementation of the impairment testing. Goodwill is considered a highly uncertain item, combining a mix of expectations that may, or may not, crystallise. And the impairment testing does not impose enough discipline onto preparers of financial statements while its conceptual superiority remains a controversial issue.

Application of the impairment test – Preparer view

In light of the existing controversy, the perspective of preparers of financial statements on the impairment-only approach may provide helpful insights into the costs and benefits associated with the approach. Albeit the impact on companies will differ depending on the amount of goodwill in the respective financial statements, the practical implementation of the impairment-only approach displays similarities across companies.

An important aspect in the accounting for goodwill is the allocation of goodwill to cash generating units because this determines the level for the performance of the impairment tests. IAS 36.80 requires companies to allocate goodwill acquired in a business combination 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. Each unit to which goodwill is allocated shall:

(a) represent the lowest level at which goodwill is monitored for internal management purposes; and
(b) not be larger than an operating segment as defined by IFRS 8 *Operating Segments.*

Linking the allocation of goodwill to the internal reporting process creates diversity across companies. The analysis of financial statements evidences that many companies allocate goodwill on the level of operating segments while others do so on a lower level. In fact, diversity even exists within single companies where goodwill is allocated on different levels. ESMA in the aforementioned report points out that for almost 75 percent of the sample companies a link between the units to which goodwill is allocated and the operating segments – the highest level possible – was apparent. Subsequent to the initial allocation, goodwill shall be tested for impairment annually (and whenever there is an indication) (IAS 36.90). The impairment test compares the carrying amount of the relevant unit with its recoverable amount. IAS 36.6 defines recoverable amount as the higher of (a) fair value less costs of disposal and (b) value in use. Value in use is defined as the present value of

estimated cash flows expected to arise from the continuing use of an asset and from its disposal at the end of its useful life (Appendix A of IFRS 5 *Non-current Assets held for Sale and Discontinued Operations*). If the carrying amount of the unit exceeds its recoverable amount, the company recognises an impairment loss.

In practice, companies typically apply discounted cash flow techniques in order to determine the recoverable amount of a cash generating unit – irrespective of whether they measure (a) fair value less costs of disposal or (b) value in use.[3] This is because most cash generating units are not traded in active markets so that their fair value cannot be derived from quoted prices. The lack of quoted prices requires the use of unobservable inputs. Discounted cash flow valuations often represent the most relevant measurement techniques in markets with no observable inputs because they allow to appropriately model the valuation object. In contrast, valuation techniques that use market multiples derived from a set of comparable companies do not reflect the specifics of the valuation object (eg a multiple of earnings or revenue or a similar performance measure). While adjustments help in tailoring a multiple to a valuation object, discounted cash flow techniques often more suitably account for the characteristics of the valuation object.

Excursus

The dominance of discounted cash flow valuations in performing the (annual) impairment tests is not in contrast to existing IFRS. IFRS 13 *Fair Value Measurements* defines a fair value hierarchy, giving highest priority to quoted prices in active markets for identical assets or liabilities (Level 1 inputs) and the lowest priority to unobservable inputs (Level 3 inputs) (IFRS 13.72).

The inputs into a discounted cash flow valuation are often unobservable, resulting in a Level 3 measurement. A market multiple that is derived from observable market data creates a Level 2 input. Such a Level 2 input is of higher priority to a Level 3 input, provided no adjustment is made to the Level 2 input. In practice, market multiples require adjustments before determining the fair value of a cash generating unit. Such adjustments are typically significant to the measurement, resulting in a Level 3 measurement. Accordingly, such measurements are not of higher priority than the results of discounted cash flow techniques. Multiples, however, may be useful in corroborating the values from a discounted cash flow technique.

[3]The paper does not discuss the conceptual differences between value in use and fair value less costs (and accordingly, it does not question their adequacy). To focus the discussion on the core issues the paper neglects any differences in the two approaches.

It is of note that the fair value hierarchy in IFRS 13 does not apply if a company determines the recoverable amount of a cash generating unit by measuring its value in use (and not fair value less costs of disposal). Value in use does not represent a fair value measurement so that, conceptually, there is no need to confirm any values with a market view.

