



December 2013

2013 European Goodwill Impairment Study

Introduction

Duff & Phelps is pleased to launch its inaugural study of goodwill impairments in European companies. The 2013 European Goodwill Impairment Study (2013 Study) examines general goodwill impairment trends across countries and industries within the European market. The 2013 Study analyses companies in the STOXX® Europe 600 Index, which represents large, mid and small capitalisation companies across 18 countries of the European region. The 2013 Study also includes:

- A survey of financial executives of European companies, focusing on the challenges faced when performing goodwill impairment tests in accordance with IAS 36 *Impairment of Assets*.
- Findings from conversations with selected European investors and analysts on their views of the meaning of goodwill

and goodwill impairments, and how they use that information.

 An interview with Professor Erik Peek, Duff & Phelps Chair in Business Analysis and Valuation at Rotterdam School of Management, Erasmus University, in the Netherlands. One area of Professor Peek's current research focuses on goodwill impairments in European publicly-listed companies.

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Introduction (continued)

The three years covered by the 2013 Study (i.e. 2010, 2011 and 2012) were marked with continued economic uncertainty within Europe. Concerns about the possibility of a global sovereign debt crisis first surfaced in late 2009 and early 2010 due to investors' reactions to increasing budget deficits in several Eurozone member states, especially Greece. The debt crisis escalated to other countries, with Greece, Ireland and Portugal all forced to request financial aid (in the form of bailout packages) during 2010 and 2011. Markets reacted negatively to a second Greek bailout agreement in mid-2011 and the crisis spread further to Spain and Italy. Various policy measures undertaken by European institutions and the International Monetary Fund throughout the crisis finally resulted in a late-2012 stabilisation of financial markets and significant declines in sovereign yield spreads of the affected countries.

Notwithstanding these improvements, events during 2013 (e.g. the Cyprus bail-in package) have demonstrated that the European sovereign crisis is not yet over. Growth prospects throughout the crisis have weakened, with economies in several European countries contracting during this period. As a group, the companies within the STOXX® Europe 600 Index performed relatively well over the three-year period, with the index rising over 20% during that time. However, the performance of individual companies in particular industries and countries within the index has varied significantly.

During periods of economic uncertainty, a company's expectations about the future cash flows that will be generated by its assets may decrease, leading to a greater likelihood of impairment, all else being equal. Furthermore, a decrease in the market capitalisation of a company below its book value is an indicator that goodwill, if present, may be impaired. This is in part why standard setters and regulators recently have been focusing on goodwill and goodwill impairments.

Hans Hoogervorst, chairman of the International Accounting Standards Board (IASB), criticised the application of IAS 36 in a June 2012 speech:

"In practice, these [goodwill] 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."

He also indicated in that speech that the IASB, which is the body that is responsible for developing International Financial Reporting Standards (IFRSs), may look at goodwill impairment testing in the context of its post-implementation review of IFRS 3 *Business Combinations*, which is currently being undertaken as of the publication date of this report.

In January 2013, the European Securities and Markets Authority (ESMA) published a report, *European enforcers review of impairment of goodwill and other intangible assets in the IFRS financial statements*, documenting its review of the accounting practices of European companies applying IAS 36 in their 2011 financial statements.¹ Specifically, the report noted that companies are:

- Providing disclosures about goodwill impairment that are boilerplate and not entity-specific;
- Not providing enough information about their key assumptions;

- Not consistent in their application of the required sensitivity analysis;
- Sometimes using entity-specific cash flows, rather than market participant cash flows, in determining fair value less costs to sell (now referred to as "fair value less costs of disposal" in IAS 36); and
- Applying "ambitious and optimistic" long-term growth rates and not being specific enough in their disclosure of discount rates.

Those findings have since influenced ESMA's enforcement priorities, as noted in its 11 November 2013 public statement on European common enforcement priorities for 2013 financial statements.² In addition to other matters, the public statement suggests that publicly-listed companies and their auditors should consider the following in relation to the application of the impairment test for nonfinancial assets in accordance with IAS 36:

- The cash flow projections used in determining value in use should be based on reasonable and supportable assumptions, with greater weight given to external evidence;
- The disclosure of key assumptions (in addition to terminal growth rate and discount rate) used in determining value in use should be provided at an appropriate level of disaggregation such that they are specific to the entity's particular cash-generating units; and
- The required disclosure of sensitivity analysis should be provided, and it is particularly important the closer the company is to recognising a goodwill impairment.

2 The public statement is available at http://www.esma.europa.eu/content/European-common-enforcement-priorities-2013-financial-statements

¹ The report is available at http://www.esma.europa.eu/content/European-enforcers-review-impairment-goodwill-and-other-intangible-assets-IFRS-financial-sta

Highlights of the 2013 Study

The 2013 Study focused on financial data for companies in the STOXX® Europe 600 Index for the period 2010-2012.³ The procedures described in Appendix 1 were undertaken to arrive at the final data set, which was used to calculate all ratios and summary statistics throughout the 2013 Study.

Some highlights of the 2013 Study include:

- The total amount of goodwill impaired by European companies in the STOXX® Europe 600 Index in calendar year 2012 of €65.5 billion was a decrease of approximately 15% from the €77.2 billion of aggregate goodwill impaired in 2011. The significant increase in 2011 (from €15.2 billion in 2010 to €77.2 billion in 2011) may be driven in part by the sovereign debt crisis that affected many European companies.
- In terms of geography, the United Kingdom recorded the largest goodwill impairments overall in 2012, recognising aggregate impairments of €22.8 billion (£18.5 billion).⁴ Companies in Italy had the second highest level at €11.2 billion, followed by companies in France at €9.6 billion.
- In terms of industry, Telecommunication Services recorded the largest goodwill impairments overall in 2012, with aggregate goodwill impairments of €23.4 billion. Financials and Materials were the next two industries most affected, with aggregate goodwill impairments of €15.2 billion and €14.2 billion, respectively.

 In 2012, the median market-to-book value ratio was 1.2x for companies that recognised a goodwill impairment, compared with 1.7x for all companies in the 2013 Study.

Highlights of the 2013 Survey

The 2013 Survey was carried out by Mergermarket in the summer of 2013 through telephone interviews with 150 European financial executives across a variety of industries in the following geographic regions:

- Benelux (Belgium, the Netherlands, Luxembourg)
- DACH (Germany, Austria, Switzerland)
- France
- Nordics (Denmark, Norway, Sweden, Finland)
- Southern Europe (Italy, Portugal, Spain)
- United Kingdom

Appendix 2 summarises the 2013 survey methodology and the number of survey respondents by industry and region.

Key findings from the survey include:

- Approximately 41% of European companies responding to the survey recognised a goodwill impairment in 2012. Geographically, impairments were concentrated in the Southern Europe region and the United Kingdom.
- Overall market conditions and general industry downturns were given as the most common reasons for the goodwill impairments, with 62% of companies

surveyed impairing between 20% and 50% of their goodwill balance in 2012.

- The survey was conducted before most entities in Europe began applying IFRS 13 *Fair Value Measurement*. Consequently, the survey asked whether the introduction of IFRS 13 will change their measurement of fair value less costs of disposal in determining recoverable amount under IAS 36. More than two-thirds of respondents think that IFRS 13 will change the way they measure fair value less costs of disposal.
- Companies anticipate that their biggest challenges in applying IFRS 13 may be determining the appropriate grouping of non-financial assets, determining the principal (or most advantageous) market, and making appropriate market participant assumptions.

Note that some of the results of the 2013 Survey may differ from those in the 2013 Study because of the different samples used and metrics analysed.

- 3 The STOXX® Europe 600 Index is derived from the STOXX® Europe Total Market Index and is a subset of the STOXX® Global 1800 Index. The index is weighted according to free-float market capitalisation. For more information, see http://www.stoxx.com/indices/index_information.html?symbol=SXXP
- 4 From a geography standpoint, part of the differences in aggregate impairment amounts may be driven by the composition of the index. For example, in 2012 the United Kingdom had a significant weighting in the STOXX® Europe 600 Index, with U.K.-based companies representing approximately 29% of the index members.

Introduction (continued)

Views from the European Investment Community

Since the global financial crisis began in 2008, it has become clear that users of financial statements (investors and investment analysts) need transparent information to maintain their confidence in a company. Companies are consistently asked to explain the amounts reported in their financial statements. Consequently, the 2013 Study includes information obtained from informal discussions with a sample of European investors and analysts about how they use information about goodwill and goodwill impairments when assessing the value and performance of a company.⁵ We also asked them how, in their view, companies can improve how they present information about goodwill (that is, how it arises) and goodwill impairments (that is. what led to its decline in value).

Many of the discussions with investors focused on disclosures since these are investors' main source of information about goodwill. Investors use that information to hold management accountable for the results of an acquisition.

Investors and analysts often find that it is difficult to monitor the results of major acquisitions, and some would prefer that companies provide information about major acquisitions separately, even if the accounting rules require presentation at a higher level. Some suggested that management should provide the key performance indicators that it will track from the acquisition, such as revenue growth or margins of the acquired company. To assess whether an acquisition was successful, they suggested that management should report to what extent it has reached those targets, including the level of synergies achieved relative to those that were originally planned. However, they recognise that if acquisitions are integrated effectively such information may be difficult if not impossible for management to provide.

Another suggestion was that companies should focus more on telling the "story" behind the impairment and to supplement that story with numbers. In their view, doing so would improve the relevance of the information provided, as long as the "story" was specific to the company and did not result in boilerplate information.

Many of the investors and analysts interviewed think that the results of the annual impairment test come too late. In their experience, impairments are often reported after the market has determined that the target company is not performing as well as expected. However, some think that the recognition of a goodwill impairment is positive news, because it shows that management recognises that "things are not going as well as planned" and is taking steps to resolve the problem.

5 For the 2013 Study we had informal in-person and telephone interviews with approximately ten senior investment professionals that use the financial information of European companies. The views expressed in this report reflect those of the investors and analysts with whom we consulted, and different users of financial statements may have different views.

