EFRAG SECRETARIAT PAPER FOR PUBLIC MEETING

Goodwill – a quantitative study

Objective

1 The objective of the session is to present a revised quantitative analysis on goodwill recognised by European entities.

2 The IASB is currently discussing possible changes to the accounting treatment of goodwill in the context of the post-implementation review of IFRS 3 *Business combination.* EFRAG Secretariat believes that it would be useful to publish this study to provide a background for the discussion. This is further discussed at the end of the paper.

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What is the problem?

3 Under IFRS, goodwill arising from a business combination is not amortised. Instead, goodwill should be tested for impairment annually or whenever there is any indication that it may be impaired (“impairment-only model”).

4 Prior to the issuance of IFRS 3 *Business Combinations* in 2004, IFRS required amortisation of goodwill on a systematic basis over the best estimate of its useful life, with a rebuttable presumption that the useful life of goodwill would not exceed twenty years from initial recognition.

5 There has been a long debate about the strengths and weaknesses of an impairment-only model and whether the amortisation of goodwill should be reintroduced. The debate encompasses both conceptual arguments about the relevance of information and implementation issues.

6 Those in favour of the reintroduction of amortisation of goodwill argue that:

(a) Goodwill amortisation allows to match the consumption of goodwill with the benefits of the transaction;

(b) Amortisation limits the recognition of internally generated goodwill;

(c) There are significant uncertainties and judgements inherent in the impairment-only model and amortisation can provide sufficient verifiability and reliability of financial information;

(d) Impairment is not usually recognised on a timely basis and thus does not provide predictive information to markets;

(e) Amortisation is a more operational approach and improves the cost-benefit balance for reporting entities; and

(f) Amortisation limits the size of goodwill in relation to total assets.

7 However, those against the reintroduction of amortisation of goodwill argue that:

(a) Impairment losses, even when late, provide confirmatory information;

(b) An impairment-only approach is more conducive to the assessment of stewardship and of the ability of the management to add value through their acquisitions;

(c) Annual amortisation is conceptually flawed since nearly all acquisitions are based on the intention to continue the acquired activities for an indefinite period;

(d) A reliable assessment of the useful life of the goodwill would also involve significant judgment; and

(e) Users would ignore amortisation and use earnings figures that exclude it.

Current developments

8 Following the completion of the PiR of IFRS 3, the IASB has started debating issues identified as priorities. The IASB scope is wider than accounting requirements for goodwill, and includes also the identification and measurement of intangible assets in a business combination.

9 At this stage, the IASB is considering possible improvements to the annual impairment test and related disclosures, although it has not ruled out the possibility to reconsider annual amortisation.

10 In 2014, EFRAG published together with Accounting Standards Board of Japan (ASBJ) and Organismo Italiano di Contabilità (OIC) a discussion paper ('DP') *Should Goodwill Still not be Amortised?* authored by a Research Group, which focused on the subsequent accounting for goodwill.

11 In 2015, EFRAG TEG discussed some possible improvements to the impairment test and tentatively agreed that the IASB should:

(a) Consider an approach in which an entity is required to perform a quantitative impairment test only if a qualitative assessment shows that the goodwill is likely to be impaired;

(b) Consider the advantages and disadvantages of requiring only one method to assess the recoverable amount. One way to do this, but not the only one, would be to require entities to select the method that reflects the expected manner of recovery of the investment;

(c) Allow the inclusion of the effect of future restructurings in the Value in Use (VIU) calculation, before the restructuring qualifies for recognition; and

(d) Allow entities to opt for a pre-tax or post-tax calculation of VIU.

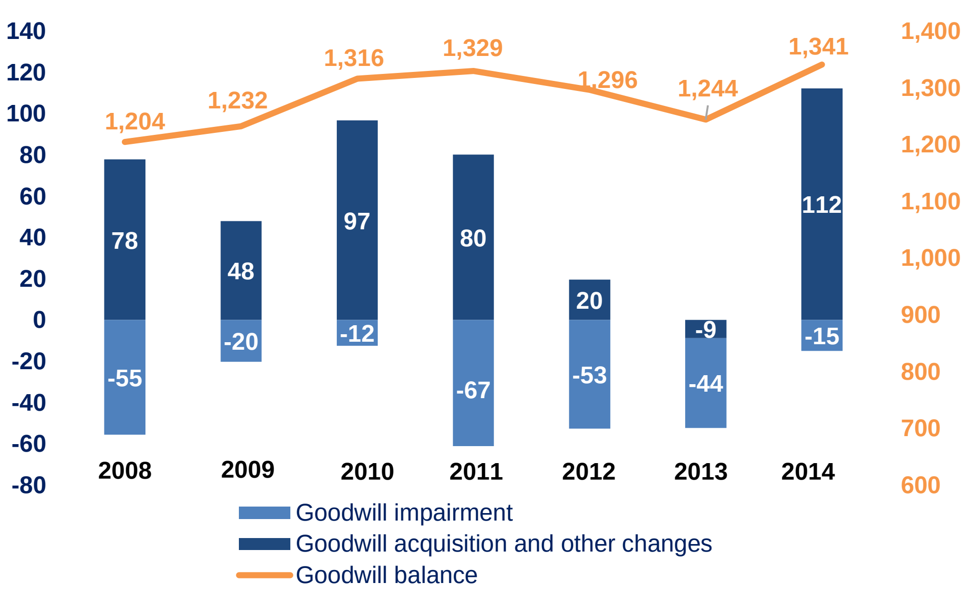
Key findings

12 EFRAG Secretariat was instructed to perform a quantitative analysis of the amount and trend in goodwill and goodwill impairment in Europe.

13 After assessing a number of external studies, EFRAG Secretariat started an analysis based on the companies included in the S&P Europe 350 index. The key findings are summarised below:

(a) **Evolution of goodwill**: In the period, the goodwill steadily increased by 13.5%. However, in 2012 and 2013 there was a steep decrease due to an increase of impairments and decrease of new acquisitions. In 2014, the amount of goodwill recovered to 1.3 trillion euros, comparable to the amount before the sovereign crisis. Over the period, companies in the sample recognised impairments of 267 billion euros and other changes (new goodwill acquired, disposals and foreign exchange) of 426 billion euros, of a net increase of 159 billion euros;

Goodwill Composition from 2008 to 2014 (in billions)



(b) **Concentration of goodwill:** There is a relatively high concentration of goodwill in a small number of companies. This concentration has been slightly decreasing over time;

(c) **Goodwill as a proportion of total assets:** On average, goodwill represents around 3.7% of total assets. The ratio rises to 17% when financial sector is excluded;

(d) **Goodwill as a proportion of net assets:** Although the ratio GW/Net Assets has been decreasing since 2008, it is still significant (29% in 2014);

(e) **Goodwill and intangibles**: Goodwill represents the biggest portion of total intangibles since 2007 (62% on average);