Discounted cash flow valuations – The use of unobservable inputs

It is specifically the use of unobservable inputs that makes the application of the impairment-only approach so controversial. The realisations of those inputs vary significantly so that the application of a discounted cash flow valuation encompasses a wide range of reasonable outcomes. It is management's objective to determine the point within these ranges that is most representative of the recoverable amount. In the following we illustrate the impact of unobservable inputs and their relative subjectivity by analysing the major inputs to a discounted cash flow valuation:

(a) the future cash flows for the cash generating unit being measured
(b) the risk free interest rate
(c) the risk premium for bearing the uncertainty inherent in the cash flows

In addition to these inputs, other factors impact the outcome of a discounted cash flow valuation (eg incremental borrowing rate, tax rate, country risk premium, leverage, liquidity, control premium). Including those additional factors further increases the complexity of a discounted cash flow valuation and correspondingly, the range of reasonable outcomes.

ad (a) estimate of future cash flows

A company's internal budgeting/forecasting process approved by management is the most relevant source to estimate the future cash flows for a cash generating unit (IAS 36.33). The budgeting/forecasting process condenses the expectations of different management levels, often combining elements of a bottom up and top down approach. Companies typically run the process in annual cycles with cash flow projections covering a fixed number of periods that vary across companies (eg three or five years). The IASB limits the number of periods included in the cash flow projections by stating that *projections based on these budgets/forecasts shall cover a maximum of five years, unless a longer period can be justified* (IAS 36.33(b)). Beyond the period covered by the budgets/forecasts, management shall extrapolate the projections by applying a steady or declining growth rate (often referred to as terminal value growth rate). That growth rate shall not exceed the long term average growth rate in the relevant industry, unless a higher rate can be justified (IAS 36.33(c)).

Additionally, the IASB requires management to assess the reasonableness of its assumptions inherent in the cash flow projections by evaluating the quality of past projections:

> *Management assesses the reasonableness of the assumptions on which its current cash flow projections are based by examining the causes of differences between past cash flow projections and actual cash flows.* (IAS 36.34)

While these measures put some constraints on companies in applying a discounted cash flow technique, nonetheless, the resulting cash flow projections are highly susceptible to changes in the underlying assumptions. The approved cash flow projections are often the result of a controversial process, with different views on the assumptions within a single company. The wide range of potential outcomes combined with their relative subjectivity makes it difficult to verify (or falsify) any resulting valuation. External evidence often provides only limited assistance in corroborating the assumptions because of the specifics of the cash generating unit.

ad (b) risk free interest rate

In practice, the Capital Asset Pricing Model (CAPM) represents the dominant technique to determine the appropriate discount rate. In order to reflect the time value of money of future cash flow projections, the discount rate includes as one building block the risk free rate. The risk free rate shall reflect the return on an investment with no risk associated. The risk free rate is typically determined by reference to risk free bonds, issued by a government where the risk of default is so low as to be negligible. Many external providers offer data points that companies can use in order to determine the risk free rate at a given point in time. While there is no unique approach to select the relevant data, arguably, from all inputs included in a discounted cash flow valuation the risk free rate can best be verified. While the relevant risk free rates may differ because of foreign currency effects and other specifics in the measurement techniques, the deviations within a currency area are limited across companies.

ad (c) risk premium

In addition to the risk free rate, the discount rate includes as second building block the risk premium. While the risk free rate captures the time value of money, the risk premium expresses the price that investors require for bearing the uncertainty inherent in the future cash flows.[4] Because the risk premium that is specific to a cash generating unit cannot be observed companies use surrogates to estimate the appropriate rate. The CAPM considers

[4] Alternatively, companies may also reflect the risk premium by adjusting the future cash flow projections (instead of increasing the discount rate). However, the alternative approach is of no practical relevance.

the following factors in deriving the adequate rate of return for a cash generating unit (R_i): (1) the cash generating unit's sensitivity to non-diversifiable risk (ie systematic risk) (beta), (2) the expected return of the market portfolio (R_m) and (3) the expected return on a risk free investment (R_f). The expected rate of return then adds up as follows (assuming an equity financed company, ie neglecting the impact of leverage):