Goodwill Landscape

The graphic below captures the evolution of goodwill from 2010-2012 for the companies within the STOXX® Europe 600 Index used in the 2013 Study.

The top panel of the graphic shows European goodwill activity, comparing the aggregate amount of goodwill added to the balance sheets during the year (amounts in blue font) compared with goodwill impairments (GWI) taken during the year (amounts in red font). The end-of-year (EOY) aggregate goodwill balance is shown on the sliding scale. Overall, more goodwill has been added by European companies than has been impaired over the three-year period. For example, in 2012 €98 billion of goodwill was added to the balance sheets of companies included in the 2013 Study and €65 billion of goodwill was impaired, resulting in a net increase in goodwill of €33 billion. Over the three-year period, aggregate goodwill impairments were highest in 2011 at €77 billion.

A limited number of events can have a dramatic effect on the annual impairment amounts. This is highlighted by the concentration of goodwill impairment amounts recorded in the top three impairment events, as shown in the middle panel. The top three events accounted for 30-40% of all goodwill impairments across the three years studied.

Lastly, although not a sole or definitive indicator of impairment, market capitalisation should not be ignored during a goodwill impairment test. Median market-to-book ratios for all companies included in the 2013 Study, as well as for those companies that recorded a goodwill impairment, are shown in the bottom panel of the graphic. Market-to-book value ratios were lowest in 2011.⁶



6 The market-to-book ratio is calculated as a company's market capitalisation divided by its reported book value of equity.

Overview of IAS 36 Requirements

Recognising Goodwill

Goodwill is defined in IFRS 3 as "an asset representing the future economic benefits arising from other assets acquired in a business combination that are not individually identified and separately recognised." Internally generated goodwill cannot be recognised. In a business combination goodwill is measured as follows:⁷



Amount of any non-controlling interest in the acquiree

+

Fair value of any previously held equity interest in the acquiree

Fair value of the acquiree's identifiable net assets acquired



Allocating Goodwill to Cash-Generating Units

Goodwill acquired in a business combination is allocated at the acquisition date to an entity's cash-generating units that are expected to benefit from the synergies of the combination. Goodwill is allocated at the lowest level within the entity at which goodwill is monitored for internal management purposes. A cash-generating unit cannot be larger than an operating segment as defined in IFRS 8 *Operating Segments*.

Recognising a Goodwill Impairment Loss

Goodwill is impaired if the recoverable amount of a cash-generating unit is less than its carrying amount. The recoverable amount of a cash-generating unit is the higher of its: (i) fair value less costs of disposal and (ii) value in use.⁹ IFRS 13 provides guidance for measuring fair value and IAS 36 provides guidance for measuring value in use.

Any impairment loss is allocated first to reduce the carrying amount of goodwill to zero. Any remaining impairment loss is allocated to the other assets of the cashgenerating unit on a pro-rata basis. Once a goodwill impairment has been recognised it cannot be reversed.

Timing of Goodwill Impairment Tests

Goodwill must be tested for impairment at least annually, or more frequently if there are indicators that it may be impaired. Factors indicating that a cash-generating unit may be impaired include, for example:

- Significant adverse changes have occurred during the period in the technological, market, economic or legal environment that have an effect on the entity, indicating that economic performance is or will be worse than expected.
- Market interest rates or other market rates of return on investments have increased during the period, and those increases are likely to decrease the asset's recoverable amount materially.
- The carrying amount of the net assets of the entity is greater than its market capitalisation.

The annual goodwill impairment test for a cash-generating unit to which goodwill has been allocated can be performed at any point throughout the annual period. However, the test must be performed at the same time each year.

Although not a sole or definitive indicator of impairment, a company's market capitalisation should not be ignored during a goodwill impairment test. Understanding the dynamics of market-to-book ratios is informative, but the fact that an individual company has a ratio below 1.0 does *not* by default result in failing an impairment test. Cash-generating unit structures, their respective performance and where the goodwill resides are a few of the critical factors that must be considered in the impairment testing process.

7 Goodwill is calculated as a residual and is subject to a number of accounting adjustments, such as the recognition of deferred tax liabilities. Non-controlling interests in the acquiree can be measured at fair value or as the proportionate share of the acquiree's identifiable net assets.

8 From a practical standpoint, it is not necessary to determine both an asset's or cash-generating unit's fair value less costs of disposal and its value in use. If either of these amounts exceeds the carrying amount, the entity may conclude that the asset is not impaired.

2013 Survey Results

The 2013 Survey was carried out by Mergermarket in the summer of 2013 through telephone interviews with 150 European financial executives across a variety of industries and geographic regions. Appendix 2 (page 49) summarises the 2013 Survey methodology and the number of survey respondents by industry and region. Some totals in the survey graphs for which respondents were asked to select only one response may not add to 100% due to rounding.

Identifying impairment indicators is the most common challenge for goodwill impairment testing

In general, what are your most significant challenges related to goodwill impairment testing?



Note: Respondents were allowed to select more than one response

Survey respondents find the most significant challenge related to goodwill impairment testing to be identifying the factors that indicate that a cash-generating unit may be impaired. Two-thirds of those polled (66%) give this response. Slightly fewer cite meeting financial reporting deadlines (55%) and developing cash flow projections (54%) as key challenges. Identifying cash-generating unit(s) is a slightly less frequently cited challenge at 19% of the survey pool, while 6% think there are no issues worth mentioning.

Some respondents note the impact of the economic climate, with one executive stating that due to the escalation of the financial crisis, "it is now very difficult to develop cash flow projections."

"Developing cash flow projections is certainly getting more difficult. With the economies in Europe not demonstrating clear recovery, we see our clients rethinking their long-term financial projections. Have we shifted to a lower gear permanently or will we return to what we used to think were 'normal' times? This will have an impact on the recoverability of investments and acquisitions made and, as a result, will affect goodwill impairment testing."

Jochem Quaak, Managing Director, Amsterdam office

41% of those surveyed recorded a goodwill impairment in 2012

Did your company recognise an impairment of goodwill in 2012?



Forty-one per cent of respondents recognised an impairment of goodwill in 2012. Reflecting the impact of acute economic challenges in the region, a significant number of respondents from Southern Europe recognised an impairment of goodwill. Respondents in the United Kingdom also had a high incidence rate of goodwill impairment losses. These results are different from those reported in the 2013 Study section, because different samples of companies were used for the Survey (150 financial executives from the regions outlined in Appendix 2) relative to the Study (STOXX® Europe 600 Index members). The 2013 Study found that approximately 35% of companies in the index recognised a goodwill impairment in 2012.

A majority of respondents saw market forces as the leading cause of impairment charges

 Overall market downturn
 89%

 General industry downturn
 61%

 Factors specific to the cash-generating unit(s)
 43%

Note: Respondents were allowed to select more than one response

What was the reason for the impairment?

Overwhelmingly, respondents point to external market factors as the main reasons for goodwill impairment. Of the 61 respondents who recognised an impairment in 2012, 89% say that the overall market downturn was the leading cause, whereas 61% point to poor performance in their specific industry, or a "general industry downturn". A smaller proportion (43%) highlight factors specific to the cash-generating unit(s).

One respondent captured overall market and economic sentiment by commenting that although their company's overall performance was strong, "...because of the economic crises and a high level of competition ... avoiding impairment was not possible."

Most write-downs range between 20% and 50% of carrying amount

What was the percentage write-down from its carrying amount?



A majority of the respondents (62%) who recognised goodwill impairment losses in 2012 saw write-downs ranging from 20% to 50% of the carrying amount of goodwill. Just under one-third of those who recognised an impairment loss saw a write-down of less than 20%. A minority (7%) of respondents say they experienced large write-downs ranging between 51% and 75% of the goodwill balance.

Comments received from survey respondents centre on the impact of good decision making on mitigating the extent of the write-down. One executive notes that, "the write-down could have been much higher if we had not taken the right business decisions on time."

Respondents split over whether impairment impacted share price

Did the announcement of the impairment have any effect on your company's share price?



Those respondents who recognised a goodwill impairment loss in 2012 are almost evenly split in terms of whether or not the impairment announcement had an effect on their share price: 49% indicate that it had no effect and 51% take the opposite stance.

One executive comments that although initially the share price was affected, "there were no long-term effects on the share price."

Another executive says that the large size of the write-down his company experienced caused the business' corporate image to suffer and had a negative impact on investor confidence in the company's shares.

AN INVESTOR'S VIEW

Although the reporting of an impairment generally comes after the market has anticipated it, seeing the loss in the financial statements provides confirmation of just how badly the acquisition has gone. It is only when we are surprised by the amount that the share price moves significantly. "Ultimately, the share price impact of a goodwill impairment announcement is hard to predict. It will depend on what information is out there in the marketplace, and investors generally already know about the troubles a company is facing. We have seen quite a few cases in which, after a substantial impairment, the share price rose. Perhaps investors expected a larger impairment, or they were reassured by the fact that management recognised that there was a problem and that they had a solution for moving forward."

Jan Jaap Snel, Managing Director, Amsterdam office

Most companies have 2-5 cash-generating units

How many cash-generating units did you have as of the most recent reporting period?

	Number	Percent
More than 10	25	17%
6 to 10	41	27%
2 to 5	82	55%
1	2	1%

"It's interesting to see that over twice as many companies used fair value less costs to sell rather than value in use. In our experience, we typically see companies focusing on value in use and using their own forecasts, which include any strategic growth initiatives that may not be available to market participants." James Palmer, Director, London office

Fair value less costs to sell was the most common basis for determining recoverable amount of a cash-generating unit

When determining the recoverable amount of a cash-generating unit, did you estimate fair value less costs to sell, value in use or both?



Although IAS 36 defines a cash-generating unit's recoverable amount as the higher of its fair value less costs of disposal and its value in use, it does not require an entity to calculate both amounts as long as one of them is higher than the cash-generating unit's carrying amount.

