

This paper provides the technical advice from EFRAG TEG to the EFRAG Board, following EFRAG TEG's public discussion. The paper does not represent the official views of EFRAG or any individual member of the EFRAG Board. This paper is made available to enable the public to follow the EFRAG's due process. Tentative decisions are reported in EFRAG Update. EFRAG positions as approved by the EFRAG Board are published as comment letters, discussion or position papers or in any other form considered appropriate in the circumstances.

GOODWILL IMPAIRMENT TEST: CAN IT BE IMPROVED?

EFRAG

Short Discussion Series Paper

[MONTH 2017]

© 2017 European Financial Reporting Advisory Group.

This Short Discussion Series Paper is issued by the European Financial Reporting Advisory Group (EFRAG).

Copies of the Short Discussion Series Paper are available on EFRAG's website. A limited number of copies of the paper may also be made available in printed form and obtained from EFRAG.

The paper invites comment on its proposals via the 'Questions to Constituents' section. Such comments should be submitted through EFRAG website by clicking [here](#) or should be sent by post to:

EFRAG
35 Square de Meeûs
B-1000 Brussels
Belgium

so as to arrive no later than [Comment Deadline Date – 180 days from issuance]. All comments received will be placed on the public record unless confidentiality is requested.

EFRAG Research activities in Europe

This paper is part of EFRAG's research work. EFRAG aims to influence future standard-setting developments by engaging with European constituents and providing timely and effective input to early phases of the IASB's work. Four strategic aims underpin research work:

- engaging with European constituents to ensure we understand their issues and how financial reporting affects them;
- influencing the development of international financial reporting standards;
- providing thought leadership in developing the principles and practices that underpin financial reporting; and
- promoting solutions that improve the quality of information, are practical, and enhance transparency and accountability.

More detailed information about our research work and current projects is available on the EFRAG website.

Table of Contents

| | |
|---|----|
| EFRAG RESEARCH ACTIVITIES IN EUROPE | 3 |
| TABLE OF CONTENTS | 4 |
| EXECUTIVE SUMMARY | 5 |
| QUESTIONS TO CONSTITUENTS..... | 7 |
| CHAPTER 1: BACKGROUND | 9 |
| CHAPTER 2: POTENTIAL IMPROVEMENTS TO IMPAIRMENT TESTING REQUIREMENTS..... | 13 |
| APPENDIX 1 – GOODWILL ACCRETION: ILLUSTRATIVE EXAMPLE..... | 27 |
| APPENDIX 2 – SOME BACKGROUND DATA..... | 29 |

Executive Summary

Introduction








- ES1 When responding to the Short Discussion Series Paper [Should Goodwill still not be amortised?](#), published in 2014 together with the ASBJ and the OIC, many constituents considered that the impairment was a challenge in practice and that there was room to improve the guidance in IAS 36 *Impairment of Assets*.
- ES2 After considering the feedback received and EFRAG's quantitative study on goodwill, [What do we really know about goodwill impairment?](#), the EFRAG Board agreed that work should be continued on potential improvements to the impairment model in IAS 36.
- ES3 As a result, EFRAG is publishing this Short Discussion Series Paper, which addresses potential improvements to the impairment test (Chapter 2) and provides some additional quantitative analysis on goodwill (Appendix 2). EFRAG will use the feedback received on this paper to react to any IASB proposals on improvements to the impairment test.

Objective and structure of the Short Discussion Series Paper

- ES4 The objective of this Short Discussion Series Paper is, as stated in **Chapter 1**, to propose amendments to the goodwill impairment test. For that purpose, EFRAG discussed the main issues raised by its constituents and possible ways to address them.
- ES5 When discussing potential improvements to the impairment test of goodwill, EFRAG considered ways to :
- a) enhance the application and effectiveness of the impairment test, which should mitigate concerns that recognition of impairment losses may not be timely; and
 - b) address some of the complexity and achieve a better balance between costs and benefits.
- ES6 In **Chapter 2** EFRAG describes in more detail the issues raised by its constituents on the existing goodwill impairment test and puts forward some suggestions to address the concerns in the areas on the allocation of goodwill to CGUs, when an entity should determine the recoverable amount and how an entity should determine the recoverable amount. In each section, EFRAG explains the objective behind the proposals and their pros and cons.

Summary of potential improvements identified

- ES7 In the table below we summarise EFRAG's suggestions to improve the goodwill impairment test and indicate the aim of each suggestion (improving effectiveness or reducing complexity).

| Issue | Suggestions | Reference (paragraph) | Effectiveness | Complexity |
|---|--|----------------------------|---|---|
| How to allocate goodwill to CGUs | <ul style="list-style-type: none"> Additional guidance on the allocation of goodwill to CGUs (e.g. fall-back methods) Disclosure of information on composition of goodwill | 2.3 – 2.21 |  | |
| When to determine the recoverable amount | <ul style="list-style-type: none"> Introduce a ‘Step Zero’ in the impairment test (a qualitative assessment of the likelihood of an impairment loss) | 2.22 – 2.36 | |  |
| How to determine the recoverable amount: Single calculation approach | <ul style="list-style-type: none"> Single calculation approach: FVLCD or VIU | 2.37 – 2.45 | |  |
| How to determine the recoverable amount: VIU and future restructurings | <ul style="list-style-type: none"> Allow consideration of cash flows from future restructurings | 2.46 – 2.53 |  |  |
| How to determine the recoverable amount: VIU and discount rates | <ul style="list-style-type: none"> Allow the use of a post-tax rate | 2.54 – 2.63 | |  |
| How to determine the recoverable amount: targeting internally generating goodwill | <ul style="list-style-type: none"> Deduct an accretion amount from the recoverable amount of a CGU. | 2.64 – 2.78 and Appendix 1 |  | |

QUESTIONS TO CONSTITUENTS

EFRAG invites comments on all matters in this Short Discussion Series Paper, particularly in relation to the questions set out below. Comments are more helpful if they:

- a) address the question as stated;
- b) indicate the specific paragraph reference to which the comments relate; and/or
- c) describe any alternative approaches that should be considered.

Before replying, please consider the scope and objective of the Paper as described in paragraph 1.16; topics like identification of acquired intangible assets in a business combination; the advantages and disadvantages of reintroducing annual amortisation; and the improvements to the disclosure requirements are out of the scope of this paper.

All comments should be received by [Submission date].

Question 1 - How an entity should allocate goodwill

In paragraphs 2.3 to 2.21 of Chapter 2 EFRAG provides suggestions on additional guidance on the allocation of goodwill to CGU (e.g. fall-back methods) and disclosures on the break-down of goodwill by cash-generating unit.

Q1.1 Do you agree with EFRAG suggestions on how an entity should allocate goodwill?

Q1.2 Do you have any other suggestions to improve this area of the goodwill impairment test?

Question 2 - When an entity should determine the recoverable amount

In paragraphs 2.22 to 2.36 of Chapter 2, EFRAG provides a suggestion on introducing a 'Step zero' to the impairment test.

Q2.1 Do you agree with EFRAG suggestions on when a entity should determine the recoverable amount?

Q2.2 Do you have any other suggestions to improve this area of the goodwill impairment test?

Question 3 - How an entity should determine the recoverable amount

In paragraphs 2.37 to 2.78 of Chapter 2, EFRAG provides suggestions on how an entity determines the recoverable amount.

Q3.1 Do you agree with EFRAG suggestions on having a single method for determining the recoverable amount?

- Q3.2** Do you agree with EFRAG suggestions on the calculation of the value in use and future restructurings?
- Q3.3** Do you agree with EFRAG suggestions on the calculation of the value in use and discount rates?
- Q3.4** Do you agree with EFRAG suggestions on targeting internally generated goodwill?
- Q3.5** Do you have any other suggestions to improve this area of the goodwill impairment test?