(f) **Goodwill impairments**: Impairment charges were more intense in 2008 and 2011, when financial markets were negative, representing up to 5% of the opening goodwill;

(g) **Concentration of goodwill impairments**: Impairment losses are significantly concentrated in a small number companies, particularly on Telecommunications ("Telcos") and Financials;

(h) **Breakdown by industry:** The total goodwill for Financials and Telcos decreased, while for all the other industries it increased by more than 25%, except for the Materials industry (increased by 6%). The key ratios (GW/Total Assets and GW/Net Assets) vary across industries, with Telcos and Consumer Staples being the leaders. The intensity of impairment varies also across industries. The industries with the higher intensity of impairments are Financials, Materials and Telcos. Further analysis is required to better understand the relationship between the evolution of intensity of impairments and the market capitalisation; and

(i) **A transaction overview:** EFRAG Secretariat has examined forty business combinations in recent years. There is no clear indication that when consideration includes a higher portion of equity instruments, more goodwill is recognised in proportion.

Quantitative analysis

Data sample

14 EFRAG Secretariat used a commercial database and focused on S&P Europe 350 Index companies, for the time period between 2007 and 2014. The index includes 350 leading blue-chip companies drawn from 16 developed European markets. Data for earlier periods were not available.

15 Some ratios were also calculated for the full population of 6,690 listed companies in the database.

16 Most of the results presented in this study are based on the extracted data. EFRAG Secretariat made some adjustments[1] to the data, such as removing companies which had zero total assets in some of the years of the analysis or companies that were repeated in the sample (e.g. parent and the Group). After the adjustments, the sample includes 328 companies, which represent a total market capitalisation of approximately 6 trillion euros.

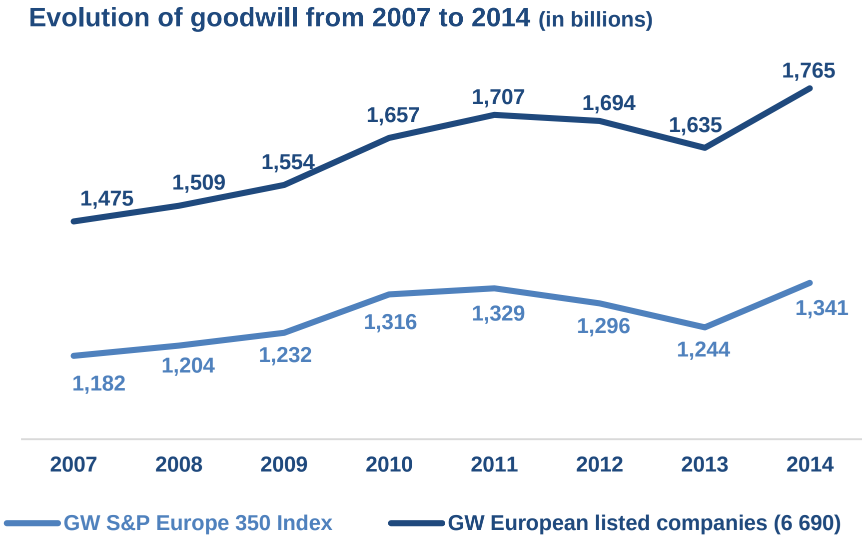
[1] In some cases, goodwill impairments were included in the line 'Profit/loss from discontinued operations'. EFRAG Secretariat examined around 70 cases and concluded that these amounts would not change significantly the analysis.

17 This sample is not a *representative sample* of all European listed entities and should not be used for *statistical inference*.

18 Financial data that were extracted for the Europe index were translated into euros using the historical exchange rate by the commercial database. The industry classification used in our presentation is based on the Global Industry Classification Standard (GICS).

Evolution of goodwill

19 The graph below depicts the evolution of goodwill in the period for the full population of European listed companies and for the sample.

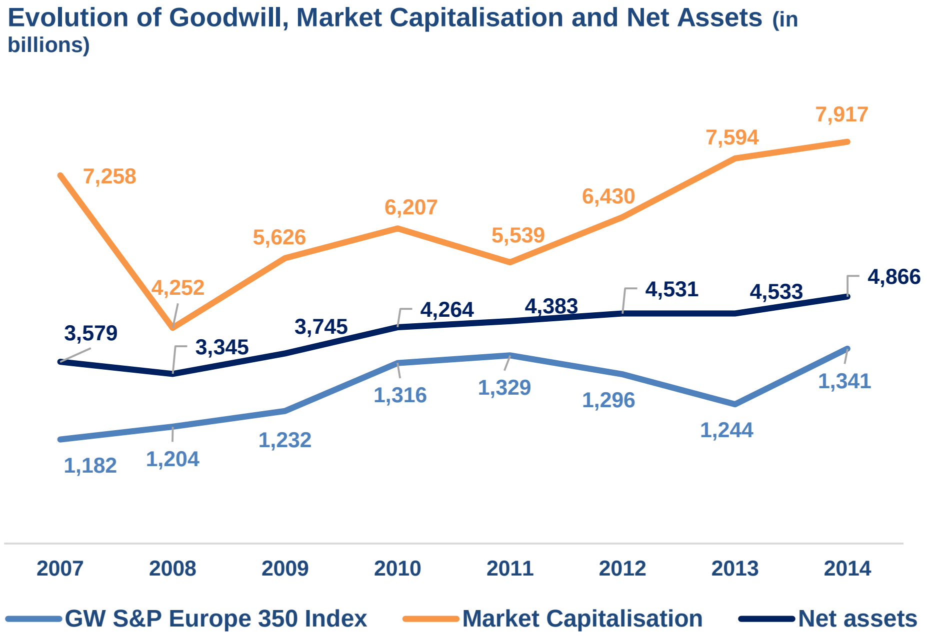


20 Between 2007 and 2011 the total amount of goodwill recognised by the companies within the sample steadily increased around 12.4% and 15.7% when considering the full population. When considering the sample, overall goodwill increased by 159 billion euros, or 13.5%, during a period when the financial crisis occurred.

21 In 2012 and 2013 there was a steep decrease (around 6.4%) on the net goodwill. This decrease resulted from a combination of higher impairments and less acquisition. In 2014 total goodwill in the sample reached 1.3 trillion euros, comparable to the pre-crisis amount. The change in 2014 is due to significant additions and lower impairment. 35 companies account for 80% of the additions.

22 The information on the portion of consideration allocated to goodwill was not available. However, a 2012 study from Houlihan-Lokey reported that for the companies within the STOXX Europe 600 index between 2007 and 2011, 45% of the consideration was allocated to goodwill. Similarly, in its review of 2012 IFRS financial statements, ESMA found that for a sample of 56 entities, goodwill represented 54% of the total consideration paid.