Respondents to the survey indicate that the most common method for determining the recoverable amount of a cash-generating unit was to look primarily at its fair value less costs to sell, with 58% of respondents saying they use this method. Almost a quarter of respondents (23%) indicate that they estimate value in use to determine the recoverable amount and about a fifth (19%) say they estimate values for both.

More than two-thirds of those using value in use do so because they perceive the market to underprice their company

If in your latest analysis the recoverable amount of a cash-generating unit was based on value in use, what factor(s) led to value in use being higher than fair value less costs to sell?



Note: Respondents were allowed to select more than one response

Among those respondents who indicate that they determined the recoverable amount of a cash-generating unit using both fair value less costs to sell and value in use, 69% say that value in use is often higher than fair value less costs to sell because the market is underpricing the company. Almost half (48%) used value in use because they expect to achieve synergies not available to market participants, while 31% of the survey respondents say events have occurred that have not yet been publicly disclosed.

"We see many differences in the estimation of recoverable amount when using fair value less costs of disposal versus value in use. Firstly, when using fair value less costs of disposal, companies are able to consider a market approach, looking at comparable company prices if available. Secondly, when using an income approach to measure fair value, the discounted cash flow model may be very different from what we would use for value in use. For example, with fair value less costs of disposal the projection period is not necessarily five years, the cost of capital differs from a value in use discount rate and the cash flows may take into consideration expectations of changes in the business that are not taken into account when determining value in use." Javier Zoido, Managing Director, London office

Almost half of respondents use the long-term inflation rate when estimating value in use

When estimating value in use in your latest analysis, what was your terminal year growth assumption?



- Long-term growth rate was zero or negative
- Used an exit multiple to estimate the terminal value
- Long-term growth rate was based on long-term inflation rate

Just under half of respondents (48%) who used only value in use or both methods indicate that in their latest value in use analysis they based the long-term growth rate on the long-term inflation rate. A substantial 29% of the survey pool used an exit multiple to estimate the terminal value while about one quarter (24%) of those polled say the long-term growth rate was zero or negative.

Five-year projection period is unanimously used when estimating value in use

All survey respondents using value in use in determining a cashgenerating unit's recoverable amount indicate that they used a five year projection period for their cash flow forecast.

"We generally see a five-year explicit projection being used by our clients. This period may be longer when the business is not in a steady state at that point in time. We see this mainly with clients in the financial services and pharmaceuticals industries. Once the steady state is reached, the growth usually does not exceed the expected long-term inflation rate." Jan Jaap Snel, Managing Director, Amsterdam office

The majority of respondents estimating value in use perform the analysis on a post-tax basis and back solve for the pre-tax discount rate

When estimating value in use, do you perform the analysis on a pre-tax basis and estimate a pre-tax discount rate or a post-tax basis and back solve for the pre-tax discount rate that results in the equivalent value conclusion?



Pre-tax basis and estimate a pre-tax discount rate

Post-tax basis and back solve for the pre-tax discount rate that results in the equivalent value conclusion

In estimating value in use, the future cash flow estimates do not include income tax receipts or payments. However, IAS 36 acknowledges that "in theory, discounting post-tax cash flows at a post-tax discount rate and discounting pre-tax cash flows at a pre-tax discount rate should give the same result, as long as the pre-tax discount rate is the post-tax discount rate adjusted to reflect the specific amount and timing of the future tax cash flows. The pre-tax discount rate is not always the post-tax discount rate grossed up by a standard rate of tax" (IAS 36.BCZ85).

When estimating value in use, the majority of respondents (71%) perform the analysis on a post-tax basis and back solve for the pre-tax discount rate. The remaining 29% of respondents calculate value in use on a pre-tax basis and estimate a pre-tax discount rate to apply in their analysis.

"These findings are consistent with our experience. As valuation professionals, we typically perform value in use calculations on a post-tax basis rather than a pre-tax basis. Because finance theory is based on posttax calculations, we believe that the results from the post-tax analysis are sounder and more supportable. The pre-tax 'back solving' is interesting, though, because it enables unbiased (from a tax standpoint) comparisons from one company to another." Yann Magnan, Managing Director, Paris office

Almost half of those using value in use apply a discount rate between 11.1% and 14%

When estimating value in use in your latest analysis, what was the weighted average pre-tax discount rate used?





Although the options available in the survey question covered a significantly broader range of pre-tax discount rates (from below 5% to above 20%), respondents all apply a relatively narrow range of discount rates when estimating value in use. When assessing the discount rates used, it is important to note that the survey respondents come from different countries and the data may come from different currency areas and dates.

Forty-two per cent of those polled say they use a rate between 11.1% and 14%, whereas one-third use a discount rate between 8.1% and 11%. One quarter of respondents use a higher discount rate, between 14.1% and 17%. The relatively uniform range of rates is likely to be supportive of individual facts and circumstances of the company and its cashgenerating units.

From an industry standpoint, some of the industries show a wide distribution of discount rates (such as Industrials), whereas others seem to cluster around a narrower rate band (such as Consumer Staples and Healthcare).

Two-thirds of respondents expect their impairment testing process to change as a result of new IFRS 13 guidance

When estimating fair value less costs of disposal, do you expect your impairment testing process to change as a result of the new guidance in IFRS 13?



When asked about the effect on their impairment testing processes of the new guidance in IFRS 13 for measuring fair value less costs of disposal, 68% of respondents say they expected changes to be needed.

One executive comments that the company, "...will now have to give priority to observable inputs when measuring fair value and will have to follow additional disclosure requirements." Another downplays the effect, stating that, "I think many of the concepts in IFRS 13 are consistent with current practice except for certain principles, and these are not a challenge and can be easily accommodated in the current process without any major change." From 1 January 2013, if recoverable amount is based on fair value less costs of disposal, an entity does not apply the IFRS 13 disclosures about fair value measurements. However, when it issued IFRS 13 the IASB amended some of the disclosures about fair value less costs of disposal to ensure consistency between IAS 36 and IFRS 13, as well as to balance the disclosures for value in use and fair value less costs of disposal.

Determining the appropriate grouping of assets may be a significant challenge when applying IFRS 13 to impairment testing

If you expect IFRS 13 to change your processes, what do you expect your greatest challenges to be as a result of applying the Standard when testing goodwill and other non-financial assets for impairment?



Note: Respondents were allowed to select more than one response

Of those respondents who do expect their impairment testing process to change as a result of applying IFRS 13, 61% anticipate that one of the greatest challenges is likely to be determining the appropriate grouping of assets that are used in combination with each other.

Determining the principal market for the cash-generating unit is highlighted as a major challenge by 47% of the survey pool and determining the appropriate market participant assumptions is mentioned by 46%.

Slightly fewer respondents (20%) note that reflecting the highest and best use of the company's assets (within a cash-generating unit) is likely to be a challenging analysis. A similar proportion (18%) think that determining whether the market for a cash-generating unit is active could prove to be difficult.

"Determining an appropriate grouping of assets and market participant assumptions are indeed likely to be challenging, and there will undoubtedly be a learning curve. Companies will need to think about whether the definition of a cash-generating unit is consistent with the valuation premise in IFRS 13. And, as with all fair value measurements, they will need to determine how their internal forecasts may differ from the assumptions that market participants would make."

Hilary Eastman, Director, Office of Professional Practice

The majority of those respondents using fair value less costs of disposal do not expect the recent IASB decision on "unit of account" to impact their approach

The IASB recently decided (subject to a public consultation) that, although the unit of account for a cash-generating unit is the cash-generating unit as a whole, if a subsidiary is listed and its shares are actively traded, the fair value less costs of disposal of its cash-generating units would be determined using the product of the quoted share price of the subsidiary times the number of shares held by the parent (PxQ). Do you expect this to affect how you measure fair value less costs of disposal when testing goodwill for impairment?



Thirty-seven per cent of those polled say that, if finalised, the recent IASB decision will not impact how they measure fair value less costs of disposal when testing goodwill for impairment. About one-fifth (19%) say there would be an impact, whereas 44% indicate that the guidance will not be applicable as their subsidiaries are not listed.

"The principles of IFRS 13 call for the price that would be received in a sale for an entire cashgenerating unit (the unit of account in IAS 36) in a transaction between market participants. Although having a price for actively traded shares is an input that must be considered, this is only the beginning of the analysis, as the price indicates the value of a minority position. Additional value may arise from the ability to optimise the business in a change of control transaction and from market participant synergies if they result in increased cash flows or reduced risk for the cash-generating unit (or the combined entity). The IASB proposal hones in on the fact that this value does not automatically exist."

Marianna Todorova, Director, Office of Professional Practice

Nearly two-thirds of respondents report a difference of up to 25% between aggregate recoverable amount and their company's market capitalisation

If you compared or reconciled the aggregate recoverable amount (on a net asset basis) with the company's market capitalisation in your latest analysis, what was the difference (e.g. implied control premium) between the aggregate recoverable amount and your company's market capitalisation?



When asked about the difference between the aggregate recoverable amount (on a net asset basis) and their company's market capitalisation, about a third of respondents indicate that the implied control premium was between 10% and 25%. Slightly fewer (30%) say that the implied control premium was less than 10%, while 21% answer that the question was not applicable. Of those who indicate a relatively higher control premium, 9% cite a range of 25% to 40%, whereas only 5% say it exceeds 40%. In contrast, only a handful of respondents (2%) say that the market capitalisation was greater than the recoverable amount.

AN INVESTOR'S VIEW

One would not expect a company to recognise a goodwill impairment simply because its market-to-book ratio is less than 1.0, but it would be difficult to justify not doing so if that situation remained prolonged. "The concept of a cash-generating unit as the level of impairment testing in IFRS shows that the market-to-book ratio of a company as a whole does not tell the full story. A very healthy (high market-to-book ratio) company may still have a single cash-generating unit that is suffering. Conversely, a very low marketto-book ratio nearly always indicates a risk of impairment, even when there are numerous cash-generating units within a company." Henk Oosterhout, Managing Director, Amsterdam office

Forty-three per cent of respondents perform an analysis of incremental cash flows to support an implied control premium

Which approach was used to support that difference?