Chapter 1: Background

Introduction

- 1.1 On 30 January 2014, the IASB began its Post-implementation Review of IFRS 3 *Business Combinations* (IFRS 3 PIR) by publishing a Request for Information on experience with, and the effect of, implementing IFRS 3.
- 1.2 Respondents to the IFRS 3 PIR raised a number of issues in relation to different aspects of business combinations accounting. Some of these concerns relate to the requirements in IFRS on the subsequent accounting for goodwill, including the goodwill impairment testing requirements in IAS 36 *Impairment of Assets*.
- 1.3 In July 2014, EFRAG together with the ASBJ and the OIC, published a Short Discussion Series Paper [Should Goodwill still not be amortised?](#) ('2014 DP'). The paper reflected the views of a Research Group convened by EFRAG and addressed the following topics:
- d) initial and subsequent accounting for goodwill, including the advantages and disadvantages of reintroducing annual amortisation;
 - e) areas of complexity in IAS 36; and
 - f) possible improvements to the disclosures on goodwill impairment.
- 1.4 Following the replies from constituents and the publication of a [feedback statement](#), in January 2015 the EFRAG Board agreed that work should be continued in particular on the second topic, potential improvements to the impairment test, as such improvements will be relevant regardless of the IASB's decision on reintroducing annual amortisation.
- 1.5 EFRAG considered the main issues raised by constituents and is publishing this Short Discussion Series Paper with a view to make some practical suggestions to address them. EFRAG will draw on the feedback received on this Paper in developing its response to any future IASB proposals arising from its *Goodwill and Impairment* research project.
- 1.6 Since the launch of its research project, the IASB has discussed:
- a) whether changes should be made to the existing impairment test for goodwill and other non-current, non-financial assets;
 - b) the subsequent accounting for goodwill (including the relative merits of an impairment-only approach and an amortisation and impairment approach); and
 - c) the extent to which other intangible assets should be recognised separately.
- 1.7 The IASB has not yet made any tentative decisions on its research project at publication date of this Paper and expects to continue its discussions through 2017. The IASB will then decide the form of public consultation (i.e. Discussion Paper or Exposure Draft).

- 1.8 The Financial Accounting Standards Board ('FASB') has also active projects on its agenda on accounting for identifiable intangible assets in a business combination, goodwill and goodwill impairment. The two boards have been monitoring each other's work and having regular joint meetings to discuss project summaries and progress reports.

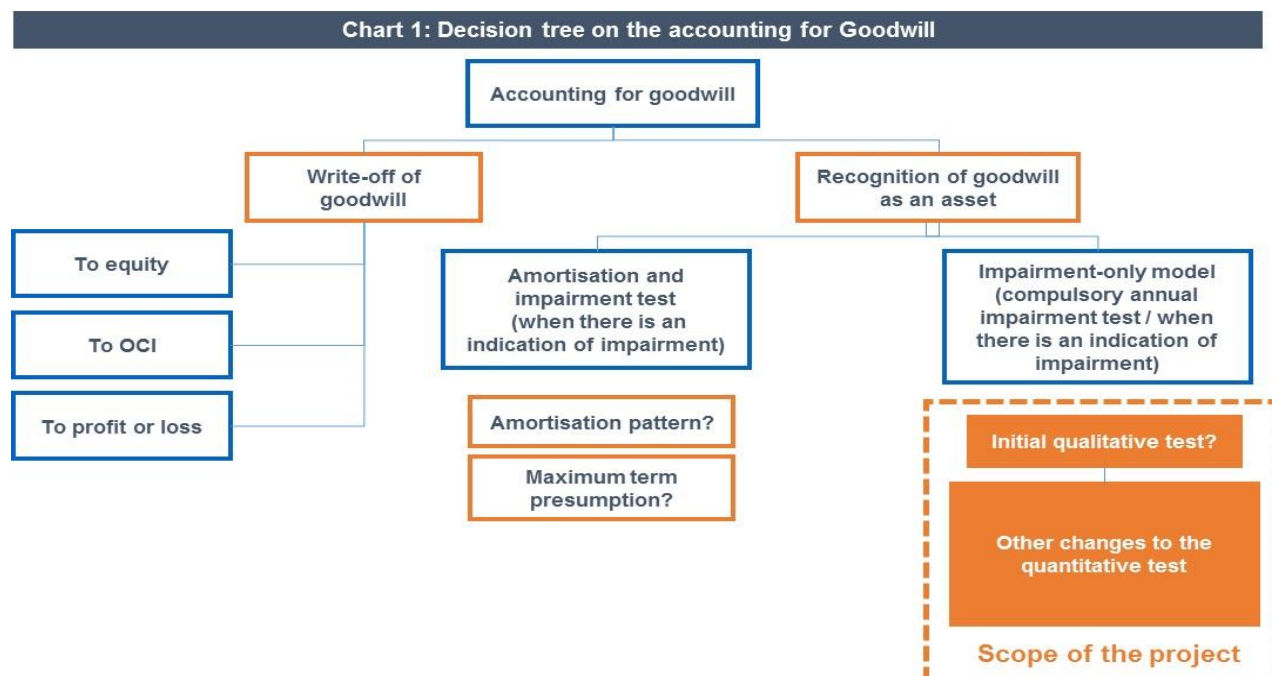
Accounting for goodwill

- 1.9 Accounting for goodwill and goodwill impairment is a complex and controversial topic. Goodwill arises when an entity purchases a business. It is recognised as an asset and measured as the difference between the purchase consideration and the value assigned to the identifiable assets and liabilities of the acquiree, which is the fair value at the acquisition date (with a few exceptions), and the value assigned to any non-controlling interest.
- 1.10 Before the introduction of IFRS 3, goodwill was subject to annual amortisation with a rebuttable presumption that its useful life could not exceed 20 years. After IFRS 3, goodwill is not amortised and is subject to an impairment test.
- 1.11 In general terms, goodwill represents the value of (or amount paid for) an acquired business that cannot be attributed to other recognisable net assets, including the value of synergies expected from the business combination. In accounting terms goodwill may also arise in part from various measurement anomalies and uncertainties, such as measuring deferred tax assets and liabilities on an undiscounted basis. Goodwill does not generate independent cash flows, cannot be transferred independently and cannot be measured directly. For these reasons, there are different views on how goodwill should be accounted for, how an impairment test should be performed and some even question whether it qualifies as an asset.
- 1.12 For example, IFRS Standards, US GAAP, IFRS Standards for small and medium-sized entities ('IFRS for SMEs') and the Directive 2013/34/EU have different requirements in relation to the impairment test of goodwill:
- a) **IFRS Standards:** In accordance with IAS 36, goodwill acquired in a business combination shall be tested for impairment at least annually and whenever there is an indication of impairment. This is sometimes described as a "one-step" approach in that an annual quantitative impairment test is mandatory whether or not there are any indicators of impairment. IAS 36 also clarifies that an entity shall test goodwill for impairment at the level of a cash-generating unit or group of cash-generating units ('CGU') and that an entity records the excess of the carrying amount over the recoverable amount as an impairment loss. For other assets that are subject to annual depreciation or amortisation, IAS 36 requires to assess if an impairment loss may have occurred, based on a number of indicators. If there is an indication of impairment loss, an entity is required to determine the recoverable amount of that asset;

- b) **US GAAP:** In accordance with ASC Topic 350 *Intangibles – Goodwill and Other*, impairment is the condition that exists when the carrying amount of goodwill exceeds its implied fair value. Goodwill has to be tested for impairment at least on an annual basis. For this purpose, an entity may first make a qualitative assessment to determine whether it needs to make a two-step quantitative test. The quantitative impairment test is required only if the fair value of a reporting unit is likely to be lower than the carrying amount. The FASB has recently published an Accounting Standards Update with a view to simplifying the requirements and has removed a second step of the calculation that required to determine the implied fair value of goodwill;
- c) **IFRS for SMEs:** IFRS for SMEs requires goodwill to be amortised. An entity reporting under IFRS for SMEs is required to assess, based on qualitative factors, whether there is any indication that goodwill may be impaired at each reporting date. Although the wording has been simplified and adapted to SMEs, the indicators included in IFRS for SMEs are similar to those in IAS 36. If there is an indication of impairment loss, an entity is required to determine the recoverable amount of that asset; and
- d) **Accounting Directive 2013/34/EU:** The Directive 2013/34/EU requires that goodwill shall be written off over its useful economic life. In exceptional cases where the useful life cannot be reliably estimated, goodwill has to be written off within a maximum period set by a Member State. That maximum period should not be shorter than five years and not exceed 10 years. A value adjustment must be made for a loss in value that is deemed permanent.