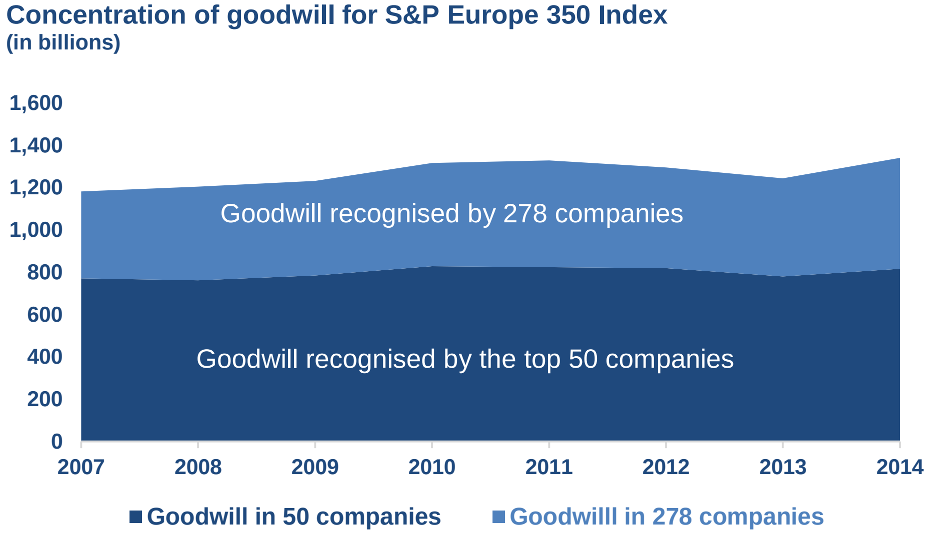
23 The following chart compares the trend of goodwill, net assets and the S&P Europe 350 Index. The index was quite volatile, with sharp decreases in 2009 and 2011.



24 For reference, the gross domestic product at market prices of Euro area 19 (fixed composition) has been slightly fluctuating between 2.3 and 2.5 trillion euros. From 2008 to 2009 there was a decrease of 2% and subsequently it increased 9% until 2014.

Concentration of goodwill

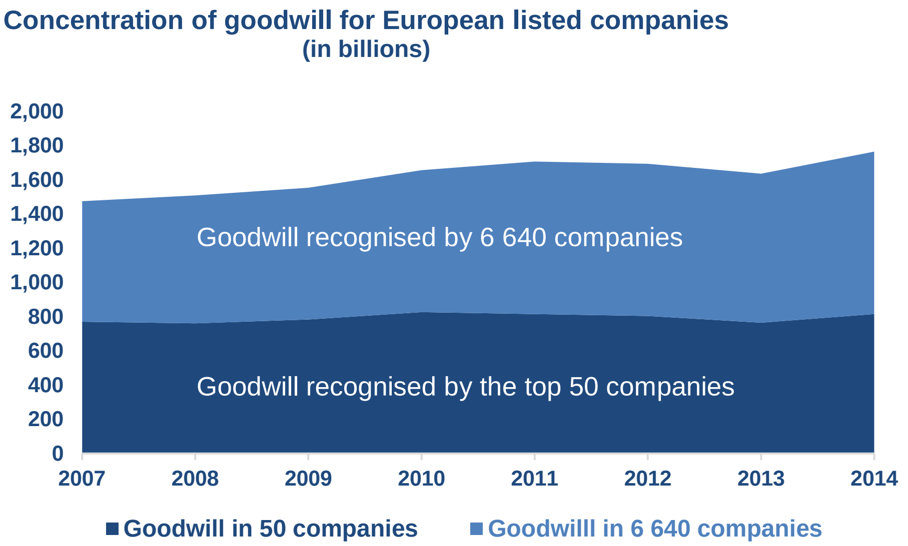
25 The graph below shows that goodwill is highly concentrated in a few companies. The top 50 companies account for, on average during the period, 63% of the total goodwill. The same companies represent 38% of the market capitalisation and 42% of the net assets in the sample.



26 The concentration has decreased from 65% in 2007 to 61% in 2014. This is partially due to an increase of the percentage of companies in the sample that report goodwill, as shown in the next table.

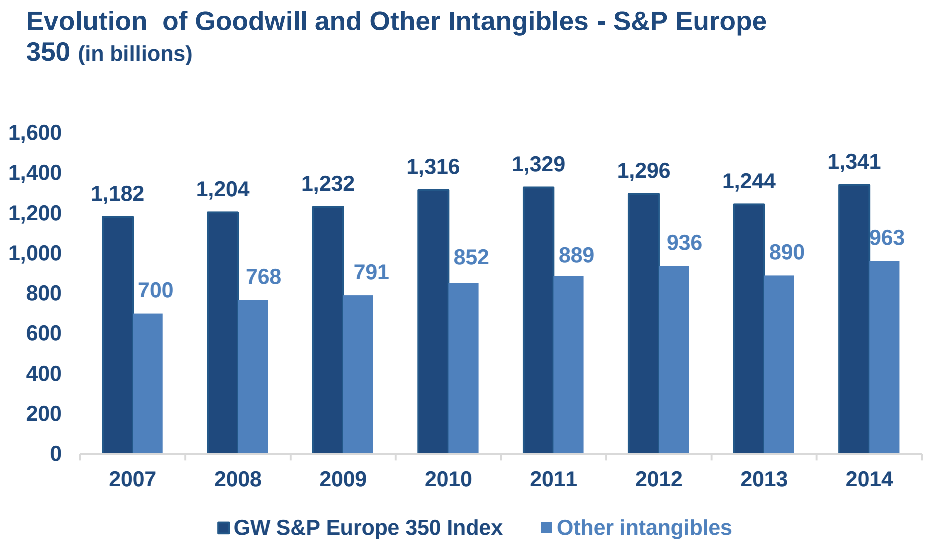
	2007	2008	2009	2010	2011	2012	2013	2014
Companies in the sample	328	328	328	328	328	328	328	328
Companies reporting Goodwill	289	291	290	297	299	295	300	306
In %	88%	89%	88%	91%	91%	90%	91%	93%
Companies accounting for 50% of total goodwill	29	31	31	32	34	35	35	36
% of market cap represented by these companies	26%	29%	29%	29%	28%	28%	28%	29%
% of net assets represented by these companies	31%	33%	34%	35%	32%	31%	29%	28%

27 When considering the full population of listed entities, the concentration is even higher with the top 50 entities (less than 1% of the total number) accounting for almost half of the total. This concentration has however decreased from 52% (in 2007) to 46% (in 2014) as more companies have been recognising goodwill.