A specific analysis of incremental cash flows derived from improving current operations A specific analysis of incremental cash flows available by combining the 21% operations of the cash-generating unit with a market participant buye A qualitative discussion of synergies/ improvements planned by management (and reflected in budgets for value in use), but not known in the marketplace A general control premium was derived from market-based studies A combination of the above Implied valuation premiums and 17% discounts were not considered

Those who compare the difference between the aggregate recoverable amount and their company's market capitalisation (i.e. measured the implied control premium) are split between a range of possible approaches taken to support the analysis. Twenty-one per cent used a specific analysis of incremental cash flows that would be available by combining the operations of the cash-generating unit with those of a market participant buyer.

A similar number of respondents (22%) carried out a specific analysis of incremental cash flows that would be derived from improving current operations. Another 22% used a combination of methods.

"It is notable that 9% use only control premium data from market-based studies. In contrast, according to our 2013 U.S. Study, 51% of the publicly-listed company survey respondents stated that they only use such data. The 43% (21% plus 22% in the chart) of respondents that analyse the incremental cash flows are consistent with recently proposed guidance on control premiums (see page 46). Those proposals put forward the notion that control premiums should be supported by reference to enhanced cash flows or a reduction in risk. In my view, at a minimum, the application of a control premium should include an evaluation of the underlying economics to support why one believes that a premium would be paid in a transaction for the asset or cash-generating unit."

22%

22%

Gary Roland, Managing Director, Office of Professional Practice

Adjusting for the size of a cash-generating unit is the most common way to incorporate specific characteristics when setting the discount rate

How do you incorporate the specific characteristics of a cash-generating unit when determining the discount rate to apply in the discounted cash flow method?



Note: Respondents were allowed to select more than one response

Respondents use a range of different approaches in order to incorporate the specific characteristics of a cash-generating unit when determining the discount rate to apply in a discounted cash flow method. A significant proportion of respondents seem to make adjustments based on the facts and circumstances and do not default to a single approach. Nevertheless, 45% of respondents say that a single discount rate was used, irrespective of the specific risk profile of each cash-generating unit. Although it is possible that those respondents incorporate risk factors directly into the cash flow projections, in our experience that is not the approach most commonly used.

The most common adjustment made to discount rates reflects the size of the specific cash-generating unit, with 48% of the survey pool indicating they do this. Thirty-six per cent of respondents also make an adjustment to reflect the country risk of where the cash-generating unit is based.

"When estimating a discount rate for a cashgenerating unit, the key word is 'consistency'. We often see discount rates calculated in a very mechanical manner, where incremental risk factors are included without much thought to the underlying risk already reflected in the projected cash flows. This may lead to a significant overstatement (and in some cases, understatement) of risk, thereby impacting the valuation conclusion." Carla Nunes, Director, Office of Professional Practice

Many measure non-controlling interests as the proportionate share of identifiable net assets

How do you measure non-controlling interests in a business combination?



Almost one third (31%) of those polled have measured non-controlling interests in a business combination as the proportionate share of the identifiable net assets of the acquiree, making this the most popular method among our sample. In fact, excluding the respondents who do not have partially owned subsidiaries, the proportionate share method is preferred by 40% of survey participants. Eighteen per cent say they have measured non-controlling interests exclusively at fair value, whereas 29% have used both methods on different transactions.

Summary Statistics by Industry and Country

Tables 1 and 2 on the following pages summarise the annual amount of goodwill impairments and the number of goodwill impairment events by industry and country, respectively. The tables also provide the proportion of companies within each industry or country that carry goodwill and which of those recorded a goodwill impairment.⁹ This format allows for a ready comparison of data across industries and countries over time.

Industries and countries are listed in descending order of their total goodwill impairment amounts for 2012. For example, in Table 1 Telecommunication Services tops the industry list with its \in 23.4 billion aggregate goodwill impairment, whereas in Table 2 United Kingdombased companies recorded the top aggregate impairment of \in 22.8 billion (£18.5 billion).

Additionally, the graphs on the right of Tables 1 and 2 provide for a quick comparison of (i) the percentage of companies in 2012 with goodwill within each industry or country and (ii) the proportion of those companies that recorded a goodwill impairment. For example, the top row of Table 1 shows:

90.5% of Telecommunication Services companies carried goodwill in 2012.

90.5% 63.2%

63.2% of those companies recorded a goodwill impairment.

Goodwill Impairments

In Tables 1 and 2, the first row of data for each industry or country presents the annual amounts of goodwill impairments (in €billions), immediately followed by the number of impairment events (shown in brackets). In general, 2012 saw an approximate 15% decrease in the aggregate amount of goodwill impairments, from €77.2 billion in 2011 to €65.5 billion in 2012. However, the aggregate number of impairment events increased from 151 in 2011 to 179 in 2012. From an industry viewpoint, Financials and Industrials saw the greatest number of impairment events at 57 and 32, respectively. From a geographical perspective, companies that are based in France and the United Kingdom had the greatest number of impairment events in 2012 at 39 and 38, respectively.10

Percentage of Companies that Recorded a Goodwill Impairment

The second row in Tables 1 and 2 indicates the proportion of all companies within each industry or country that recorded a goodwill impairment. Across the entire 2013 Study (shown in the Total section in tables), the average proportion of companies recording an impairment loss increased significantly from 20.0% in 2010 to 30.4% in 2012. In 2012, Telecommunication Services had the largest percentage of companies that impaired goodwill (57.1%), followed by Financials (42.5%) and Consumer Staples (32.0%). From a geographic standpoint, companies in France had the largest percentage of companies that impaired goodwill (46.4%), closely followed by Italy (37.9%) and the Netherlands (37.5%).

Percentage of Companies with Goodwill Obviously, companies that do not carry goodwill on their balance sheets are not

exposed to a goodwill impairment. The third row of Tables 1 and 2 provides the proportion of companies with goodwill within each respective industry or country. In 2012, 87.6% of all the companies included in the 2013 Study carried some amount of goodwill on their balance sheets. The percentage of companies with goodwill remained relatively constant between 2010 and 2012. From an industry perspective, Industrials had the highest percentage of companies with goodwill in any given year over the 2010-2012 period (around 96% to 97%), whereas Materials had the lowest average proportion (but still hovering around a relatively high level of 80%). Geographically, France had the highest percentage of companies with goodwill (97.6% in 2012), whereas the United Kingdom had the lowest percentage (78.1% in 2012).

Percentage with Goodwill Recording a Goodwill Impairment

The final row in Tables 1 and 2 indicates the percentage of companies with goodwill that recorded a goodwill impairment. Overall, the average impairment percentages across all companies in the 2013 Study increased significantly from 23.0% in 2010 to 34.8% in 2012. In 2012, Telecommunication Services had the largest percentage of companies with goodwill on their balance sheets that impaired goodwill (63.2%), followed by Financials (52.3%) and Consumer Staples (39.0%). Similarly, France had the largest percentage of companies with goodwill that impaired goodwill (47.6%), followed by the Netherlands (40.0%) and Italy (39.3%). Looking at trends over time, Telecommunication Services had the highest overall percentage during the three-year period at 63.2% in 2012. From a geographic perspective Italy had the highest overall percentage of companies impairing goodwill at 50.0% in 2011.

9 Appendix 1 describes the company base set selection and methodology used to generate the data in Tables 1-3 of this report.

10 In 2012, 33 companies based in the "Other" country category recognised aggregate goodwill impairments of €6.6 billion (see Table 2). In particular, three companies based in Luxembourg recognised the majority of this amount, at €3.3 billion, followed by Norway at €0.9 billion (6 companies) and Finland at €0.8 billion (5 companies). The countries aggregated within the "Other" category in the 2013 Study are Austria, Belgium, Cyprus, Denmark, Finland, Greece, Ireland, Luxembourg, Portugal and Norway.

2012 Goodwill	2010	2011		2012	
Impairment	Goodwill Impairments: €	billions (number of events)		Companies	Percentage
(Table 1)	Percentage of Companie	es with Goodwill		with GW	Recording GWI
(Companies)	Percentage of Companie	es with Goodwill that Recorded	d a GWI		
Telecomm, Services	4.5 (8)	20.4 (11)	23.4 (12)		
	40.0%	52.4%	57.1%	00 50%	62.00%
	95.0%	95.2%	90.5%	30.0%	00.270
(21)	42.1%	55.0%	63.2%		
Financials	4.2 (38)	38.7 (52)	15.2 (57)		
	26.6%	38.2%	42.5%	81.3%	52.3%
	85.3%	84.6%	81.3%	01.070	02.0 /0
(134)	31.1%	45.2%	52.3%		
Materials	0.1 (7)	6.4 (10)	14.2 (17)		
	12.5%	17.5%	29.8%	00 50	
	80.4%	80.7%	82.5%	82.5%	36.2%
(57)	15.6%	21.7%	36.2%		
Litilities	1.7 (6)	2.2 (10)	3.2 (6)		
Otilities	20.0%	35.7%	24.0%		
	90.0%	85.7%	92.0%	92.0%	26.1%
(25)	22.2%	41.7%	26.1%		
Industrials	2.4 (24)	3.5 (30)	3.1 (32)		
Industriais	21.2%	26.8%	28.1%		
	95.6%	97.3%	96.5%	96.5%	29.1%
(114)	22.2%	27.5%	29.1%		
Consumer Staples	0.9 (10)	2.7 (11)	2.2 (16)		
	22.2%	23.4%	32.0%	00.004	00.000
	80.0%	83.0%	82.0%	82.0%	39.0%
(50)	27.8%	28.2%	39.0%		
Information Technology	0.0 (4)	1.1 (3)	1.4 (5)		
internation reenhology	12.9%	8.8%	14.7%	00 404	17.00%
	87.1%	88.2%	82.4%	82.4%	17.9%
(34)	14.8%	10.0%	17.9%		
Enerav	0.6 (4)	0.6 (5)	1.4 (6)		
	11.1%	15.2%	17.1%	88.6%	19.4%
	77.8%	81.8%	88.6%	00.070	10.470
(35)	14.3%	18.5%	19.4%		
Consumer Discretionary	0.7 (15)	1.7 (17)	1.2 (23)		
	19.2%	20.7%	28.0%	00.20%	31 10%
	84.6%	87.8%	90.2%	90.270	51.170
(82)	22.7%	23.6%	31.1%		
Healthcare	0.0 (2)	0.0 (2)	0.2 (5)		
	5.3%	5.4%	13.9%	01 704	15 20%
	89.5%	91.9%	91.7%	91.7%	10.2%
(36)	5.9%	5.9%	15.2%		
Total*	15.2 (118)	77.2 (151)	65.5 (179)		
	20.0%	25.7%	30.4%	97 604	31 80%
	86.8%	87.9%	87.6%	07.0%	34.0%
(588)	23.0%	29.3%	34.8%		

* Amounts shown are aggregates. Differences due to rounding.