Decision tree on accounting for goodwill

1.13 As referred above, there are different views on how to account for goodwill. The following table provides a summarised illustration of the different possibilities, both in relation to initial and subsequent accounting.



Scope and objective of the Short Discussion Series Paper

- 1.14 The objective of this Short Discussion Series Paper is to propose potential improvements to the goodwill impairment test and seek input from constituents on those proposals. While some constituents consider that more fundamental changes are needed, addressing some practical difficulties could be beneficial to:
- a) enhance the application and effectiveness of the impairment test, which should mitigate concerns that recognition of impairment losses may not be timely; and
 - b) address some of the complexity and achieve a better balance between cost and benefits.
- 1.15 EFRAG notes that these two objectives are not necessarily mutually exclusive, but might conflict with each other in some respects. Accordingly, this Paper identifies which of the two objectives each suggestion is primarily aimed at along with potential drawbacks and trade-offs.

Outside the scope of the Short Discussion Series Paper

- 1.16 This Short Discussion Series Paper does not address the following topics:
- a) the identification and measurement of intangible assets in a business combination and the extent to which these should be separated from or subsumed into goodwill;
 - b) advantages and disadvantages of reintroducing annual amortisation; and
 - c) improvements to the disclosure requirements.

For a discussion on topics b) and c), please refer to the 2014 DP.

Chapter 2: Potential improvements to impairment testing requirements

In this chapter, EFRAG describes some of the issues raised by its constituents on the existing impairment testing requirements and discusses possible ways to address them.

Identification of the issues

- 2.1 Many respondents to the 2014 DP considered that the impairment was a challenge in practice and that there was room to improve the guidance in IAS 36. The most common issues and areas of potential improvement were the following:
- a) the perceived late recognition of impairment losses and the overstatement of goodwill;
 - b) the cost and complexity of performing an impairment test;
 - c) the significant judgement involved, which may result in lack of transparency and allow for earnings management;
 - d) the requirement to determine the recoverable amount event when there is no indication of an impairment loss, in contrast to the requirements of US GAAP;
 - e) the requirements on allocation of goodwill to CGUs. Some respondents commented that these should be improved, particularly in relation to the effects of organisational changes, where goodwill is continuously reallocated. Such reallocations could hide potential impairment losses;
 - f) the interaction between the two methods to determine the recoverable amount. Some respondents suggested that approaches that involve only a single measure, instead of IAS 36's 'higher of' method should be investigated;
 - g) the requirement to perform discounted cash flow calculations on a pre-tax basis, which some consider to be problematic; and
 - h) some aspects of the VIU calculation that were considered problematic, particularly the IAS 36 approach to the effect of future restructurings.

Improving IAS 36

- 2.2 In the following paragraphs, EFRAG will illustrate some suggestions to address the concerns in the areas of:
- a) how an entity should allocate goodwill to CGUs;
 - b) when an entity should determine the recoverable amount; and
 - c) how an entity should determine the recoverable amount.

How an entity should allocate goodwill to CGUs

IAS 36 requirements

- 2.3 Goodwill does not generate independent cash flows, therefore an entity is required to identify CGUs or groups of CGUs that are expected to benefit from the synergies of the combination, and allocate goodwill to them. Each identified CGU shall represent the lowest level within the entity at which the goodwill is monitored for internal management purposes, and not be larger than an operating segment determined in accordance with IFRS 8 *Operating Segments*.
- 2.4 If an entity disposes of an operation within a group of CGUs to which goodwill has been allocated, the goodwill associated with that operation shall be included in the carrying amount of the operation when determining the gain or loss on disposal. It should be measured based on the relative values of the operation disposed of and the portion of the CGU retained, unless the entity can demonstrate that some other method better reflects the goodwill associated with the operation disposed of.
- 2.5 If an entity reorganises its reporting structure in a way that changes the composition of one or more CGUs to which goodwill has been allocated, the goodwill shall be reallocated to the units affected. This reallocation shall be performed using a relative value approach similar to that used when an entity disposes of an operation within a CGU, unless the entity can demonstrate that some other method better reflects the goodwill associated with the reorganised units.
- 2.6 In practice, entities often use the pre-acquisition analysis (e.g. due diligence made by the acquirer) to help identify which parts of the group are expected to benefit from the business combination, through expected cost savings and revenue synergies.

Issues identified

- 2.7 Constituents expressed the following concerns:
- a) the allocation of goodwill to CGUs involves a high degree of subjectivity and there is only limited guidance in IAS 36 on how to perform it;
 - b) if there are pre-existing CGUs with recoverable amounts that exceed their carrying amounts ('pre-acquisition headroom'), entities have an incentive to allocate more goodwill to those CGUs in order to 'shield' the newly-purchased goodwill from future impairment losses; and
 - c) after a number of reorganisations, the structure of the group (and CGUs) may bear little or no resemblance to the structure at the time of the acquisition. When goodwill has been repeatedly re-allocated, the information is difficult to explain and understand. Moreover, some noted that re-allocation could be used to hide potential impairment losses.

Suggestion 1: additional guidance on allocation

- 2.8 EFRAG agrees with the principle in IAS 36 that the main driver to allocate goodwill should be the management's analysis of the expected synergies. However, IAS 36 could indicate some guidance on the allocation methods to be used.
- 2.9 For instance, allocation may be based on the pre- and post-acquisition fair value of each CGU (or group of CGUs) that is expected to benefit from the acquisition. More specifically, for each CGU an entity would determine the difference between these two values and use it as a basis for allocation of goodwill.
- 2.10 For example, Company A has two business segments, beverages and soft drinks, which are identified as CGU A and B and monitored for internal management purposes. Company A has just acquired Company B for CU 2 100 which has a single business segment (e.g. beverages). Company A expects that its two business segments will benefit from the acquisition; nonetheless the expected synergies have been calculated for Company A in its entirety (e.g. administrative overheads). In accordance with paragraph 2.9, for allocation purposes, an entity would calculate the pre- and post-combination fair value of the beverages and soft drinks business segments. The difference between the pre- and post-combination could be used as a basis for allocation of goodwill.

Company A acquires company B for CU 2 100

The net identifiable assets recognised by Company A amount to CU 1 800

Company A recognises CU 300 of goodwill

| Company A | Pre-acquisition fair value | Net assets allocated | Post-acquisition fair value | Difference |
|------------------|---------------------------------------|---------------------------------|--|-------------------|
| CGU A | 2 000 | 1 700 | 3 985 | 285 |
| CGU B | 3 100 | 100 | 3 215 | 15 |

The difference can be used as a basis for allocation of goodwill.