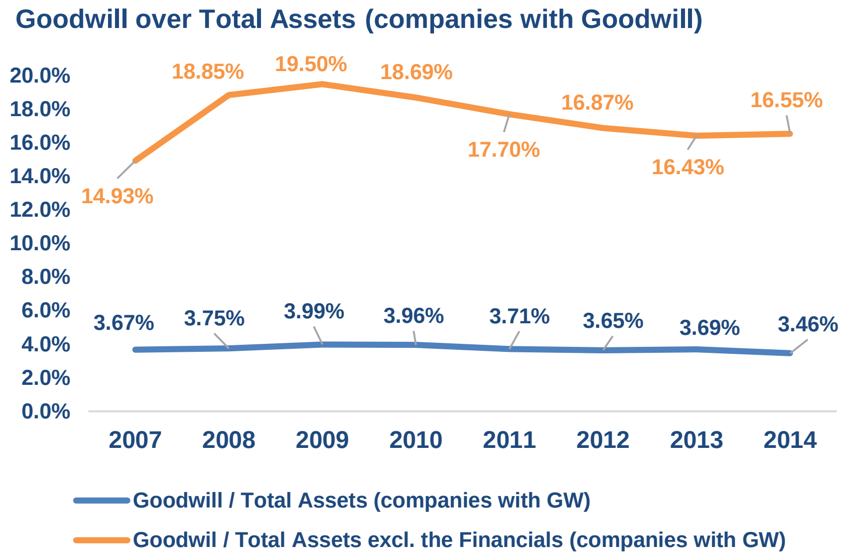
Evolution of intangible assets

28 Goodwill represents a significant portion of total intangibles, with an average of 62% over the period. Other intangibles show a similar trend to that of goodwill, and increased by 263 billion euros, or 38%, in the period. The figure refers to total intangible assets, as it was not possible to analyse separately intangibles purchased in business combinations.



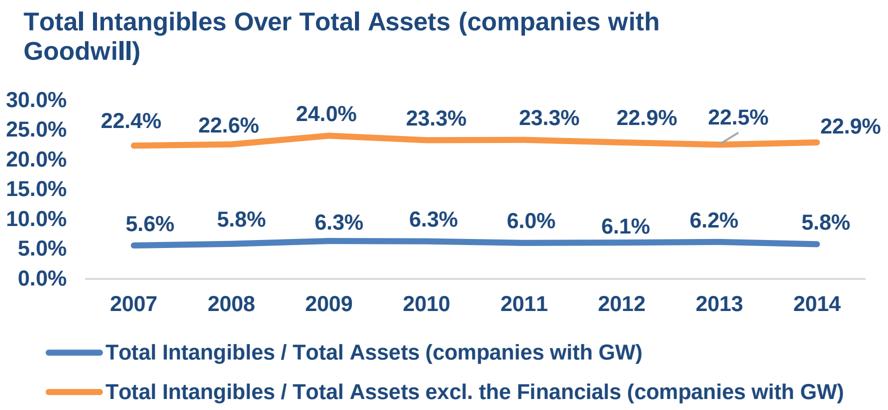
Evolution of goodwill as a percentage of total assets

29 In the period, the ratio of goodwill to total assets averaged 3.7% for the sample and 3.9% for the full population. This ratio has been decreasing since 2009 and reached its lowest point in 2014 with 3.5%.



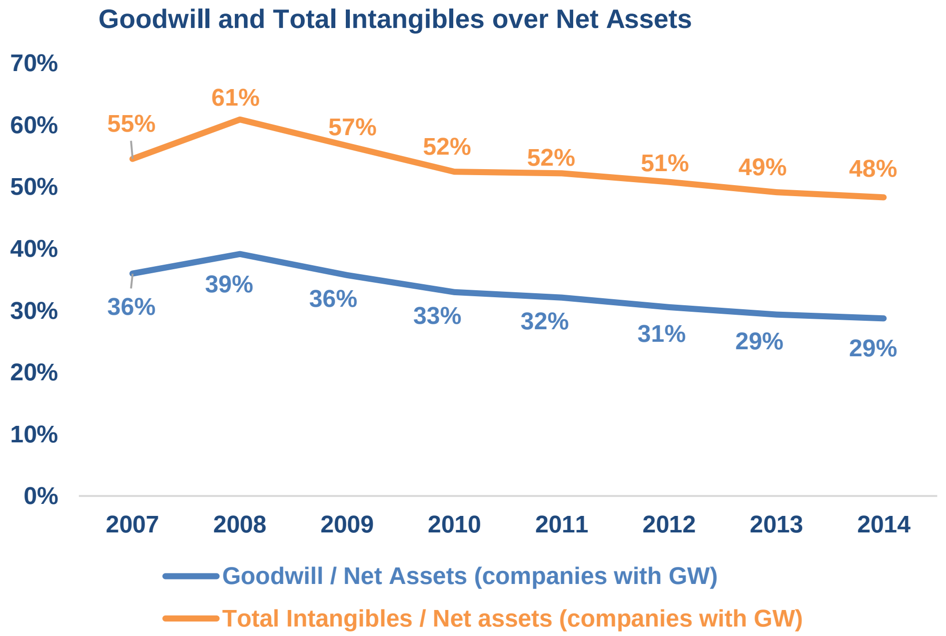
30 The ratio is skewed by the Financials sector, whose entities have very large balance sheets. When Financials are excluded, the ratio is significantly higher and fluctuates between 15% and 20%. The adjusted ratio has been decreasing since 2009 and stabilised at 16.6% in 2014.

31 The ratio of total intangibles to total assets remained stable around 6% for the sample and 23% when Financials are excluded.



Evolution of goodwill as a percentage of net assets

32 The ratio of goodwill to net assets, or the carrying amount of equity, averaged 33% for the sample and 32% for the full population. This ratio has been decreasing since 2008 and reached its lowest point in 2014 with 28.8%.

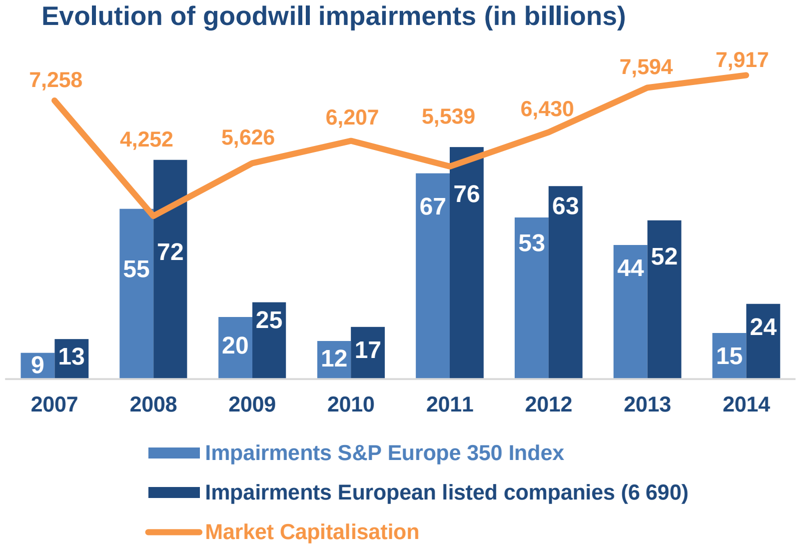


Evolution of goodwill impairment

33 The amount of goodwill impairment losses per year has fluctuated over the period, with the highest amounts of total impairment recognised in 2011 (67 billion euros) and 2008 (55 billion euros), years in which the market capitalisation fell significantly.