2012 Goodwill	2010	2011	2012		
Impairment (Table 2) (Companies)	Goodwill Impairments: €billions (number of events) Percentage of Total Companies that Recorded GWI Percentage of Companies with Goodwill Percentage of Companies with Goodwill that Recorded a GWI			Companies with GW	Percentage Recording GWI
Lipited Kingdom	5.0 (28)	16.0 (35)	22.8 (38)		
United Kingdom	16.6%	20.8%	22.5%		
	77.5%	78.6%	78.1%	78.1%	28.8%
(169)	21.4%	26.5%	28.8%		
Italy	1.2 (12)	36.9 (15)	11.2 (11)		
italy	37.5%	50.0%	37.9%	06 60%	20.20%
	100.0%	100.0%	96.6%	90.0%	39.3%
(29)	37.5%	50.0%	39.3%		
France	3.2 (28)	9.9 (32)	9.6 (39)		
	35.0%	40.0%	46.4%		47.6%
	98.8%	98.8%	97.6%	97.6%	
(84)	35.4%	40.5%	47.6%		
Germany	2.9 (10)	4.1 (15)	6.0 (18)		
elermany	18.2%	26.8%	30.5%	94 704	26.00%
	81.8%	83.9%	84.7%	04.7%	30.0%
(59)	22.2%	31.9%	36.0%		
Netherlands	0.6 (4)	1.9 (6)	4.0 (12)		
	12.9%	19.4%	37.5%	02 90%	40.0%
	93.5%	90.3%	93.8%	90.070	40.0%
(32)	13.8%	21.4%	40.0%		
Switzerland	0.4 (5)	1.5 (7)	3.3 (12)		
	11.1%	15.6%	25.5%	00 404	00 604
	86.7%	91.1%	89.4%	09.4%	20.0%
(47)	12.8%	17.1%	28.6%		
Sweden	0.0 (5)	0.7 (6)	1.0 (9)		
	14.7%	16.7%	24.3%	81 10%	30.0%
	82.4%	83.3%	81.1%	01.170	00.070
(37)	17.9%	20.0%	30.0%		
Spain	0.4 (9)	2.4 (7)	1.0 (7)		
	29.0%	23.3%	23.3%	00.00%	05.00%
	87.1%	93.3%	90.0%	90.0%	20.9%
(30)	33.3%	25.0%	25.9%		
Other	1.5 (17)	3.8 (28)	6.6 (33)		
	15.0%	25.2%	32.7%	93.1%	35 1%
	90.3%	91.0%	93.1%	00.170	00.170
(101)	16.7%	27.7%	35.1%		
Total*	15.2 (118)	77.2 (151)	65.5 (179)		
	20.0%	25.7%	30.4%	87.6%	34.8%
	86.8%	87.9%	87.6%	27.070	
(588)	23.0%	29.3%	34.8%		

* Amounts shown are aggregates. Differences due to rounding.

Summary Statistics by Industry and Country (continued)

Tables 1 and 2 captured the total amount of goodwill impairment and the frequency of events by industry and country. In Table 3, the focus shifts to the industries' (i) relative importance of goodwill to the overall asset base (goodwill intensity); (ii) the magnitude of annual impairment relative to the carrying amount of goodwill; and (iii) the magnitude of such impairment in relation to total assets (the latter two being measures of loss intensity).

Goodwill intensity, defined here as goodwill as a percentage of total assets (GW/TA), measures the proportion of an industry's total assets represented by goodwill.¹¹ Because goodwill arises as a result of a business combination, goodwill intensity is greater in industries with significant merger and acquisition (M&A) activity.

The first loss intensity measure, goodwill impairment as a percentage of goodwill (GWI/GW), indicates the magnitude of goodwill impairments. In other words, it measures the proportion of an industry's goodwill that is impaired each year. Goodwill impairments as a percentage of total assets (GWI/TA), the second loss intensity measure, quantifies the percentage of an industry's total asset base that was impaired.

The graphs on the right of Table 3 provide for a quick comparison of (i) goodwill as a percentage of total assets and (ii) goodwill impairments as a percentage of goodwill. For example:

Goodwill of Telecommunication Services companies represents 23.2% of total assets.

11.1% 23.2%

Goodwill impairments in 2012 made up 11.1% of the goodwill carrying amount.

Goodwill Intensity

The first row in Table 3 illustrates goodwill as a percentage of total assets (GW/TA) reported over time for each industry, with 2012 being highlighted specifically in the grey circle of the graphic on the right.

Aggregate goodwill as a percentage of total assets for all companies in the 2013 Study (across all industries) averaged approximately 3.4% over the 2010-2012 period. However, this ratio can vary significantly by industry. For example, in 2012 it ranged from 0.8% for Financial companies to 25.0% for Healthcare companies.¹²

Healthcare¹³ and Telecommunication Services were the top two industries exhibiting the highest average goodwill intensity during the three-year period. For these industries, contributing factors include continued transaction activity as well as high growth expectations from future (yet-to-be-identified) technologies, which may make goodwill a significant component of the purchase price.

		Intensity Measure	How?	Why?
Goodwill Intensity	Extent to which an industry's asset base includes goodwill	GW/TA	Goodwill as a percentage of total assets, measured at year end	Indicates how significant an industry's goodwill is in relation to total assets
Loss Intensity (1)	Extent to which an industry's goodwill is affected by impairment	GWI/GW	Goodwill impairments (total) as a percentage of the prior year's total goodwill	Indicates how impairments impacted each industry's goodwill
Loss Intensity (2)	Extent to which an industry's asset base is affected by impairment	GWI/TA	Goodwill impairments (total) as a percentage of the prior year's total assets	Indicates how impairments impacted each industry's total assets

AN INVESTOR'S VIEW

Goodwill gives an indication of how much of the company, on a consolidated basis, has grown through acquisitions and how much has grown organically. That information can affect how one analyses the company.

11 Although the companies in the index may measure non-controlling interests associated with their partially-owned subsidiaries on different bases (i.e. either at fair value or as the proportionate share of the acquiree's identifiable net assets), this analysis does not make adjustments for such differences.

12 In fact, the impact of companies in the Financials industry is substantial because those companies comprise a significant proportion of the STOXX® Europe 600 Index. Excluding Financials from the 2012 total would result in an average GW/TA ratio of 13.3%, rather than 3.4%. The effect is similar in other years.

13 As defined in the Global Industry Classification Standard (GICS), the Healthcare industry includes, among others, biotechnology and pharmaceutical companies.

Although goodwill intensity, measured by GW/ TA, has been fairly stable over time, some industries have recently shown a downward or upward trend. For example, goodwill intensity in Telecommunication Services decreased over the period (partially due to significant impairments in 2012), whereas it increased for Information Technology.

Goodwill Impairment to Goodwill

The second row in Table 3 represents the first measure of loss intensity (GWI/GW) recognised for each industry over the threeyear period, with 2012 being highlighted specifically in the blue triangle of the graphic on the right.

The total amount of impairment decreased from €77.2 billion in 2011 to €65.5 billion in 2012, a decrease of €11.7 billion (as previously shown in Tables 1 and 2). But 2011 marked a dramatic fivefold increase over the aggregate impairment of €15.2 billion in the previous year. The first loss intensity measure (GWI/GW) portrays a similar trend. The overall loss intensity for companies in the 2013 Study quadrupled from 1.1% in 2010 to 5.4% in 2011, at the height of the European sovereign debt crisis. This loss intensity metric declined slightly in 2012 to 4.5%, as European financial market conditions began to stabilise in the latter part of the year. The 2012 decrease in the loss intensity factor for Financials was more than offset by the increase observed in Materials.

AN INVESTOR'S VIEW

In future periods, it is a good sign if a company's goodwill remains on the balance sheet. However, sometimes we do not have enough information to assess whether an impairment may actually have been warranted.

Goodwill Impairments to Total Assets This second measure of loss intensity is presented in the third row in Table 3 for each industry.

Goodwill impairment charges typically represent a relatively small proportion of a company's total asset base. Telecommunication Services had the largest GWI/TA ratio in 2012 at 2.8%, which is significantly larger than the overall average of 0.2% in that year. Financials and Healthcare had the lowest GWI/TA ratio in 2012 at virtually nil. The significant size of balance sheets of financial services companies within the STOXX® Europe 600 Index partially explains why goodwill impairments represent such a small proportion of the asset base in the Financials industry.

AN INVESTOR'S VIEW

The magnitude of goodwill depends on the industry. For example, one would not expect to see a manufacturing company with a lot of goodwill. On the other hand, it would be unusual to see a software company with little goodwill.