- 2.11 Alternatively, entities could be allowed to allocate the goodwill on the basis of the difference between the fair value of the portion of the acquired business to be included in a CGU and the fair value of the net assets of the acquired business that have been assigned to a CGU. In most cases, this method would result in goodwill being allocated based on where the net assets of the acquiree have been assigned and exclude other CGUs that might be affected indirectly by the combination.

- 2.12 For example, Company A acquires Company B that has two different businesses (e.g. beverages and soft drinks). For allocation purposes, Company A would calculate the fair value of the beverage business acquired and the fair value of the net assets associated with that business. The difference between the two, which represents the implicit goodwill of the beverage business acquired, would be allocated to the CGUs of Company A that are focused on the beverage business (where the acquired business has been integrated). Alternatively, such an allocation could be made on a relative basis (i.e. on the weight of implicit goodwill of the beverage business over the total goodwill recognised).

| Company A acquires company B for CU 2 100 | | | | |
|--|-------------------|--|-------------------|--|
| The net identifiable assets recognised by Company A amount to CU 1 800 | | | | |
| Company A recognises CU 300 of goodwill | | | | |
| Company B | Fair value | Net identifiable assets at fair value | Difference | |
| Portion A | 1 500 | 1 300 | 200 | |
| Portion B | 600 | 500 | 100 | |
| The difference is allocated to the CGUs to which the net identifiable assets have been allocated | | | | |

- 2.13 Regardless of the basis of allocation, in principle the method should not result in a decrease of the headroom. The entity would therefore need to apply an 'allocation ceiling' to each CGU in all cases, with any excess goodwill over the aggregated allocation ceiling being written off. The objective is to ensure that goodwill is not allocated in excess to the benefits from the synergies of the combination.
- 2.14 Using the example in paragraph 2.10 above and assuming that the pre-acquisition headroom of CGU A is CU 200, then the post-acquisition headroom of CGU A (i.e. after the allocation of the acquired net assets and goodwill to CGU A) would have to amount at least to CU 200. Therefore, an entity could not allocate more than CU 285 of goodwill to CGU A if this allocation leads to a pre-acquisition headroom equal to post-acquisition headroom. This would ensure that goodwill is only allocated to the CGUs that are actually expected to benefit from the synergies of the combination.

Advantages and disadvantages of the suggestion

- 2.15 The proposed allocation methods would have the benefit of bringing more clarity and transparency into the application of the allocation principles defined in IAS 36, particularly when there is an incentive to shield the purchased goodwill.
- 2.16 The 'allocation ceiling' test would increase cost, since companies are not currently required to measure the headroom in pre-existing CGU. However, EFRAG notes that the IASB has discussed the introduction of a pre-acquisition headroom test.

Suggestion 2: adding information on composition of goodwill

- 2.17 Impairment losses often trigger questions from users about the origin of the goodwill that has been impaired (i.e. the acquisition(s) that gave rise to the goodwill). Since impairment may occur years after the acquisition, and in the meantime the Group organisation may have been modified, the origin of the goodwill impairment (and the residual amounts of goodwill) can become difficult to trace back. There is no current requirement to track goodwill by individual acquisition.
- 2.18 This information gap may be filled by a requirement to disclose a reconciliation of the total goodwill allocated to each CGU. An illustrative example is shown below:

**Goodwill is allocated to the Group's CGU according to business segments.
The carrying amounts of goodwill by CGU at 31 December 201x are summarised below:**

| | CGU 1 | CGU 2 | CGU 3 | Group |
|--------------------------------------|---------------|---------------|---------------|---------------|
| Goodwill related to acquisition of A | 6 500 | 1 500 | 1 265 | 9 265 |
| Goodwill related to acquisition of B | 1 265 | 1 200 | 1 500 | 3 965 |
| Goodwill related to acquisition of C | 1 200 | 1 260 | 1 211 | 3 671 |
| Goodwill related to acquisition of D | 1 200 | 6 500 | 15 200 | 22 900 |
| Total | 10 165 | 10 460 | 19 176 | 39 801 |

- 2.19 The reconciliation could also include a breakdown of the major changes over the reporting period (new acquisitions, reallocations, impairment and disposals).

Advantages and disadvantages of the suggestion

- 2.20 The introduction of the reconciliation would provide a clearer picture of the changes in the allocation and the historical origin of goodwill and would assist users in better assessing its recoverability.
- 2.21 The suggestion does not address the complexity in reallocating goodwill after group reorganisation and introduces some additional cost in tracking the changes over the years; entities may not have the information to apply the disclosure retrospectively.

When an entity should determine the recoverable amount: the 'Step Zero'

IAS 36 requirements

- 2.22 In accordance with IAS 36, an entity is required to determine the recoverable amount of a CGU to which goodwill has been allocated at least annually and whenever there is an indication of impairment. For assets that are subject to annual depreciation or amortisation, IAS 36 requires an entity to assess if an impairment loss may have occurred based on a number of indicators. If there is an indication of impairment loss, an entity is required to determine the recoverable amount of that asset.

Issues identified

- 2.23 Some respondents have raised as a concern that IAS 36 requires an entity to determine the recoverable amount of a CGU even when the likelihood of an impairment is remote. This is perceived as a time-consuming and costly exercise that has no real practical benefit.
- 2.24 Paragraph 99 of IAS 36 allows entities to use the most recent detailed calculation of the recoverable amount as a test for the current period, but subject to strict conditions:
- a) there have been no significant changes in the assets and liabilities of the CGU;
 - b) the most recent detailed calculation showed a significant headroom; and
 - c) based on an analysis of facts and circumstances, the likelihood of an impairment loss is remote.
- 2.25 Some of these respondents pointed out that US GAAP includes the option to perform first a qualitative assessment of the likelihood of an impairment.

Suggestion: introduce a 'Step Zero'

- 2.26 The Step Zero, similarly to US GAAP requirements, would allow an entity to perform a qualitative assessment of the likelihood of an impairment loss. A separate qualitative assessment would be required at least annually for each CGU to which goodwill has been allocated. An entity would not be required to determine the recoverable amount when, and only when, the likelihood of an impairment is assessed to be remote. That is, when it is highly probable that the recoverable amount exceeds the carrying amount.
- 2.27 The introduction of a Step Zero would require more specific and adapted indicators for goodwill, which would build on those in IAS 36. In evaluating whether or not the likelihood of an impairment is remote, an entity would have to assess relevant events and circumstances that could include the following:
- a) Macroeconomic conditions:
 - (i) a decline in general of economic conditions (e.g. equity and credit markets) or limitations on accessing capital;
 - (ii) industry and market considerations such as a deterioration in the environment in which an entity operates or increased competitive environment; and
 - (iii) cost factors such as significant increases in raw materials, labour, or other costs that have a negative effect on earnings and cash flows.
 - b) Conditions specific to the entity/CGU:
 - (i) observable prices for the CGU, such as prices paid by the acquirer or a third party to buy non-controlling interest, vesting or non-vesting of performance-based put/call options on non-controlling interest and the outcome of contingent consideration clauses;

- (ii) significant decline in actual and planned earnings when compared with prior projections;
- (iii) whether the reasons for undertaking the business combination have been met, for example in relation to expected technological innovation, access to markets or realisation of expected synergies from the combination;
- (iv) information from previous impairment calculations, such as whether the most recent calculations have indicated that the recoverable amount of the CGU is significantly greater than its carrying amount and assets and liabilities composing the CGU have not changed significantly since then;
- (v) changes in the way the acquired business is managed or changes in plans, such as restructuring or discontinued operations of the business acquired;
- (vi) restructuring costs are significantly higher than initially expected; and
- (vii) other relevant entity-specific events such as changes in key personnel or customers, contemplation of bankruptcy or litigation.