34 Impairment losses tend to be higher when financial markets are negative and lower when they are positive. Overall, impairments and falling prices tend to occur in the same years, although it is difficult to assess causation.

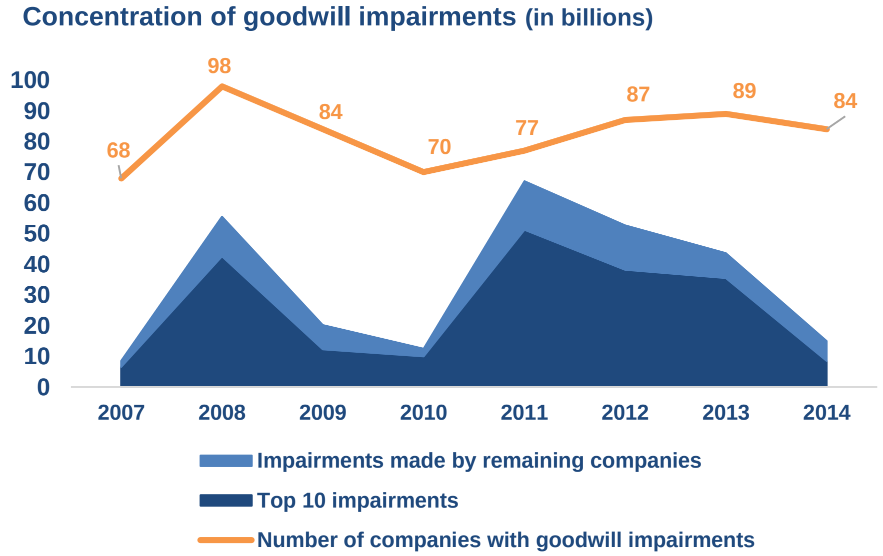
35 Impairment losses have been decreasing since 2011 and in 2014 almost reached the level of 2010. This conclusion is aligned with the external studies and the conclusions of the 2011 ESMA review.



Concentration of goodwill impairments

36 On average 28% of companies in the sample reported impairments and those impairments are highly concentrated in a limited number of companies (top 10), athough the percentage decreased significantly for 2014.

	2007	2008	2009	2010	2011	2012	2013	2014
Companies with goodwill	289	291	290	297	299	295	300	306
Companies that reported goodwill impairments	68	98	84	70	77	87	89	84
% of companies with goodwill impairment	24%	34%	29%	24%	26%	30%	30%	28%
% of goodwill impairment recognised by top 10	76%	77%	61%	80%	76%	72%	81%	57%



37 In addition, 42 companies in the sample recognised impairment losses in at least 6 years during the period.

38 This concentration is high when also considering the full population. In each year of the period, only 17% of the companies that report goodwill recognised an impairment loss. The 10 companies that reported the biggest impairment losses accounted for 60% of the total on average during the period.

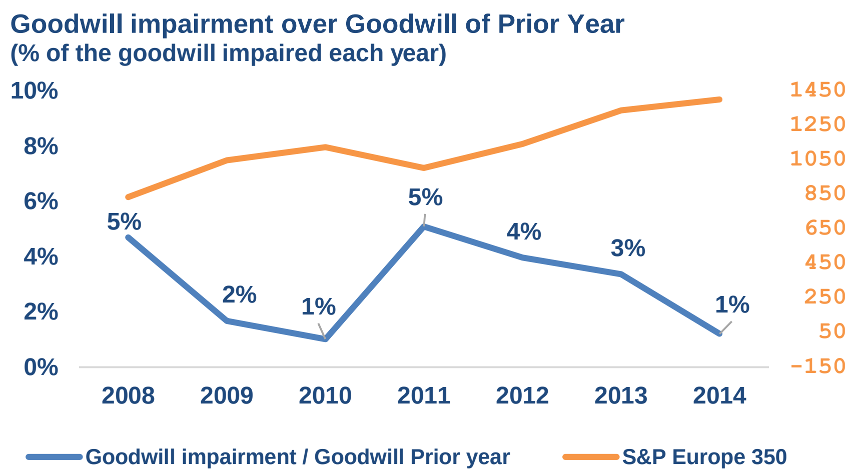
39 Other external studies report similar findings. The 2012 Houlihan Lokey study noted that more than 70% of total goodwill impairments in 2011 were booked by just two industries: Banks and Telecommunications as Banks continued to grapple with ongoing regulatory and macroeconomic uncertainties and Telecommunications witnessed increasingly challenging trading conditions.

40 In its review of 2011 financial statements, ESMA noted that a limited number of companies accounted for the significant impairment losses. 5% of the companies in the sample of 235 listed entities reviewed accounted for almost 75% of the goodwill impairment and were mostly in financial services and telecommunications.

Intensity of goodwill impairments

41 As noted above, impairment losses peaked in 2011 and 2008, years in which the market capitalisation fell significantly.

42 The following chart illustrates the trend in the ratio between impairment losses and the opening balance of goodwill. This ratio ranged from approximately 1% (in 2010 and 2014) to approximately 5% (in 2008 and 2011).



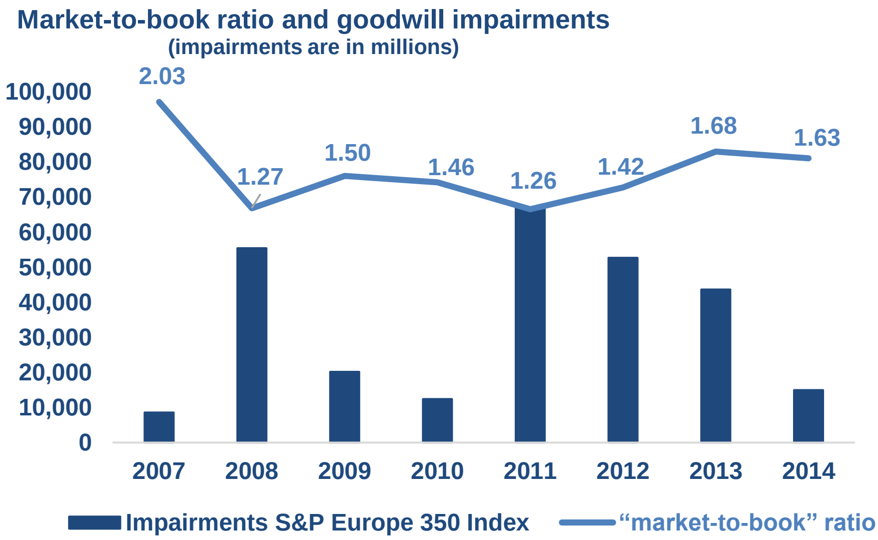
43 On average, entities in the sample recognised an annual impairment of 3% of the opening goodwill. Assuming the ratio is constant over time, an entity would take 33 years on average to fully impair the goodwil. It should be noted that, due to the high concentration of goodwill and impairment losses, the average may have limited relevance. Also, the annual change in the ratio is significant.