2012 Goodwill	2010	2011	201	2012	
Impairment (Table 3) (Companies)	Goodwill Intensity (GW/TA) Loss Intensity (1) (GWI/GW) Loss Intensity (2) (GWI/TA)			GWI/GW GW/TA	
Telecomm Services	27.2%	25.1%	23.1%	11.1%	
	2.0%	8.8%	11.1%	23.2%	
(21)	0.5%	2.4%	2.8%		
Financials	0.9%	0.8%	0.8%	5.9%	
1 manolalo	1.4%	12.5%	5.9%	0.8%	
(134)	0.0%	0.1%	0.0%		
Materials	11.1%	10.1%	8.8%	10.0%	
Materiale	0.1%	6.2%	13.9%	8.8%	
(57)	0.0%	0.7%	1.4%		
Litilities	9.1%	9.2%	8.8%	2.5%	
Otintics	1.3%	1.7%	2.5%	8.8%	
(25)	0.1%	0.2%	0.2%		
Industrials	15.1%	15.7%	15.8%	1.5%	
Industrials	1.3%	1.8%	1.5%	15.8%	
(114)	0.2%	0.3%	0.2%		
Consumer Staples	20.7%	22.6%	22.2%	1.1%	
e en earreir e tapiee	0.5%	1.5%	1.1%	22.2%	
(50)	0.1%	0.3%	0.2%		
Information Technology	20.6%	21.2%	23.4%	3.3%	
intermation reenhology	0.1%	2.7%	3.3%	23.4%	
(34)	0.0%	0.6%	0.7%		
Energy	3.0%	3.2%	2.8%	3.7%	
Energy	2.1%	1.8%	3.7%	0.806	
(35)	0.1%	0.1%	0.1%	2.0%	
Consumer Discretionary	8.2%	9.2%	9.7%	0.9%	
	0.7%	1.8%	0.9%	9.7%	
(82)	0.1%	0.1%	0.1%		
Healthcare	23.6%	24.9%	25.0%	0.1%	
rioannoaro	0.0%	0.0%	0.1%	25.0%	
(36)	0.0%	0.0%	0.0%		
Total*	3.5%	3.4%	3.4%	4.5%	
Total	1.1%	5.4%	4.5%		
(588)	0.0%	0.2%	0.2%	3.4%	

* Amounts shown are aggregates. Differences due to rounding.

Notes

Industry Spotlights cover ten industries, providing an in-depth focus on their relevant metrics and statistics. Each Spotlight displays a variety of data, including the top three companies in the 2013 Study that recognised the highest amount of goodwill impairment for calendar year 2012. The guide below provides a brief description of the components of the Industry Spotlights.

Goodwill Trends

Provides goodwill amounts at the beginning and end of the three-year period, as well as the aggregate goodwill additions and impairments over that period for companies in the index.¹⁴

Impairment History

Annual amounts and number of goodwill impairment events over the last three years. The industry market-to-book ratio (blue line) provides some context for the annual impairment measures.

Market-to-Book Ratio Distribution

Highlights the number of companies in the industry (shown in percentage terms) with a market-to-book ratio below and above 1.0. The blue shaded area to the left of the needle further separates the number of companies with a ratio above and below 0.5. Although not predictive on its own, companies with a low market-to-book ratio may be at a greater risk of impairment.

Size of Sector

Size of Industry

Represents the size of the industry relative to the combined size of all companies included in the 2013 Study sample, measured in terms of market capitalisation.

Top 3 Industry Goodwill Impairments

Highlights the concentration of the top three impairments recorded in the industry in 2012.

Summary Statistics

Goodwill Intensity (GW/TA), Goodwill Impairment to Goodwill (GWI/GW), Companies with Goodwill and Percentage of Companies that Recorded a Goodwill Impairment in 2012.

ndex (Year End 2009 = € Index

Shows the three-year returns of the industry sector sub-index and the STOXX® Europe 600 Index overall.¹⁵ Summarises the relative performance of the industry, reflecting what a \in 1 investment at the end of 2009 would be worth at the end of 2012.

14 Because companies regularly move into and out of the STOXX® Europe 600 Index (the annual churn rate is typically around 40 companies), this comparison does not include the same set of companies every year. This explains, for example, why Utilities appear to have a negative goodwill addition of €7 billion over the 2010-2012 period (see Utilities Spotlight).

15 STOXX® Europe 600 industry sub-indices are constructed by the index provider for ten industries based on the Industry Classification Benchmark. This is a different industry classification from that used throughout the 2013 Study, which is based on GICS codes. Although the industry definitions are broadly similar, the naming convention is slightly different. For example, in the Energy spotlight we show the performance of the STOXX® Europe 600 Oil & Gas sub-index.

2012 Composite Industry Spotlight



Size of Sector (Relative to Study's Total Market Cap)



 Top 3 Industry Goodwill Impairments
 (in millions)

 Vodafone Group PLC
 €11,447 (£9,286)

 Rio Tinto PLC
 €5,004 (US\$6,598)

 Telecom Italia SpA
 €4,289

Cumulative 3-year Terminal Index Value by Industry from 2010 to 2012 Index (Year End 2009 = €1)



Energy GICS Code 10





Size of Sector (Relative to Study's Total Market Cap)





€11



Total SA

Materials

GICS Code 15





Size of Sector (Relative to Study's Total Market Cap)

Akzo Nobel NV





€2,450



Industrials

GICS Code 20





Size of Sector (Relative to Study's Total Market Cap)



Top 3 Industry Goodwill Impairments	(in millions)
Finmeccanica SpA	€1,148
Wolseley PLC	€419 (£340)
Schneider Electric SA	€250



Consumer Discretionary

GICS Code 25



Size of Sector (Relative to Study's Total Market Cap)

Carnival PLC



€131 (US\$173)





Consumer Staples

GICS Code 30

Goodwill Trends 2009 - 2012



Size of Sector (Relative to Study's Total Market Cap)



	-		•	
Imperial Tob	bacco Group P	LC	€1,463 (£1,18	7)
Orkla ASA			€204 (kr 1,50	0)
CSM			€16	35



Healthcare

GICS Code 35





Size of Sector (Relative to Study's Total Market Cap)



Top 3 Industry Goodwill Impairments	(in millions)
Roche Holding AG	€155 (CHF 187)
Celesio AG	€21
Straumann Holding AG	€17 (CHF 21)



Financials



Size of Sector (Relative to Study's Total Market Cap)



Top 3 Industry Goodwill Impairments	(in millions)
Credit Agricole SA	€3,395
UBS AG	€2,510 (CHF 3,030)
Deutsche Bank AG	€1,595



Information Technology

GICS Code 45



Size of Sector

Logitech International SA



€160 (US\$211)

Index (Year	End	2009	=	€1)
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2012 Industry Spotlight Telecommunication Services

GICS Code 50



Size of Sector (Relative to Study's Total Market Cap)



Top 3 Industry Goodwill Impairments	(in millions)
Vodafone Group PLC	€11,447 (£9,286)
Telecom Italia SpA	€4,289
Deutsche Telekom AG	€2,965



GICS Code 55

Utilities





Size of Sector

E.ON SE

GDF Suez





16 The decrease in the amount of goodwill added in Utilities is due to the change in the composition of the index over the period.

Notes

Goodwill Impairments by Industry Group

Calendar Year 2012

Goodwill Intensity

Goodwill to Total Assets (GW/TA)

Loss Intensity

Goodwill Impairment to Goodwill (GWI/GW)

List of Industries by Industry Group, as defined by Global Industry Classification Standard (GICS)

GICS Code	GICS Industry Group Name	Number Cos.	% of Cos. with GW	GW/TA	GWI/GW	% of Cos. with GW that Recorded GWI	Goodwill Impairment (in €billions)	Market-to- Book Ratio
	Energy						€1.4 (sector total)	
1010	Energy	35	88.6%	2.8%	3.7%	19.4%	€1.4	1.8
	Materials						€14.2 (sector total)	
1510	Materials	57	82.5%	8.8%	13.9%	36.2%	€14.2	1.4
	Industrials						€3.1 (sector total)	
2010	Capital Goods	77	97.4%	16.2%	1.5%	28.0%	€2.3	2.1
2020	Commercial and Professional Services	19	100.0%	33.7%	0.9%	36.8%	€0.2	3.1
2030	Transportation	18	88.9%	9.9%	2.3%	25.0%	€0.6	1.5
	Consumer Discretionary						€1.2 (sector total)	
2510	Automobiles and Components	12	100.0%	5.1%	0.3%	16.7%	€0.1	1.5
2520	Consumer Durables and Apparel	20	85.0%	9.6%	1.5%	29.4%	€0.4	2.2
2530	Consumer Services	13	92.3%	18.7%	1.0%	25.0%	€0.2	2.4
2540	Media	28	89.3%	30.0%	0.8%	44.0%	€0.4	3.0
2550	Retailing	9	88.9%	10.6%	2.6%	25.0%	€0.2	2.5
	Consumer Staples						€2.2 (sector total)	
3010	Food and Staples Retailing	13	100.0%	12.5%	1.1%	46.2%	€0.3	1.6
3020	Food, Beverage and Tobacco	31	71.0%	26.4%	1.2%	31.8%	€1.9	2.5
3030	Household and Personal Products	6	100.0%	21.0%	0.2%	50.0%	€0.0	3.6
	Healthcare						€0.2 (sector total)	
3510	Healthcare Equipment and Services	16	87.5%	36.2%	0.1%	21.4%	€0.0	2.5
3520	Pharmaceuticals, Biotechnology and Life Sciences	20	95.0%	22.8%	0.2%	10.5%	€0.2	3.1
	Financials						€15.2 (sector total)	
4010	Banks	43	86.0%	0.7%	6.0%	64.9%	€8.7	0.6
4020	Diversified Financials	36	86.1%	1.0%	10.3%	48.4%	€5.3	1.1
4030	Insurance	32	96.9%	1.0%	2.0%	35.5%	€1.1	1.0
4040	Real Estate	23	43.5%	0.6%	3.7%	70.0%	€0.0	1.0
	Information Technology						€1.4 (sector total)	
4510	Software and Services	16	81.3%	36.8%	0.2%	7.7%	€0.0	3.6
4520	Technology Hardware and Equipment	13	84.6%	18.5%	3.8%	18.2%	€0.7	2.4
4530	Semiconductors and Semiconductor Equipment	5	80.0%	4.1%	41.1%	50.0%	€0.7	1.9
	Telecommunication Services						€23.4 (sector total)	
5010	Telecommunication Services	21	90.5%	23.1%	11.1%	63.2%	€23.4	2.2
	Utilities						€3.2 (sector total)	
5510	Utilities	25	92.0%	8.8%	2.5%	26.1%	€3.2	1.3

Q&A with Erik Peek

Professor Erik Peek serves as the Duff & Phelps Chair in Business Analysis and Valuation at Rotterdam School of Management, Erasmus University (RSM), in the Netherlands. In this capacity, he focuses on areas of study related to the valuation of businesses and business interests. The Chair is the first endowed professorship in Europe to concentrate on connections between capital markets and financial reporting. Part of his current research focuses on goodwill impairments in European publicly-listed companies.