2.28 An entity would always need to consider all facts and circumstances that could affect the recoverable amount of the CGU.

2.29 It could be possible to add also a quantitative component to the Step Zero in the form of an 'acid test'. For example, a market capitalisation lower than the carrying amount of the net assets (for listed entities) or a decline in the revenues of the CGU of more than a defined threshold could be treated as a determinative indicator that automatically requires an entity to determine the recoverable amount.

2.30 To increase transparency, an entity would have to disclose how it reached a conclusion on its qualitative assessment for each CGU to which a significant amount of goodwill has been allocated. The disclosure could include a description of the significant factors evaluated.

Advantages and disadvantages of the suggestion

2.31 The introduction of the Step Zero would allow entities to avoid the calculation of the recoverable amount when the likelihood of an impairment is remote, and result in a reduction of cost. The additional step is optional, which should avoid any increase in costs or complexity by enabling entities to apply it when they expect it will simplify the overall process. It would provide a broader relief than the existing practical expedient in paragraph 99 of IAS 36.

2.32 The introduction of the Step Zero does not reduce – and possibly increases – the judgement inherent in the impairment assessment.

2.33 Firstly, it requires to set up and assess a likelihood threshold, such as 'remote' (as in paragraph 2.26), 'more likely than not' or 'probable'. Concerns have been expressed on the potential diverging application of probability thresholds in IFRS Standards.

2.34 Secondly, judgement could be difficult when some indicators provide conflicting evidence. It would not be possible to define a precise hierarchy among the indicators.

- 2.35 Thirdly, it may be argued that management would have an incentive to conclude that the likelihood of impairment is remote. The disclosure in paragraph 2.30 would mitigate but not eliminate the risk. EFRAG also acknowledges that requiring an annual calculation of the recoverable amount may benefit management and be an effective tool to monitor the performance of an acquisition.
- 2.36 Finally, there is also the view that a compulsory impairment test is a good management tool to monitor the performance of the acquisition and it is beneficial for users of financial statements when assessing the stewardship of the management. Nonetheless, it is worth noting that the relief referred in paragraph 2.26 would only encompass cases where the likelihood of impairment is remote.

How the entity should determine the recoverable amount: a single calculation approach

IAS 36 requirements

- 2.37 In accordance with IAS 36, a CGU to which goodwill has been allocated is impaired when the carrying amount of that CGU exceeds its recoverable amount. The recoverable amount of the CGU is the higher of its:
- a) **fair value less costs of disposal ('FVLCD')** which reflects the assumptions of market participants; and
 - b) **value in use ('VIU')** which reflects the effects of factors that may be specific to the entity and not applicable to entities in general.
- 2.38 In practice, many companies use a discounted cash-flows calculation (DCF) to determine the recoverable amount, the difference being that FVLCD uses a market participant perspective and VIU uses a management perspective. A report published by ESMA* in 2013 showed that most entities use VIU in a DCF calculation. In a 2013 survey among entities included in the STOXX Europe 600 Index†, 69% of the respondents that used both FVLCD and VIU indicated that the latter is often higher because the market under-priced the company.

Issues identified

- 2.39 Respondents indicated that there was some confusion around the interaction between VIU and FVLCD. It was claimed that users may not understand the different assumptions used under the two methods. Others noted that it was more difficult to challenge management's assertion in relation to VIU.

* European enforcers review of impairment of goodwill and other intangible assets in the IFRS financial statements, ESMA (January 2013).

† European Goodwill Impairment Study, Duff & Phelps (December 2013)

Suggestion: a single calculation approach

- 2.40 From a practical standpoint, requiring or allowing only one method could simplify the impairment test as both preparers and users will not have to consider whether there is a difference in terms of assumptions and inputs used in the discounted cash flow model when calculating the VIU and FVLCD. This could be achieved by retaining only one of the two methods (either VIU or FVLCD) as the measurement of recoverable amount.

Advantages and disadvantages of the suggestion

- 2.41 The elimination of one method would simplify the application of the requirements in those instances where an entity is required to apply both methods, which happens when the first method results in a recoverable amount lower than the carrying amount. This applies to all alternatives.
- 2.42 Each method has its own advantages. **FVLCD** can be based on observable prices, when available (although this is not generally the case), which enhances its reliability. It also has the benefit of allowing an entity to consider cash flows expected to arise from a future restructuring to which a preparer is not yet committed or from asset enhancements.
- 2.43 **VIU** allows entities to consider factors that are more entity-specific, including entity-specific synergies. This would also be aligned with fact that many business acquisitions are motivated by expected synergies and not by a future sale (exit strategies are typically related to investment companies). Finally, the use of VIU reflects the value expected to arise from continuing use of an asset and from its disposal in the future and not the value expected to arise from an hypothetical immediate sale which management does not intend to make. Nonetheless, such an approach is often criticised due to the subjectivity of the assumptions used by preparers. It is often argued that VIU model can be prepared in a way that could delay the recognition of impairment value.
- 2.44 The elimination of one of the methods is a change in the notion of recoverable amount and may be seen to reduce the relevance of the calculation. The IASB would need to consider if this change would be extended to all assets in scope of IAS 36.
- 2.45 The suggestion may result in recognition of more impairment losses compared to the existing requirements. This would be the case when the method applied results in a recoverable amount lower than the carrying amount, and the other method would have resulted in an amount higher than the carrying amount. EFRAG has not investigated how frequent these cases are.

How an entity should determine the recoverable amount: Value in Use and future restructurings

IAS 36 requirements

- 2.46 In accordance with IAS 36, estimating VIU involves estimating the future cash flows to be derived from continuing use of the CGU and from its ultimate disposal. The cash flow projections should be based on reasonable and supportable assumptions and the most recent budgets and forecasts.

- 2.47 The cash flow projections should relate to the asset in its current condition. Thus, the VIU should not reflect cost saving or benefits that are expected to arise from enhancements or future restructurings but to which an entity is not yet formally committed.

Issues identified

- 2.48 It has been claimed that the exclusion of the effect of future restructurings does not reflect how acquirers price the business. Typically, a buyer would incorporate future restructurings and changes in the processes when determining the maximum purchase price to be paid.

Suggestion: allow consideration of future restructurings

- 2.49 The requirements for the VIU measurement should be changed to allow the effect of planned future restructurings (inflows and outflows) to be incorporated in the cash flow projection, even when the threshold to recognise a provision for restructuring costs has not yet been met.
- 2.50 To mitigate these risks, an entity could be allowed to take into account future restructurings only if it has a formal plan (although not yet made public) and/or the restructurings is expected to be completed in the foreseeable future. In addition, an entity may be required to demonstrate the technical feasibility of completing the restructuring plan and the availability of adequate financial and other resources to complete the plan (similar to the guidance in paragraph 57 of IAS 38 to recognise an intangible arising from development).

Advantages and disadvantages of the suggestion

- 2.51 The suggestion could increase the relevance of the VIU calculation and effectiveness of the impairment test because it would take into consideration the dynamic management of the business. It would also simplify the impairment test as it allows entities to use directly their budgets and forecasts, which are likely to include the impact of future restructurings (i.e. without making artificial adjustments to remove future restructurings). It would also eliminate one of the sources of confusion between the VIU and the FVLCD method and would allow management to better explain to users of financial statements their intentions towards the business acquired.
- 2.52 If an acquirer has incorporated the effects of future restructurings in pricing the acquisition, the exclusion of these effects may result in recognition of an impairment loss, which according to IAS 36 cannot be reversed. The suggested change would avoid this.
- 2.53 The suggestion would also have the following consequences:
- a) it may be difficult to identify the unit of account, if the restructuring is expected to modify the existing Group reporting structure;
 - b) it may require long-term projections (in some cases exceeding the 5-year usual term). When the restructuring process takes a number of years to be completed, its final outcome may differ significantly from the original expectations; and

- c) it would change the current notion in IAS 36 that the entity should assess the recoverable amount of the asset/CGU in its current state.