$E(R_i) = R_f + \text{beta} \times (E(R_m) - R_f)$

While the risk free rate is – more or less – observable the remaining inputs into the CAPM require significant assumptions. The market risk premium ($E(R_m) - R_f$) cannot be observed so that companies must estimate the appropriate premium. Most companies determine the market risk premium by observing historical data (ex-post approach) (KPMG 2013, 30; Fernandez, Linares, and Fernandez Acin 2014, 12; Damodaran 2012, 21). This approach requires determining (1) the relevant market to observe the market risk premium (that is, the portfolio of investments to be included in the sample), (2) the period of historical data covered and (3) the historical risk free rates. An alternative approach is to derive ex-ante market risk premia out of analysts' forecasts and observable share prices. Irrespective of the method chosen, the resulting market risk premia react sensitive to the assumptions going into the respective models. Fernandez et al. issue a yearly survey on the use of market risk premia in different countries, containing data for 88 countries in their 2014 report (Fernandez, Linares, and Fernandez Acin 2014). Their survey provides evidence of significant differences in the premia applied not only across countries but also within a single country. Randomly selecting the United Kingdom shows an average market risk premium of 5.1 percent, ranging from a minimum rate of 1.5 percent to a maximum rate of 12.8 percent. While one may argue whether the outliers are representation faithful, the observed range impressively demonstrates the sensibility of the market risk premia to the underlying assumptions.

In addition to the market risk premium, the CAPM considers non-diversifiable risk (beta) in determining the adequate rate of return. Beta represents the non-diversifiable risk of the cash generating unit's business. A cash generating unit with beta greater 1 bears a higher non-diversifiable risk than the market portfolio and vice versa. Akin to the market risk premium, beta is typically estimated based on historical returns of comparable companies (because beta usually cannot be observed directly from the relevant company). This makes beta sensitive to the selection of comparable companies and the period of historical returns covered.

Discounted cash flow valuations – Illustrative example

The sensitivity of a discounted cash flow valuation to the different inputs is best demonstrated by analysing an example. Consider Company A that has recently invested into Cash Generating Unit B (CGU B) with the expectation to receive attractive returns in future periods. The company's budgeting/forecasting process includes cash flow projections covering five years.

Future cash flow projections

Company A has set up an annual process to estimate the cash flow projections of its cash generating units. This process combines elements of a top down and bottom up approach, involving all hierarchy levels that are involved in the operations of the cash generating units. Management concludes the process by approving the budgets for the cash generating units. As to CGU B, it is the management consensus that the free cash flows grow stronger than the market with a rate of 5 percent in the first two years. In years three to five the growth rate decreases by one percentage point each year. Based on a free cash flow generation of 10,000 Currency Units (CUs) in the year preceding the budgeting process, the projected free cash flows in the following table result:

Year	1	2	3	4	5
Growth rate	5%	5%	4%	3%	2%
Cash flows	10,500	11,025	11,466	11,810	12,046

While the projected free cash flows represent the approved budget, different views on the adequacy of the projections exist within Company A. Manager C who decided about the recent investment is convinced that CGU B's actual performance will exceed the approved projections. In his view, free cash flows will grow at a rate of 7 percent in the first two years. In years three to five the growth rate decreases by one percentage point each year.

Year	1	2	3	4	5
Growth rate	7%	7%	6%	5%	4%
Cash flows	10,700	11,449	12,136	12,743	13,252

However, Manager C is about to take over different responsibilities within Company A, handing over to Manager D. Manager D who was involved in the budgeting/forecasting process is less optimistic about the future prospects of CGU B. He acknowledges the growth opportunities but expects challenges in the market will make it difficult for CGU B to achieve a growth rate that exceeds 4 percent in the first two years. In years three to five the growth rate decreases by one percentage point each year.

Year	1	2	3	4	5
Growth rate	4%	4%	3%	2%	1%
Cash flows	10,400	10,816	11,140	11,363	11,477

With respect to the terminal value growth rate that applies to the cash flows beyond the planning/budgeting process (ie as of year six), the rate approved by management amounts to 2 percent. This rate shall reflect the long term average growth rate in the relevant industry that CGU B is expected to achieve. However, Manager C is more optimistic about the prospects of the relevant industry and further believes that CGU B will at least in years 6 to 10 outperform the market. In his view, this is equivalent to a terminal value growth rate of 2.5 percent. He supports his view with external studies that investment banks generated prior to Company A investing into Cash Generating Unit B. Manager D is less optimistic about the prospects of the relevant industry and does not think that CGU B will outperform the market. He considers a terminal value growth rate of 1 percent as appropriate, underlining his view with external studies on the long term average growth rates for the relevant industry.

Discount rate

In order to measure the present value of the future cash flow projections, management uses market data to derive the appropriate discount rate. While the relevant risk free rate can easily be observed at a rate of 3 percent, determining the other elements in the discount rate – ie the market risk premium and sensitivity to non-diversifiable risk – requires the use of assumptions.