Why have you decided to focus your academic career on the intersection of accounting and valuation?

We've seen in recent years that financial markets only work if firms provide good accounting information on a timely basis. Without transparency, investors ultimately lose confidence and financial markets break down. Determining what accounting information is useful to investors and assessing the costs and benefits of accounting disclosures is a complex task; it is certainly an interesting challenge to help improve accounting by examining its current usefulness to investors and analysts and by thinking about what could be done to make things better.

Furthermore, although I realise that valuation will always remain an applied science, I believe that research can play an important role in challenging some of the current practices and in providing concrete guidance to investors and analysts.

What made you decide to focus your research on goodwill impairments in European companies?

Like any other asset, goodwill reflects an investment for which the management of a firm can be held accountable. What makes goodwill a special asset is its relative riskiness as a direct outcome of mergers and acquisitions. There's much academic and anecdotal evidence that mergers and acquisitions often turn out to be unsuccessful, thus not generating the previously expected excess returns. This makes goodwill impairments a relatively common event and a potentially timely indicator of M&A success.

Surprisingly, the economic size of European goodwill impairments during the past few years seems moderate, despite my hypothesis that much of companies' acquired goodwill must have been "at risk", especially during the recent sovereign debt crisis. Furthermore, evidence shows that companies' goodwill impairments are relatively untimely and thus largely anticipated by investors. Hence, goodwill impairment is not really performing its role as a "timely indicator of M&A success". It is a challenging but important task for researchers to find out to what extent European companies comply with regulation and what drives non-compliant behaviour.

Although there is some evidence for U.S. companies, evidence on European companies is still scarce. There are significant differences between U.S. and international standards on goodwill impairment. Such differences could also influence local goodwill impairment behaviour and thus justify a focus on Europe.

Have you noticed any patterns the amount of goodwill on companies' balance sheets or impairment losses taken over the period?

We have been and currently are still analysing the goodwill impairments made by slightly less than 2,000 European companies in 13 countries during the past seven years. Our analysis uses a different sample than what was used in the 2013 Study. Our analysis reveals some interesting trends. In particular, it shows that: Goodwill remains a significant item on companies' balance sheets, despite a decrease in M&A activity and an increase in goodwill impairment.

Even more important is the trend that we observe in the relative size of internally generated goodwill (i.e. the value added through a company's own operations rather than through acquisitions of other companies, measured by taking the difference between a company's market capitalisation and the carrying value of its recognised net assets) versus externally acquired goodwill.

- Before the start of the global financial crisis, internally generated goodwill represented approximately 60% of companies' market capitalisation, this percentage has decreased to only about 35% in 2012. At the end of 2012, about 40% of publicly-listed companies' goodwill had been acquired rather than internally generated.
- This emphasises the relevance of assessing the relative riskiness of existing (and internally generated) assets as compared to acquired goodwill. Given that internally generated goodwill serves as a cushion that softens the effect of economic shocks on goodwill impairment, this trend also raises substantial concerns about the amount of acquired goodwill that was "at risk" at the end of 2012.
- Of course, positive market developments during the past year have improved the situation and increased this cushion of internally generated goodwill (possibly to about two-thirds internal; one-third external), thereby reducing the risk of goodwill impairment. However, we're still far removed from the relatively comfortable situation that we saw in 2007, just before the global financial crisis.



Specifically, have you noticed any impairment patterns or systematic deviations across particular industries? What about across countries?

One industry where we have seen a long series of significant goodwill impairments during the period we are studying is the Telecommunications industry, where M&A activity has been significant but industry conditions have been challenging. Another industry that saw a significant amount of goodwill impairment in 2012 was the Materials industry.

With respect to countries, it is difficult to assign any meaning without considering country differences in, for example, the type of firms that are publicly listed, economic growth and sentiment, or the average size of goodwill balances. This is why we are developing models that help us to estimate what an expected goodwill impairment frequency would be, based on the characteristics of firms and the economic situation in their environment.

Based on the models we have developed so far, we can conclude that some countries saw more goodwill impairment than expected, whereas others saw less goodwill impairment than expected. However, unexplained country differences in goodwill impairment seem relatively small and we do not observe any differences that make us worry about firms in one or a few countries being systematically less compliant than firms in the other European countries.

Of course, I must mention one important caveat: as outsiders we cannot easily determine what the true goodwill impairment frequency should have been; we can only benchmark countries and firms against the European average. It is certainly possible that the average goodwill impairment behaviour is less than optimal, in the sense that there is noncompliance with the international standards on goodwill impairment. Furthermore, a significant proportion of goodwill impairments seem not to be driven by current performance, but are part of a sequence of impairments. This all suggests that at least some goodwill impairments are not recognised in a timely manner.

Are there any economic indicators that seem to be associated the recognition of impairment losses? What about firm-specific indicators? We do find that economic indicators, such as local economic sentiment, explain a small part of companies' goodwill impairments. However, industry and firm-specific factors seem relatively more important than macro-economic factors. That is, goodwill impairments tend to be concentrated by industry rather than by country. Furthermore, firm-specific stock price performance and volatility are strongly associated with goodwill impairments.

Surprisingly, we find that an increase in local government bond yields is only weakly associated with impairment frequencies. This contrasts with the idea that country risk, as reflected in government bond yields, should also affect a company's discount rates and, consequently, affect the probability of impairment.

Given your findings so far, do you have any advice for companies in terms of how they can improve the timeliness of their impairments? What economic or other events should they be looking out for as indicators that goodwill may be impaired?

IFRSs require that in impairment tests companies use a discount rate that reflects all risks that are specific to a cash-generating unit. Such risks also include country risk if a cash-generating unit has significant country exposure. We observe that, despite the temporary increases in country risk that we have witnessed in several European countries during the past few years, many companies stick with a long-term discount rate and seemingly fail to adjust their discount rates for increases in country risk. I would advise companies to critically assess whether their discount rate assumptions are still in sync with local market rates.

Another observation is that companies' disclosures about how they have performed their impairment tests and what assumptions they have made can be significantly improved. Goodwill impairment can only be a useful measure of M&A success or failure if the company can credibly communicate and justify whether and, if so, why it recognised an impairment.

The U.S. Appraisal Foundation's Proposed Guidance on Control Premiums

For some time it has been common practice to apply a "control premium" in financial reporting valuations. Often relied upon in goodwill impairment testing, the application of control premiums might follow this line of reasoning:

Company A, a publicly-listed company, estimates the recoverable amount of its cash-generating units and their aggregate value exceeds the company's market capitalisation by 30%. Control premium studies identify recent transactions in the industry with premiums ranging from 25% to 40%. Therefore, Company A concludes that the values for the cash-generating units reconcile to its market capitalisation.

However, in recent years some have begun to question the existence of a control premium in general. Different viewpoints have resulted in diversity of practice not only among valuation professionals but also among companies performing their goodwill impairment tests internally.

Recognising the lack of guidance and diversity in practice, The Appraisal Practices Board (APB)¹⁷ in the United States assembled a working group to develop best practices for the application of control premiums in the context of financial reporting, and published a discussion draft of a Valuation Advisory in April 2013. The ultimate objective of the Valuation Advisory, once it is finalised, is to create greater commonality among valuation best practices. Although the discussion draft is focused on U.S. GAAP valuations, its conclusions are relevant to valuation more generally and might be useful to those applying IFRSs, particularly in the light of the IASB's recent discussions on unit of account.

The discussion draft introduces the term *market participant acquisition premium* (MPAP) to emphasise the market participant perspective and to highlight the value created by the combination of two separate entities, rather than the value created simply by having control over an entity. Below are three of the main ideas in the discussion draft:

- MPAPs should be supported by reference to enhanced cash flows or a reduction of risk: Controlling interests are commonly viewed as having greater value than their minority counterparts because, conceptually, control is in and of itself valuable. The proposed guidance takes the perspective that the value of control comes from the ability of an entity to create future economic benefit by exercising that control. Those benefits may come, for example, in the form of enhanced cash flows from higher profit margins, increased growth, improved investment effectiveness or a reduction in risk (e.g. in the form of a lower cost of capital). In the absence of the ability to derive additional economic value, there is arguably no reason to pay a premium simply for the luxury of having control.
- Relying solely on benchmark control premium data to derive an MPAP is not consistent with best practices: Analysing historical data regarding observed premiums from closed transactions has some merit as evidence for quantifying the value of having control. However, the quality and relevance of such benchmark data should be critically evaluated to assess its applicability

to a particular valuation situation. The discussion draft suggests that relying solely on benchmark premium data to derive an MPAP, without considering any expectation for enhanced cash flows or reduced risk for the combined entity, is insufficient and is not consistent with best practice.