44 It is also helpful to consider the ratio between market capitalisation and net assets. IAS 36 indicates a market capitalisation lower than the carrying amount of equity provides an indicator of impairment. If the entity is a single CGU reporting goodwill, a market capitalisation lower than the carrying amount of equity should normally lead to an impairment loss, unless the entity can support recoverable amount through a value in use calculation. This would imply that the management uses more optimistic assumptions than the market participants.

45 The chart below illustrates the trend of the market-to-book ratio over the period for the sample. The ratio was at its lowest levels in 2011, despite the significant impairment losses, and subsequently recovered due to gains of the stock market.

46 Other studies show similar results. The 2012 study from Houlihan Lokey noted that in 2011 more than a third of the companies in the Euro STOXX 600 had a ratio below 1, and most of the industries had lower ratios than in 2007.

47 In its review of the 2011 financial statements, ESMA noted that 43% of a sample of 235 European listed entities showed a ratio below 1, but only half of those recognised impairment losses in that year.



	2007	2008	2009	2010	2011	2012	2013	2014
Number of companies with market-to-book ratio lower than 1	35	114	80	76	112	90	64	66

Timing of goodwill impairments

48 There have been questions about whether impairment losses are recognised timely. As noted in paragraph 34 above, higher goodwill impairments tend to occur when financial markets are negative and viceversa.

49 The following table shows that the vast majority of the companies reporting impairment had a positive pre-tax result before impairment.

	2007	2008	2009	2010	2011	2012	2013	2014
Number of companies reporting goodwill impairment	68	98	84	70	77	87	89	84
Number of companies with a negative result before impairment	3	17	14	3	10	12	10	8
In %	4%	17%	17%	4%	13%	14%	11%	10%

50 Some studies have investigated the relation between market changes and impairments. A 2013 study used[2] a reverse regression model that compares 'stock returns' (assumed to be a proxy of changes in economic value) and 'impairment recognition'. The authors concluded that approximately 31% of losses in economic value are recognised in current period earnings, with 17.8% attributable to goodwill impairment charges. The authors aggregated countries in three clusters based on different criteria and concluded that the correlation is stronger for those countries where the stock market is more developed and there is stronger enforcement. More specifically, companies operating in strong regulatory and enforcement settings appear to recognize economic losses earlier than those based in jurisdictions where enforcement is deemed weaker.

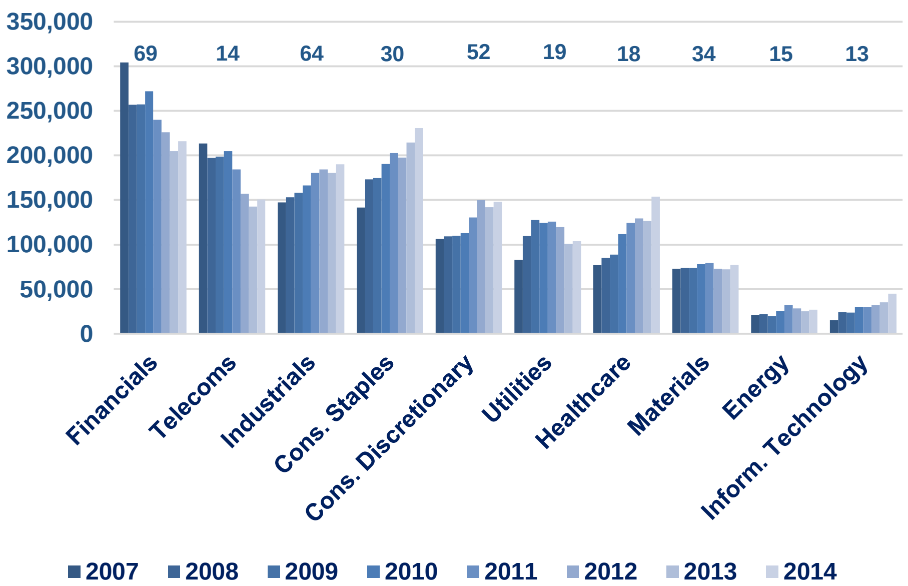
51 Similar results appear another study published in 2015[3] where the authors conclude that that goodwill impairment incidence is negatively associated with performance, but also related to proxies for managerial and firm-level incentives, as well as to ownership structures. They also conclude that goodwill impairment incidence is associated with lagged stock market return, suggesting that firms tend to delay necessary impairment.

Breakdown by industry

52 In the following parahraphs, the study breaks down some of the analysis of the sample at the industry level.

53 The following chart shows the evolution of the total amount of goodwill by industry, as well as the number of companies in each industry.

Evolution of goodwill by industry (in millions)



54 The ratio of goodwill over total assets may range from 1% to 26% (average: 3.7%). Consumer Staples, Telcos and Healthcare report the highest ratios, while Financials, Energy, and Utilities report the lowest.

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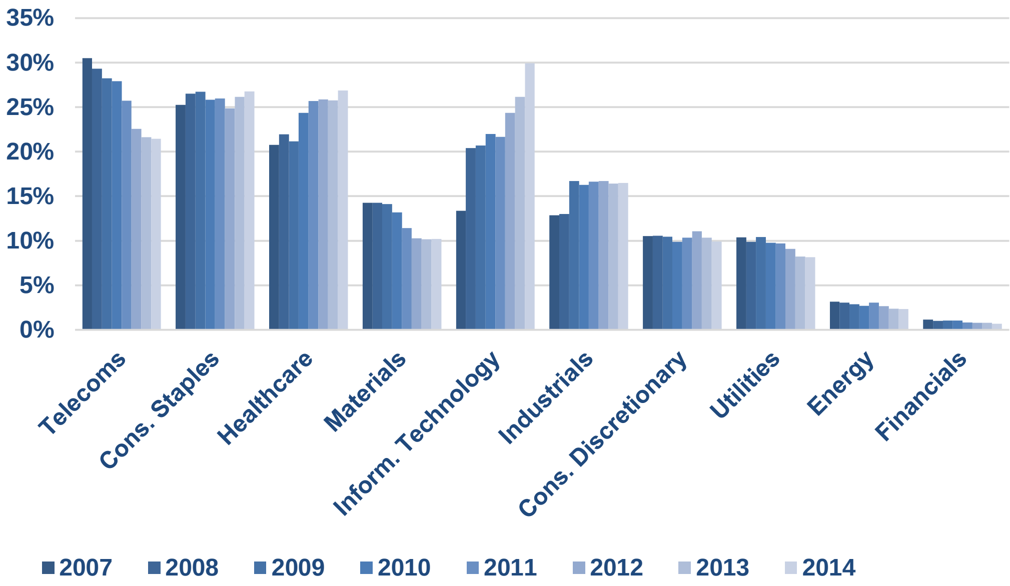
[2] *Accounting for asset impairment: a test for IFRS compliance across Europe* by H. Amiraslani, G.E. Iatridis and P.F. Pope.