Management derives the market risk premium by using an ex-post approach. The approved rate of 7 percent results from an index of global companies, including historical data of ten years. While Manager C agrees on the chosen index of global companies he does not think it is adequate to observe the past ten years. He argues for a period of 30 years to estimate the market risk premium because this more appropriately addresses the outliers in recent years, resulting in a corresponding rate of 6 percent. In contrast, Manager D supports the use of an ex ante approach because it measures the risk premium that is implicit in current share prices and therefore, best represents market participants' expectations. In his view, this justifies a market risk premium of 8 percent.

Management measures CGU B's sensitivity to non-diversifiable risk by reference to the performance of 5 listed peer companies. Observing market data over the last two years yields a beta of 1.2. Manager C thinks that adding another peer company more adequately reflects the cash flow profile of CGU B. In addition, he believes extending the historical data to five years provides more relevant data in predicting the relevant beta. Applying Manager C's view reduces beta to 0.9. In contrast, Manager D would include two years of historical data but eliminate one peer company from the sample, increasing beta to 1.4. Combining the market risk premium and the beta approved by management justifies a discount rate of 7.8 percent:

$E(R_i) = 3\% + 1.2 \times (7\% - 3\%) = 7.8\%$

Manager C's and D's view support a rate of 5.7 percent and 10.0 percent, respectively.

Recoverable amount of Cash Generating Unit B

Having fixed the inputs to the valuation, CGU B's present value amounts to 176,746 CUs based on the budget approved by management and the associated discount rate (7.8 percent). The value increases by more than 60 percent to 290,051 CUs, according to Manager C's view. Differently, Manager D's view reduces the value by approximately 30 percent to 125,489 CUs. This range in potential outcomes impressively demonstrates how sensitive a cash generating unit's value reacts to changes in the underlying assumptions. And their relative subjectivity makes it difficult to narrow down the range. Indeed, the selection of parameter values in the example does not seem disproportionate, considering the illustrative examples in IFRS 13 that display a broader range in the parameter values (eg Example 17).

The calculation of CGU B's present value does not specify whether it measures the recoverable amount of CGU B by reference to (a) fair value less costs of disposal or (b) value in use. The two measurements may result in some differences.[5] However, their impact on the recoverable amount is typically limited so that the additional complexity into the model does not justify a detailed analysis. The performance of the impairment test requires Company A to compare CGU B's recoverable amount with its carrying amount. The process to determine the carrying amount of CGU B is also complex and, to some extent, subjective because it requires determining the assets and liabilities of the cash generating unit. For many items the allocation may be straightforward but specifically for corporate assets the link to the cash generating unit may be less clear. Corporate assets include group or divisional assets such as the building of a headquarters or a research centre. Those items do not generate independent cash flows and their carrying amount must be allocated to the company's cash generating units on a reasonable basis.

It is of note that the valuation of CGU B's recoverable amount excluded some parameters that are relevant to a discounted cash flow valuation (eg incremental borrowing rate, tax rate, country risk premium, leverage, liquidity, control premium). Additional parameters not only extend the range of potential outcomes but further increase the complexity in applying a valuation technique. In fact, the performance of the (annual) impairment absorbs significant resources within a company. While the estimated future cash flows typically result from internal projections many companies refer to external advice in calculating the discount rate.

[5] Differences, for example, relate to the treatment of costs of disposal or the extent to which future restructurings are included in the measurements.

This is to ensure the discount rate appropriately considers the impact of the different inputs. In addition, external advice makes the calculations quasi immune to inquiries by regulators/enforcers.

Given the complexity and subjectivity in performing the (annual) impairment testings, it is no surprise that many regulators and other constituents challenge the implementation of the impairment-only approach. The Financial Reporting Enforcement Panel of Germany (FREP) addressed its issues with the impairment-only approach during the IASB's Agenda Consultation 2011. In its comment letter, the FREP summarises the concerns that are shared by many enforcers:

> *Since market values for cash generating units are available under very rare circumstances only, the estimation of a recoverable amount is typically based on estimates and management's judgement with respect to future development of the cash generating units. IAS 36 refers to the use of reasonable and supportable assumptions in projecting future cash flows (IAS 36 paragraph 33(a)) that are based on the most recent financial budgets approved by management. To assess whether financial statements contain material errors, the enforcer has to examine whether the assumptions used by management are reasonable and supportable. Since it is difficult for an auditor or enforcer to second-guess the assumptions used by management, potentially inadequate calculations are difficult to enforce, except for obvious infringements, such as clear miscalculations.* (FREP 2011, 9)

The FREP in its statement underlines that it is often arbitrary to draw a line between a reasonable judgement and an error. The FREP goes on by stating that the reference to an external expert report creates an *almost limitless range of possible valuations*. And any corroboration with market multiples, presumably, will not detect any errors in the valuation because of the specifics of the valuation object. Hence, enforcement actions are apparently limited to technical errors in the application of the valuation models.