. MPAPs should be applied in the context of total invested capital rather than on an equity basis: The traditional method of calculating transaction premiums is founded on the notion that the benefits of control accrue to the equity holders rather than the debt holders. However, this is potentially misleading. The economic benefits realised through exercising control enhance the value of the enterprise as a whole, not just that of the equity interests. Premium percentages computed on an equity basis will differ depending on the capital structure of the company. In contrast, MPAPs expressed as a percentage of total invested capital (i.e. the sum of debt and equity) would be consistent across companies regardless of differences in leverage.

The discussion draft also addresses some practical issues to be aware of when analysing traditionally observed control premiums and transaction data as part of a more robust MPAP analysis. It also includes an illustration of the application of an MPAP using this new perspective. Overall, the proposed guidance furthers the understanding and support for MPAPs in valuations for financial reporting generally, and for impairment testing in particular.

Only 9% of survey respondents used a control premium derived from general market studies, and 17% did not consider control premiums at all.

¹⁷ The APB, formed in 2010 by The Appraisal Foundation Board of Trustees, adopts and publishes best practice guidance developed by the Valuation for Financial Reporting Working Groups. These groups were originally facilitated by The Appraisal Foundation.

U.S. and Canadian Goodwill Impairment Studies

U.S. Study

Duff & Phelps has published the *U.S. Goodwill Impairment Study* annually since 2009. The U.S. Study examines U.S. publicly-listed companies' recognition of goodwill impairments and features a comparative analysis of the goodwill impairments of approximately 5,000 companies by industry. It also presents the findings of an annual survey of Financial Executives International (FEI) members.

In calendar year 2012, U.S. companies recognised US\$51 billion in goodwill impairment losses,¹⁸ a significant increase over the US\$29 billion recognised in 2011. Nearly half of the 2012 goodwill impairment amount was dominated by the top three impairment events, which accounted for US\$24 billion. Approximately 67% of the total goodwill impairment in 2012 was concentrated in three industries: Information Technology, Industrials and Healthcare.

The U.S. Study includes a summary of the American Institute of Certified Public Accountants' (AICPA) Accounting and Valuation Guide, *Testing Goodwill for Impairment*. Although the Guide relates to goodwill impairment testing under U.S. GAAP, some of its guidance may be useful for impairment testing under IFRS. For example, it contains guidance on how to treat shared assets (such as corporate assets), developing market participant assumptions and comparing the aggregate value of reporting units (similar to IAS 36's cash-generating units) to the entity's market capitalisation.

Canadian Study

In February 2013, Duff & Phelps published its first annual *Canadian Goodwill Impairment Study*. The 2012 Canadian Study looked at goodwill impairments recognised by Canadian publicly-listed companies through 2011 and included an analysis of Canadian company disclosures regarding the transition from prior Canadian GAAP to IFRS and its effect on goodwill impairments.

In Canada, mandatory IFRS adoption was required for annual periods beginning on or after 1 January 2011 for most publicly accountable entities. IFRS 1 *First-time Adoption of International Financial Reporting Standards* requires first-time adopters of IFRS to present full comparative financial information for the year prior to the adoption and an opening balance sheet at the date of transition to IFRS.

In general, IFRS 1 requires full retrospective application of all IFRSs. In theory, this would mean that all past business combinations that took place before the transition date would need to be restated to be consistent with IFRS 3. However, IFRS 1 offers an optional exemption to that requirement. If a company chooses to use the exemption, goodwill balances must be tested for impairment at the transition date. In most cases, a company must recognise any resulting transition-related impairment loss in retained earnings.

The year before IFRS adoption in Canada (2010) provided an opportunity to measure the effect that IFRS adoption had on the goodwill balances of Canadian companies. For comparison purposes, goodwill impairment was presented in 2010 under both sets of accounting rules: (i) as originally reported under prior Canadian GAAP and (ii) as restated under IFRS. The 2012 Canadian Study found that as a result of IFRS adoption:

- 2010 goodwill impairment increased from C\$1.3 billion as originally reported under Canadian GAAP to C\$2.9 billion reported under IFRS.
- In the aggregate, an incremental C\$5.5 billion cumulative transition date goodwill impairment was recognised in the opening balance sheet as a result of IFRS adoption. This amount approximates the cumulative impairment that would have been recognised under IFRS had companies restated their previous business combinations.

Other 2012 Canadian Study highlights included:

- The aggregate amount of goodwill impaired by Canadian publicly-listed companies was C\$11 billion, 81% of which (or C\$8.9 billion) was recognised by three companies: Thomson Reuters, Yellow Media and Kinross Gold Corporation.
- Over 90% of total impairments in 2011 were recognised in the Consumer Discretionary, Materials and Financials industries.

As of the date of this publication, the 2013 Canadian Goodwill Impairment Study is in the final stages of completion and will be available soon. For additional details about these studies, visit: www.duffandphelps.com

18 The total goodwill impairment amount of US\$51 billion is based on the company base set selection and methodology used to prepare the 2013 U.S. Study. It provides a consistent basis for comparison of goodwill impairments over the study period. In addition, General Motors Company's US\$27 billion goodwill impairment charge in the fourth quarter of 2012 was excluded due to the unique circumstances related to the initial recording and subsequent impairment of its goodwill.

Appendix 1: Company Base Set Selection and Methodology

The 2013 Study focused on financial data for companies in the STOXX® Europe 600 Index for the period 2010-2012. The primary sources of data for the Study were Standard & Poor's S&P Capital IQ © 2013 database and individual company annual and interim financial reports.¹⁹ The following procedures were used to arrive at the 2013 Study data set, which was used to calculate all ratios and summary statistics throughout the 2013 Study:

- The 2013 Study used index constituents at the beginning of each year (e.g. 1 January 2010 for the 2010 list) to form the annual data set.²⁰
- The data set was assessed each year to identify any index constituents with a controlling interest in another constituent company because in such cases the controlling investor (the parent) would have consolidated the underlying entity's (the subsidiary's) financial results. To avoid double-counting the parent's and the subsidiary's reported financial information, we excluded the financial results of any subsidiary companies in the index that met this criterion. We also excluded duplicates within the index that are dual listed on European exchanges.²¹

- Financial data for all companies in the 2013 Study was adjusted, when applicable, to a calendar year end (rather than the most recent fiscal year end) to examine impairments over a specific period of time, regardless of company-specific choices of fiscal year.
- Finally, to allow for comparison of goodwill impairment amounts across companies, countries and industries, the financial data for each company in the index with a non-euro reporting currency was translated into euro using the foreign exchange rate assumptions listed in Appendix 3 to this report. Regardless of fiscal yearend choices, for simplicity and comparability reasons, goodwill impairments (and other financial metrics) were translated into euro using the applicable spot foreign exchange rate as of 31 December of the applicable year, with a few exceptions.²²

The resulting data set was used to calculate all ratios and summary statistics throughout the 2013 Study.

- 19 Although most of the companies in the STOXX® Europe 600 Index prepare financial statements in accordance with IFRS, some use other accounting standards, such as Swiss GAAP or U.S. GAAP. The 2013 Study did not make adjustments for any differences in accounting standards applied by companies within the index. However, because only a small proportion of the companies in the index do not use IFRS, we do not expect the inclusion of those companies to have a material impact on the statistics reported in the 2013 Study.
- 20 Source: Bloomberg. The index is reviewed regularly for component changes and is typically adjusted on a quarterly basis.
- 21 This analysis resulted in the elimination of 10, 13 and 12 companies from the data set in 2010, 2011 and 2012, respectively. Consequently, Tables 1-3 show that 2012 statistics were computed for 588 companies (600 companies in the index, less the 12 that were eliminated from the data set).
- 22 Because of the fiscal year-end to calendar year-end adjustment goodwill impairment amounts for some companies were calculated using financial results across different fiscal years. In such cases, spot foreign exchange rates corresponding to the appropriate fiscal year-end dates were used to convert the impairment amounts into euro.

Appendix 2: 2013 Survey Methodology

In the third quarter of 2013, Mergermarket interviewed 150 CFOs and Finance Directors of publicly-listed European companies regarding their experiences in applying the IAS 36 goodwill impairment test in 2012. Respondents were split evenly across a range of industries and geographic regions, as shown below. All interviews were conducted by telephone and are reported anonymously with the results presented in aggregate. Some totals in the survey graphs may not add to 100% due to rounding.

Survey Respondents by Region and Industry

Number of Companies by Industry	Benelux	DACH	France	Nordics	Southern Europe	United Kingdom	Total
Energy	2	1	0	5	3	4	15
Materials	4	2	1	3	3	2	15
Industrials	1	3	4	2	2	3	15
Consumer Discretionary	2	1	4	0	5	3	15
Consumer Staples	4	3	4	4	0	0	15
Healthcare	2	4	2	5	1	1	15
Financials	3	3	2	2	0	5	15
Information Technology	3	2	5	0	1	4	15
Telecommunication Services	4	4	0	3	4	0	15
Utilities	0	2	3	1	6	3	15
Total	25	25	25	25	25	25	150

Appendix 3: Foreign Exchange Rate Assumptions

Year	Currency	Per €1
2012	CHF	1.207
	DKK	7.461
	GBP	0.811
	NOK	7.341
	SEK	8.585
	USD	1.318
2011	CHF	1.214
	DKK	7.433
	GBP	0.835
	NOK	7.746
	SEK	8.918
	USD	1.299
2010	CHF	1.253
	DKK	7.454
	GBP	0.859
	NOK	7.802
	SEK	9.011
	USD	1.341

Other Dates	Currency	Per €1
31/03/2012	GBP	0.834
30/09/2011	GBP	0.860
30/04/2011	GBP	0.889
31/03/2011	GBP	0.884
31/01/2011	GBP	0.855
30/09/2010	GBP	0.865
31/07/2010	GBP	0.831
30/04/2010	GBP	0.868
31/03/2010	GBP	0.891

Source: S&P Capital IQ

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