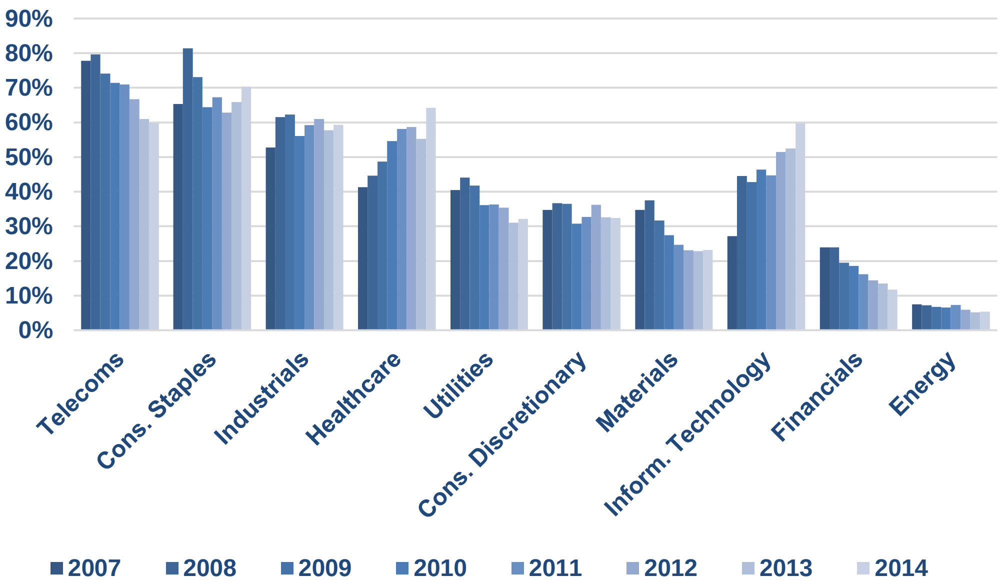
[3] *Determinants of goodwill impairment: international evidence* by M.Glaum, W.Landsman and S.Wywra.

Goodwill over total assets by industry

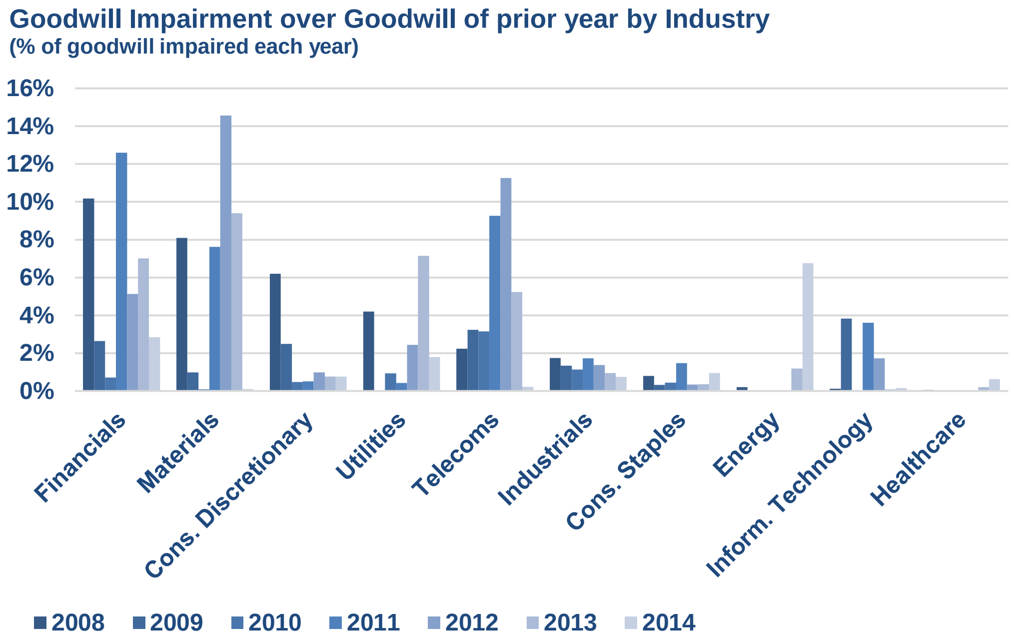


55 The ratio of goodwill over net assets also varies significantly, with a range from 6% to 70% (average: 33%). The three industries with the highest ratios are Telcos, Consumer Staples and Industrials, while those with the lowest ratio are Energy, Financials and Materials.