Conclusion

The impairment-only approach highlights the IASB's dilemma in the standard setting process: the development of principle based standards that provide decision useful information to users of financial statements without compromising on the rigorous application of those standards. The introduction of the impairment-only approach in 2004, inevitably, extended the degree of subjectivity in IFRS financial statements. And this is not the result of a poorly implemented concept into the IFRS but an inevitable consequence of introducing fair value oriented measurements (when no quoted prices are available). Hence, any attempt to

bring more rigour to the impairment test will likely increase the associated costs for preparers but it will not significantly reduce the range in reasonable outcomes. This is because any amendment to the approach will not eliminate the root cause to the perceived problem: the subjectivity in measuring the recoverable amount of a cash generating unit.

For preparers of financial statements, the impairment-only approach creates significant ongoing costs and it remains judgemental whether the associated benefits justify those costs. It is, however, possible to measure the loss of information that would go along with the abolition of the impairment-only approach. Assuming that an alternative approach would require companies to amortise goodwill over a fixed period of time, users of financial statements would no longer receive the information associated with the (annual) goodwill impairment testing. Some take the view that the impairment-only approach can be helpful in assessing how management has fulfilled its stewardship responsibility. However, if the recognition of an impairment is not timely because share prices reflect the impairment before its actual occurrence that information is of no, or minor, relevance in making investment decisions. In an amortisation model, analysts can easily back out the respective amortisation charges if they consider the periodic expenses not relevant in estimating the value of a company. Indeed, many analysts already eliminate the impact from amortising intangibles that result from business combinations (Financial Reporting Council 2014, 4). They would typically do so if the company incurs planned expenditure in future periods in order to maintain the respective intangible asset at its standard performance level (and that expenditure does not result in the recognition of an asset).

All in all, the loss of information from transitioning to an amortisation model seems therefore justifiable – specifically if one sticks to the IASB's call when introducing the impairment-only approach: the creation of a rigorous and operational impairment test (IAS 36.BC131G).

Appendix

The appendix contains a non exhaustive list of additional challenges in the practical implementation of the impairment-only approach. The aim is to highlight some of the issues without providing thorough insights into the topics.

Allocating goodwill to cash generating units

IAS 36.80 requires goodwill acquired in a business combination to 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. The allocation will depend on management's estimate about the future prospects of the acquired business and its integration into the company and involves some subjectivity. That is, there is possibly more than one appropriate way to allocate goodwill to cash generating units. The impairment-only approach may implicitly affect the allocation process because it influences the probability of a future impairment. Assume a company has acquired a business for 1,000 CUs. The business is expected to generate free cash flows of 105 CUs per year and the appropriate discount rate amounts to 10 percent.[6] Hence, the present value of the future cash flows amounts to 1,050 CUs (ie the investment seems beneficial). A subsequent change in the parameter values may significantly impact the value of the acquired business – even if the future cash flow prospects remain unchanged. For example, the discount rate may change because of changes in the risk free interest rate or the market risk premium. Assuming an increase in the discount rate by 1 percentage point to 11 percent decreases c.p. the present value of the acquired business to 955 CUs (falling short of the purchase price amounting to 1,000 CUs).

In such a scenario, management could aim to address any impact from changes in the discount rate by allocating goodwill to existing cash generating units provided it is judgemental whether the acquired goodwill creates a separate cash generating unit or becomes part of an existing cash generating unit. This is particularly relevant if the existing cash generating units' recoverable amounts significantly exceed their carrying amounts. In contrast, in an amortisation approach such considerations would be of less relevance.