How an entity should determine the recoverable amount: Value in Use and discount rates

IAS 36 requirements

- 2.54 IAS 36 requires the use of a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the asset/CGU. The discount rate should not reflect risks for which future cash flows have been adjusted and should equal the rate of return that investors would require if they were to choose an investment that would generate cash flows equivalent to those expected from the asset/CGU, in terms of amount, timing and risk profile. Since the discount rate is determined on a pre-tax basis, future cash flows are also estimated on a pre-tax basis.
- 2.55 The discount rate is estimated from the rate implicit in current market transactions for similar assets or from the weighted average cost of capital of a listed entity that has a single asset (or a portfolio of assets) similar in terms of service potential and risks to the asset under review. When an asset-specific rate is not directly available from the market, an entity uses surrogates to estimate the discount rate.
- 2.56 When the basis used to estimate the discount rate is post-tax, that basis is adjusted to reflect a pre-tax rate. In accordance with paragraph Z85 of the Basis for Conclusions on IAS 36, the pre-tax discount rate is best determined by an iterative computation and not by grossing up the post-tax discount rate by a standard rate of tax. It is suggested that a simple gross-up does not usually work because it ignores the timing of creation and reversal of future temporary differences. That is, a simple gross up will provide a correct pre-tax discount rate only if the amount and timing of the future tax cash flows is pro rata to the pre-tax cash flows.

Issues identified

- 2.57 Determining the discount rate is often mentioned as a problematic area. In particular, it has been claimed that in many cases, entities can observe only post-tax rates and it is difficult to calculate an appropriate pre-tax rate. In addition, the use of pre-tax discount rate could be challenged. These respondents did not see the benefit of using a pre-tax rate (on pre-tax cash flows) when compared to a post-tax rate (on post-tax cash flows) and did not understand why a pre-tax calculation would provide superior information to users. These respondents also noted that academic books often estimated future cash flows on a post-tax basis using a corresponding post-tax discount rate.
- 2.58 In many cases, the test is conducted on a post-tax basis with an additional iteration performed simply to derive a pre-tax discount rate.

Suggestion: allow the use of a post-tax rate

- 2.59 The requirements should be changed to allow entities an election between a pre-tax or post-tax calculation. Entities would need to disclose the basis chosen.

Advantages and disadvantages of the suggestion

- 2.60 The inclusion of a choice would simplify the calculation of VIU and reduce the cost when entities only have observable post-tax discount rates for an asset/CGU. Entities usually use WACC as a starting point for determining the discount rate, and the WACC is typically a post-tax rate.
- 2.61 The relevance of the calculation would not be affected, because the two basis should result in the same recoverable amount when the pre-tax rate is adjusted to reflect the timing of creation and reversal of temporary differences.
- 2.62 However, allowing a post-tax basis could raise some issues. For example, it is unclear if this would have implications on the composition of the CGU and calculation of the amount of tax that should be allocated to the different CGUs. Moreover, since the estimates of future cash flows should include cash inflows or outflows from income tax receipts or payments, a number of practical questions would arise (as noted in paragraphs BCZ81 to BCZ84 of the Basis for Conclusions of IAS 36), such as how should deferred taxes be reflected in the future cash flows or if the carrying amount of the CGU should be equally adjusted.
- 2.63 In this process, entities will have to ensure that the carrying amount of a CGU shall be determined on a basis consistent with the way its recoverable amount is determined. For instance, entities will have to ensure that estimates of future cash flows are aligned with the principles of IAS 12 *Income Taxes* (e.g. future tax benefits arising from existing deductible differences should be measured consistently with the recognised deferred tax assets).

How an entity should determine the recoverable amount: targeting internally generating goodwill

Issues identified

- 2.64 The stated objective of the impairment test would be to ensure that the goodwill purchased is not carried at an amount higher than its recoverable amount. Since goodwill is not directly measurable and can only be tested at the CGU level, there are a number of 'buffers' that can potentially offset an impairment loss.
- 2.65 One of these is due to the fact that after the business combination, the acquirer may generate additional goodwill through its efforts and investments. Conceptually, this is not part of the purchased (and paid for) goodwill.
- 2.66 BC131E of IAS 36 acknowledges that 'if goodwill is an asset, in some sense it must be true that the goodwill acquired in a business combination is being consumed and replaced provided that the entity is able to maintain the overall level of goodwill (by, for instance, expending resources on advertising and customer service)'. However, the IASB concludes that it is not possible to measure the two components separately.
- 2.67 Critics argue that this creates a conflict with IAS 38 *Intangible Assets* because IAS 38 does not allow capitalisation of internally generated goodwill, and therefore an accounting arbitrage – entities have an accounting incentive to grow through mergers and acquisitions rather than by internal growth.

Suggestion: the goodwill accretion

- 2.68 IAS 36 should require entities to make an adjustment when testing purchased goodwill in order to eliminate the effect of the internally generated goodwill. The adjustment would be made by means of a 'goodwill accretion' and would be determined only for the purpose of the impairment test with no recognition in the financial statements.
- 2.69 Each year, the entity would determine an accretion amount by multiplying the opening balance of goodwill by the discount rate at the end of the prior period. This amount would be added to the carrying amount of the CGU. If no impairment loss is recognised, the balance of accretion would be carried forward. When the inclusion of the accretion results in the recognition of an impairment loss, the balance of the accretion would be correspondingly reduced. The entity would continue to determine the accretion until the goodwill is fully written off. Appendix 2 provides an illustrative example.

Advantages and disadvantages of the suggestion

- 2.70 The suggestion aims to mitigate the buffer of the post-acquisition internally generated goodwill. Since no direct measurement is possible, the rate at which goodwill is internally-generated must be based on assumptions. An essential feature of the approach should be its cost effectiveness and simplicity.
- 2.71 The approach is meant to reflect that the acquirer consumes the purchased benefits over time. In other words, the useful life of the purchased goodwill is finite, although not determinable.
- 2.72 In practice, it can be observed that the recoverable amount of a business is maintained or even increased over time. However, any increases in value generated long after the acquisition are more likely to be related to the actions taken and investments made by the acquirer rather than to the acquisition itself.
- 2.73 The approach uses a rate of accretion equal to the return expected on the acquisition. For an acquisition to be successful, the return earned annually by the acquirer should be at least equal to the discount rate, which reflects the time value of money, the variability of the expected future cash flows and the risk inherent in the business acquired.
- 2.74 Purchased goodwill could be pictured as the present value of expected future cash flows in excess of identifiable assets, measured at the date of acquisition. As time passes, the present value of these cash flows should increase by the unwinding of the discount.
- 2.75 EFRAG considers that the goodwill accretion does not create a conflict with the general objective in IAS 36. The stated objective is that an asset should not be carried at an amount higher than its recoverable amount; the accretion is compatible with an objective to measure the whole CGU at its recoverable amount, net of the unrecognised internally generated goodwill.
- 2.76 The approach is cost effective because it only needs input that are already available to the entity (the carrying amount of the goodwill and the discount rate). Its application is relatively simple, as in substance it is a calculation of a notional interest. In addition, the approach is effective regardless of whether the goodwill is allocated to pre-existing CGU or the purchased business.