Goodwill over net assets by industry

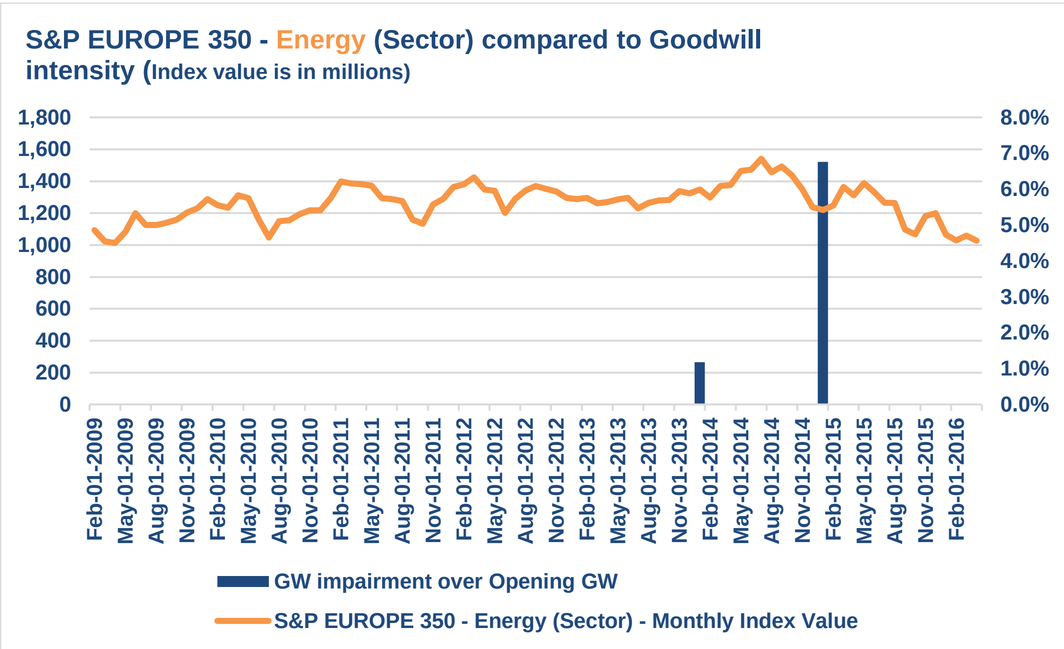


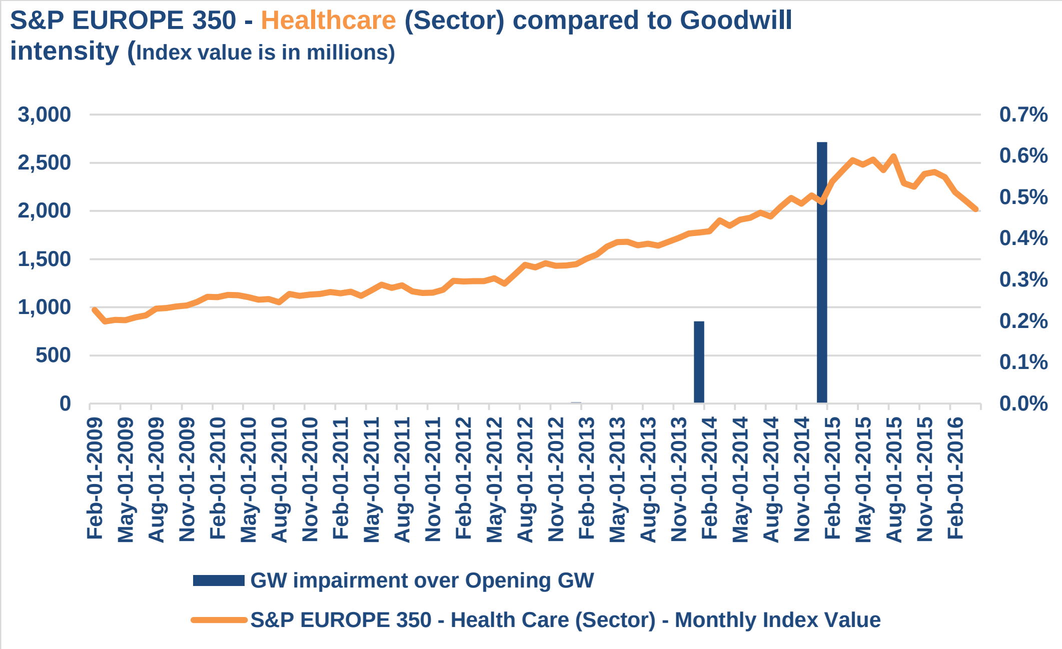
56 The ratio of mpairment losses ranges from 1% to 6% (average: 3%). Financials, Materials and Telcos report the highest ratios, and Healthcare, Consumer Staple and Energy the lowest ones.



57 As mentioned above, there is a high concentration of goodwill impairment charges in a few companies of our sample. In 2008, 50% of the total impairment losses were recognised by two entities in Financials and one in Telcos; in 2011, the same percentage was recognised by two entities in Financials, two in Telcos and one in Materials.

58 While comparing the trend of impairment losses and the industry sub-index, the results are mixed. For instance, the comparison for Energy or Healthcare shows no correspondence between the two. However, further analysis is required.





A transaction perspective

59 Some academic studies have assumed that there is a correlation between certain characteristics of an acquisition and the magnitude of impairment losses recognised subsequently. These are some characteristics thought to be indicative of a potential overpayment:

(a) goodwill is significant compared to the net identifiable assets of the acquiree;

(b) a significant portion of the consideration was represented by the acquirer's equity interests;

(c) the acquirer was bidding against other potential buyers; and

(d) the acquirer paid a significant premium over the acquiree's market price.

60 EFRAG Secretariat investigated if a higher portion of consideration paid in shares results in a higher proportion of consideration treated as goodwill. Based on a sample of forty recent major acqusitions, there is no clear evidence of a correlation.

61 In 31 cases, consideration only included cash. The proportion of the consideration recognised as goodwill is illustrated in the next table.

Percentage of goodwill over total consideration	
<0%	4
0% - 25%	5
26% - 50%	10
51% - 75%	6
76% - 100%	4
>100%	2
Total	**31**

62 In the other 9 cases, consideration was paid partly in the acquirer's equity instruments. The following table illustrates the percentage paid in shares and the proportion between goodwill and total consideration.

Portion of consideration paid in shares	Portion of consideration allocated to goodwill
Between 0% and 50% (3 cases)	Between 32% and 69%
Between 50% and 100% (3 cases)	Between 20% and 60%
100%	Between 0% and 32%

Possible additional analysis

63 EFRAG Secretariat has not completed the analysis of the data. It may be helpful to consider whether the differences between industries can be justified by the underlying economic trends.

Preliminary indications from the quantitative study

64 Many academic studies have investigated different aspects of goodwill accounting. While some single country studies support the relevance of impairment losses, there is no conclusive evidence of whether the impairment-only model provides timely and reliable results, or more decision-useful information.

65 EFRAG Secretariat is still considering the findings and performing additional analysis. However, we have identified some preliminary indications that we would like to present to EFRAG Board for their consideration:

(a) The absolute amount of goodwill has increased in the period and its relative weight to total assets and net equity is significant. However, the rate of increase has slowed down between 2010 and 2014 and the relative weight of goodwill has been relatively stable or even decreased. This does not support the claim that goodwill is growing exponentially.

(b) Since goodwill is highly concentrated, the behaviour of a limited number of companies has a significant impact on trends;

(c) The average intensity of impairment (the ratio between the impairment loss recognised and the opening balance of goodwill) ranges between 1% and 5% in a period that included a serious financial crisis. This is also not consistent with presumptions included in Standards under which the useful life of acquired goodwill should not extend beyond 10 or 20 years;

(d) On an overall level, higher impairment losses are observed in years where the market index decreases. This could suggest that entities do not delay recognition of impairment, although additional analysis is needed at the industry level;

(e) In each year the number of companies that recognise impairment losses exceed the number of companies that report a pre-impairment loss (i.e., companies that report a loss regardless of the goodwill impairments recognised in the year). This suggests that entities do not delay recognition of impairment until they experience significant losses, although it should be noted that:

(i) The companies in the sample are large groups with presumably a strong internal control and governance system; and

(ii) The companies in the sample are presumably multi-segment groups, so it may be more meaningful to compare impairment with segment results.