Volatility of fair value oriented measurements

The concept underlying the recoverable amount represents a fair value oriented measurement. The use of fair value as a measurement attribute results in volatility because fair value is a market-based measurement. From time to time, capital markets exhibit cycles, sometimes resulting in overreactions. The recoverable amount of a cash generating unit, at least to some extent, is expected to mimic market reactions. Arguably, this also applies if the

[6] The example does not consider any tax effects.

recoverable amount is measured by reference to value in use. While such a measurement is not an imminent market-based measurement, value in use is likely to be influenced by market sentiments. In fact, IAS 36.33 points out that greater weight shall be given to external evidence in measuring value in use.

Market dynamics may change quickly, possibly creating challenges for companies when calculating the recoverable amount of a cash generating unit. Companies often carry out their planning in regular cycles that are not necessarily synchronized to short term market developments. Hence, the budgeting process is typically less dynamic than capital markets. Moreover, reflecting any changes in capital markets in measuring the recoverable amount would likely be disadvantageous for companies but also for investors. Financial Statements are prepared under the assumption of a going concern and many users of financial statements appreciate some inertia in financial reporting. As pointed out in the introduction, financial reports are not designed to show the value of a company. Instead, they shall provide information to help investors in estimating the value of a company. It is therefore questionable whether the impairment of goodwill – following a temporary decline in capital markets – provides decision useful information if it is not indicative for the long term performance of the relevant cash generating unit. The prohibition to subsequently reverse any goodwill related impairment exacerbates this issue.

Allocating impairment losses within a company

IAS 36 requires a cash generating unit to which goodwill has been allocated to be tested for impairment annually and whenever there is an indication that the unit may be impaired. In the event of an impairment, the calculation of the impairment loss while complex absorbs a limited period of time. It is the actual allocation of the impairment loss within a company that is lengthy and involves many stakeholders. This is because goodwill must (implicitly) carry information about tax and foreign currency effects. Impairments are, therefore, typically allocated on the level of legal entities or surrogates (and not on the level of the reporting entity). While companies regularly plan the future cash flows of a cash generating unit they less often carry out this exercise for the legal entities (that form the reporting entity). Hence, the allocation of the impairment loss requires additional calculations. Those calculations must consider any interdependencies between the legal entities, complex tax structures and regulatory requirements, if applicable. Instead, an amortisation model expenses goodwill in a regular albeit arbitrary way that is easier to implement for companies.

Recoverable amount – Fair value less costs of disposal versus value in use

IAS 36 specifies recoverable amount as the higher of (a) fair value less costs of disposal and (b) value in use. Both concepts require in depth knowledge in measurement techniques,

assessing such factors as illiquidity or control premiums. In addition, measuring value in use requires companies to exclude certain cash flows from the calculation, eg cash flows that are expected from a future restructuring to which a company is not yet committed or from improving or enhancing an asset (IAS 36.44). For preparers of financial statements it is sometimes difficult to understand the different rationales for the approaches, including why different logics apply in the composition of fair value less costs of disposal and value in use.

Discount rate

In order to calculate the present value of future cash flows IAS 36.55 requires applying a pre-tax rate that reflects current market assessments of (a) the time value of money and (b) the risks specific to the cash generating units (for which the future cash flow estimates have not been adjusted). The above discussion on the different inputs to a discounted cash flow valuation revealed the subjectivity in deriving the appropriate discount rate. Moreover, the determination of the discount rate requires assumptions about the factors to include into the discount rate. The IASB's discussion on the definition of risk – for example in the context of the IAS 37 project – revealed that there are divergent views. Some Board Members would only consider the impact of systematic (non-diversifiable) risk; others would also include non-systematic risk into the calculation. Further, there are discussions about whether, and when, it is appropriate to include country risk premia into the calculation of the discount rate. The same applies to discounts for illiquidity.

Dividend payouts

In many companies, the distribution of dividends is linked to earnings figures that result from IFRS financial statements. A growing number of companies explicitly communicate a specified share of IFRS earnings that they plan to distribute via dividends. For example, a company might propose a dividend payout which represents 40 percent to 60 percent of IFRS net income in that period. Companies do so despite the fact that local regulations often establish a limit on the distribution of dividends and that limit is not linked to IFRS financial statements.

Any limit on the distribution of dividends may then require companies to synchronise net income in their local statutory accounts to IFRS net income in order to generate a corresponding payout capacity. The impairment-only approach puts additional pressure on this process if goodwill is amortised over a fixed period of time in the local statutory accounts. In the extreme, companies may carry out intragroup mergers or other intragroup transactions in order to close any gap between IFRS earnings and statutory earnings.

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