- 2.77 EFRAG acknowledges that the accretion is based on an assumption about the rate at which goodwill is generated internally, rather than a direct measurement. This reflects the considerable challenges in measuring internally-generated goodwill separately and a need to ensure the approach is operational and cost-effective.
- 2.78 The application of the goodwill accretion does not automatically lead to an annual impairment loss. EFRAG acknowledges that some disagree with the notion that purchased goodwill is being consumed over time and has therefore a finite life; others instead believe that if this notion was correct, then it would be appropriate to have a regular annual amortisation.

Appendix 1 – Goodwill accretion: illustrative example

- 1 The appendix includes an illustrative example and discusses some specific application issues.

Illustrative example

- 2 During Year 0, Entity A acquires Business B. After completing the purchase price allocation, goodwill is measured at CU 100. Entity A determines that Business B is a CGU and allocates 100% of the purchased goodwill to it. At the end of Year 0, Entity A determines a discount rate of 7%.
- 3 Each year, the entity would determine an accretion by multiplying the opening balance of goodwill by the discount rate at the end of the prior period. It would then be added to the carrying amount of the CGU or deducted from the recoverable amount.
- 4 The following table illustrates the application in Years 1, 2 and 3 and the way the cumulated accretion balance would change.

| | Year 1 | Year 2 | Year 3 |
|--------------------------------|--------|--------|--------|
| Recoverable amount of CGU | 320.0 | 284.0 | 275.0 |
| Opening balance of accretion | 0.0 | 7.0 | 13.0 |
| Accretion of the year | 7.0 | 6.0 | 7.3 |
| Adjustments due to impairments | 0.0 | 0.0 | -9.0 |
| Cumulated accretion | 7.0 | 13.0 | 11.3 |
| Adjusted recoverable amount | 313.0 | 271.0 | 263.7 |
| Carrying amount of net assets | 200.0 | 180.0 | 168.0 |
| Carrying amount of goodwill | 100.0 | 100.0 | 91.0 |
| Total CGU | 300.0 | 280.0 | 259.0 |
| Impairment losses | 0.0 | -9.0 | 0.0 |
| CA of goodwill less impairment | 100.0 | 91.0 | 91.0 |

- 5 At the end of Year 1, the entity does not recognise an impairment loss and carries forward the balance of CU 7. The entity updates the discount rate to 6%.
- 6 At the end of Year 2, the entity recognises an impairment loss of CU 9 and updates the discount rate to 8%. The closing balance of goodwill is CU 91.
- 7 In Year 3, the entity decreases the cumulated accretion by CU 9 and calculates an accretion for the period equal to $CU\ 91 \times 8\% = CU\ 7.3$. The entity does not recognise any impairment loss and carries forward the cumulated balance of CU 11.3.

Original or revised accretion rate?

- 8 EFRAG has considered whether the accretion should be computed based on the original discount rate (that is, the discount rate used for the first impairment test) or an updated rate.

- 9 Updating the accretion rate is more consistent with the overall impairment test model. However, it would imply that a decrease in the discount rate leads both to an increase in the recoverable amount (assuming no changes in the nominal cash flows) and to a decrease in the accretion. Both these effects would make the recognition of an impairment less likely.
- 10 This could be seen as counterintuitive, because a decrease in discount rates makes credit cheaper and allows entities to invest more in the purchased business, which may be conducive to a higher rate of creation of internally generated goodwill.
- 11 If the accretion rate were not updated, this would create an application issue when goodwill from a new acquisition is added to a CGU that already includes some from a prior business combination. In that case, the entity would have to test separately the two portions.
- 12 The approach attempts to simulate the rate of creation of internally generated goodwill. The original rate represents the return that the investor is willing to accept on the investment and the revised rate represents the current expected return. EFRAG does not hold strong views on the issue. An approach based on an updated rate seems to be simpler to apply.

How do partial disposals or distributions affect the calculation?

- 13 Paragraph 86 of IAS 36 indicates that if the entity disposes an operation within a CGU to which goodwill has been allocated, (part of) the goodwill should be included in the operation disposed and derecognised.
- 14 The paragraph addresses disposals, which is not a defined term under IFRS. However, IFRS 5 *Non-current Assets Held for Sale and Discontinued Group* includes the notion of disposal groups – and disposal groups can be classified as either held for sale or held for distribution to owners. It may therefore be concluded that paragraph 86 of IAS 36 also applies to non-monetary distribution to owners.
- 15 After a partial sale or distribution, the cumulated balance of the accretion should be reduced in the same proportion of the portion of the goodwill that has been de-recognised, unless the entity can demonstrate that another basis is more appropriate.
- 16 The rationale is that the operation disposed is likely to include a portion of internally generated goodwill after the acquisition. Therefore, the buffer is likely to be reduced, which should result in a reduction of goodwill accretion included in the impairment test after the disposal.
- 17 A cash distribution should not influence the accretion. The accretion does not depict the distribution of the benefits to the owners.

Appendix 2 – Some background data

EFRAG's quantitative study on goodwill and goodwill impairment

- 1 In September 2016, EFRAG published a quantitative study on goodwill and goodwill impairment. The objective of the study was to provide some evidence on how goodwill and goodwill impairment have evolved over time. The study presented an analysis of approximately 300 major European companies from 2005 to 2014 on:
 - a) absolute amounts of goodwill and goodwill impairments;
 - b) relative weight of goodwill compared to total assets and equity;
 - c) distribution of goodwill and impairment losses across the entities in the sample;
 - d) comparison of the trend of impairment losses and market capitalisation; and
 - e) a breakdown of the overall data by industry.
- 2 The full study can be found [here](#). A summary of the key findings in Europe can be found below:
 - a) from 2005 to 2014 the total amount of goodwill recognised increased from 935 billion euros to 1.341 billion euros, representing an increase of 43%;
 - b) a small number of companies accounted for a large share of the carrying amount of goodwill and impairment losses recognised;
 - c) the ratio goodwill to total assets had remained stable over the years at approximately 4%. The ratio was significantly higher when entities in Financials industry are excluded but had been gradually decreasing since 2009;
 - d) the ratio goodwill to net assets had been decreasing since 2008, but it was still significant in 2014 (29%);
 - e) the amount of impairment losses recognised was at the highest level in 2008 and 2011, years when the performance of the financial markets was negative. On average, companies with goodwill at the beginning of the year impaired 3% of their opening balance of goodwill. Companies that recognised a loss impaired, on average, 6% of their opening goodwill; and
 - f) absolute and relative levels of goodwill and impairment losses varied significantly across industries.

Analysis of market-to-book ratio of the S&P 350 Europe sample

- 3 Based on the feedback received, EFRAG further analysed the data and added some findings on the relationship between the market-to-book ratio and goodwill.

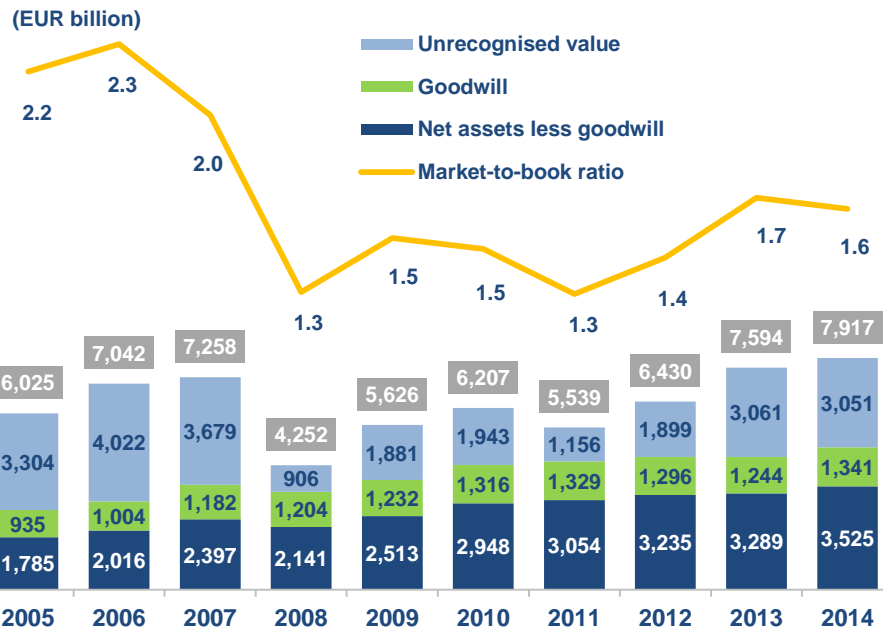
What is the market-to-book ratio and why is it important?

- 4 *The Conceptual Framework for Financial Reporting* defines equity as the residual interest in the assets of an entity after deducting all its liabilities. It is also known as the **book value of equity** and represents an accounting measure of the net worth of the firm.
- 5 The **market value of equity** or market capitalisation is calculated by multiplying the number of shares outstanding by the market price per share.
- 6 The relation of the book value of equity and its market value, typically expressed in the form of the market-to-book ratio, is a topic of longstanding interest in finance. This ratio is often used by investors and analysts to explain patterns in stock returns.
- 7 When the ratio is higher than one, it means that the market assigns a higher value to an entity than its book value. This market premium can depend on various factors such as the entity's industry, the nature of the entity's assets and liabilities, and the entity's specific attributes. The following explanations for such a premium are possible:
 - a) many assets are measured based on their historical cost rather than their fair value or what investors expect those assets to produce in the future (e.g. intangible assets, such as brands and property, plant and equipment and intangible assets); and
 - b) many of the company's assets are not recognised in the statement of financial position (e.g. quality of the management team, value of research and innovation, relationships with customers and suppliers, entity's reputation, etc.).
- 8 IAS 36 indicates that a market capitalisation lower than the carrying amount of equity (i.e. a market-to-book ratio lower than 1) is one of the external sources of information that suggest likelihood of impairment, because the market perceives that the book value of equity is not recoverable. On the other hand, IAS 36 requires determining the recoverable amount as the higher of the FVLCD and VIU. Therefore, a market capitalisation lower than the book value of equity does not need to result in recognition of an impairment loss, if the management assumptions are more optimistic than the market participants' are.

Quantitative data

- 9 The following graph illustrates the trends in the year-end market capitalisation, disaggregated into the following three components:
 - a) goodwill;
 - b) net assets other than goodwill; and
 - c) unrecognised value (that is, the difference between the year-end market capitalisation and net assets including goodwill). This difference represents the value that the market assigns to the companies but that is not recognised in the financial statements.
- 10 The unrecognised value is a large portion of the market capitalisation and it is mostly driven by market fluctuations rather than changes in recognised goodwill.

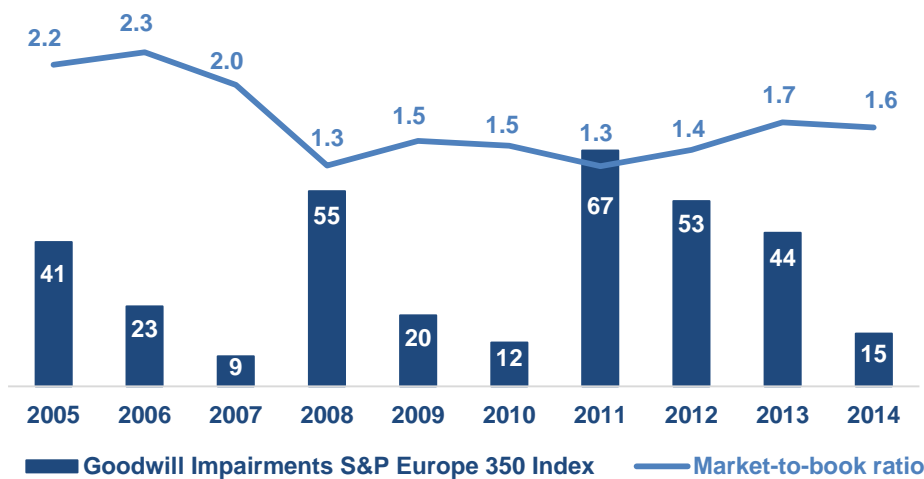
Market capitalisation, goodwill, net assets less goodwill and market-to-book ratio - S&P 350 Europe



Note: Figures in grey boxes represent the market capitalisation, which is equal to the sum of the market premium (light blue), goodwill (green) and net assets less goodwill (dark blue).

- 11 The following graph shows that the average market-to-book ratio for the sample at its lowest levels in 2008 and 2011, despite the significant goodwill impairment losses that were recorded in those two years.

Market-to-book ratio and goodwill impairments (goodwill impairments are in billion euros)



- 12 EFRAG further investigated the frequency and intensity of goodwill impairment losses in entities having a market-to-book ratio lower than one.

13 On average during the period:

- a) of all companies in the sample reporting goodwill, 20% had a ratio lower than 1 at year-end (34% of those with ratio lower than 1, had a ratio of goodwill over net assets higher than 30%); and
- b) out of these companies, 40% reported a goodwill impairment loss during the period (or 60% did not). These companies impaired 4% of the opening balance of goodwill, which is lower than the average 6% of the sample (see paragraph 3e).

| | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|--|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Number of companies with goodwill [a] | 295 | 298 | 289 | 291 | 290 | 297 | 299 | 295 | 300 | 306 |
| How many of these have market-to-book ratio lower than 1? [b] | 17 | 12 | 26 | 99 | 67 | 67 | 99 | 81 | 56 | 61 |
| % [b] / [a] | 6% | 4% | 9% | 34% | 23% | 23% | 33% | 28% | 19% | 20% |
| How many of these with market-to-book ratio lower than 1 recorded goodwill impairment [c]? | 5 | 2 | 6 | 50 | 31 | 31 | 42 | 40 | 28 | 26 |
| % [c] / [b] | 29% | 17% | 23% | 51% | 46% | 46% | 42% | 49% | 50% | 43% |
| How much of their opening goodwill they impaired? | N/A | 1% | 2% | 7% | 3% | 2% | 8% | 6% | 7% | 2% |
| What was the year-end market-to-book ratio of companies under [c]? | 0.7 | 0.9 | 0.8 | 0.6 | 0.7 | 0.7 | 0.5 | 0.6 | 0.7 | 0.7 |

- 14 Finally, EFRAG investigated if the market-to-book ratio is affected by the relative size of goodwill compared to total assets, to assess if markets allocate a premium (or a discount) to entities with significant goodwill. The table does not suggest that there is a correlation.

| | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|--|------|------|------|------|------|------|------|------|------|------|
| Market-to-book ratio of companies with no goodwill | 1.9 | 1.4 | 2.2 | 1.2 | 1.7 | 2.0 | 1.8 | 2.3 | 2.0 | 2.6 |
| Market-to-book ratio of companies with goodwill over net assets lower than 30% | 2.3 | 2.4 | 2.0 | 1.2 | 1.2 | 1.2 | 1.0 | 1.1 | 1.2 | 1.1 |

| | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|---|------|------|------|------|------|------|------|------|------|------|
| Market-to-book ratio of companies with goodwill over net assets higher than 30% | 2.1 | 2.4 | 2.1 | 1.4 | 1.8 | 1.7 | 1.6 | 1.8 | 2.5 | 2.5 |



EFRAG receives financial support of the European Union - DG Financial Stability, Financial Services and Capital Markets Union. The contents of this document is the sole responsibility of EFRAG and can under no circumstances be regarded as reflecting the position of the European Union.