October 2011

2011 Goodwill Impairment Study

Introduction

In 2009 Duff & Phelps and the Financial Executives Research Foundation (FERF) first published the results of their comprehensive *Goodwill Impairment Study*. The *2009 Study* examined U.S. publicly-traded companies' recognition of goodwill impairment at the height of the financial crisis (the end of 2008 and the beginning of 2009), and featured a comparative analysis of the goodwill impairments for over 5,000 companies (by industry), as well as the findings of a survey of FEI members.

The *2010 Goodwill Impairment Study* followed up and expanded on the *2009 Study*'s results. In the *2010 Study*, the time horizon over which goodwill impairments were studied was extended to five years, enabling an assessment of goodwill impairment trends over time. In addition, the *2010 Study* featured an analysis of the relative performance of companies over the 12-month periods before and after the goodwill impairment charge occurring.[1]

Now in its third year of publication, the *2011 Goodwill Impairment Study* continues to examine general goodwill impairment trends, trends within different industries through December 2010, and the relative performance of companies that have impaired their goodwill versus companies that have not done so. In addition, the *2011 Study*'s annual survey of Financial Executives International (FEI) members introduces a segregation of responses between private and public firms.

[1] Performance is measured relative to the market. The market is defined throughout the *2011 Study* and *2010 Study* as the Standard & Poor's 500 Index.

Inside

Introduction

Purpose of the 2011 Study

- To report and examine the general and industry trends of goodwill and goodwill impairment of U.S. companies, and to assess whether new trends have developed.
- To analyze the relative performance of companies that recorded goodwill impairment to the performance of the market as a whole.
- To report the 2011 results of the annual goodwill impairment survey of FEI members that included their preliminary views regarding to the use of the qualitative assessment option finalized under ASU 2011-08.

Highlights of the 2011 Study

- The total amount of goodwill impaired in calendar year 2010 increased from $26 billion in 2009 to $30 billion, including a $12.4 billion goodwill impairment by Bank of America (NYSE: BAC). Goodwill impairments decreased by 34.5 percent excluding the BOA impairment.
- For the second year in a row, financial service firms had the greatest proportion of total impairments. Over 70 percent of total impairments in calendar year 2010 were recognized in financial services, healthcare, and industrials.
- Most of the underperformance of companies that recorded goodwill impairment occurs prior to the actual impairment charge, indicating that in general, investors are aware of the issues that may lead to a subsequent impairment long before the actual impairment is recognized.
- Anticipating the release of ASU 2011-08, FEI members were surveyed on their preliminary views of the update. The qualitative assessment option had broad appeal among the respondents, with 69 percent of private companies and 81 percent of public companies indicating that they expect to employ the qualitative assessment for some or all of their reporting units. For a summary of the Accounting Standards Update, see Appendix B, *"Quick Accounting Reference Guide"*.

Overview of Goodwill and Goodwill Impairment

Goodwill is "an asset representing the future economic benefits arising from other assets acquired in a business combination or an acquisition by a not-for-profit entity that are not individually identified and separately recognized." [2]

In general terms, the amount of goodwill recognized is the excess of the consideration transferred (including the fair value of any noncontrolling interest and previously held equity interest, if applicable) over the net acquisition-date amounts of the identifiable assets acquired and liabilities assumed.

Goodwill Impairment Testing

Goodwill impairment is measured as the excess of the carrying amount of goodwill over its implied fair value.[3] The Financial Accounting Standards Board's (FASB) standard for the accounting for goodwill, Accounting Standards Codification (ASC) Topic 350 *Intangibles–Goodwill and Other* specifies that goodwill must be tested for impairment at least annually.[4]

Qualitative Assessment

In September 2011, FASB issued ASU No. 2011-8 *Intangibles-Goodwill and Other (Topic 350): Testing Goodwill for Impairment* (the "Update"), providing public and private entities with the option to first assess qualitative factors ("Qualitative Assessment") to determine whether it is more likely than not (greater than 50% likelihood) that the fair value of a reporting unit is less than its carrying amount. An entity would continue to the traditional first step of the impairment test if it fails the Qualitative Assessment, while no further analysis would be required if it passes. Qualitative Assessments can be bypassed or resumed in any subsequent period.

The Update provides examples of events and circumstances, none of which are intended to be standalone factors, and which are to be evaluated in the aggregate, based on the weight of the evidence. These factors include, but are not limited to:

- Macroeconomic conditions
- Industry and market considerations
- Cost factors
- Overall financial performance
- Other relevant entity-specific events
- Events affecting a reporting unit
- If applicable, a sustained decrease in share price

Recent fair value calculations and the amount by which fair value exceeded the carrying amount of the reporting unit should also be considered. Note that an entity must make a *positive assertion about its conclusion reached* and the events and circumstances taken into consideration if it concludes that it has passed the Qualitative Assessment.

A guide to relevant goodwill impairment accounting references is provided in Appendix B, *"Quick Accounting Reference Guide"*.

2011 Study: Company Base Set Selection and Methodology

The *2011 Study* includes four distinct areas of analysis:

1. Goodwill Impairment and Market-to-Book Value
2. Summary Statistics by Industry
3. Returns-Based Analysis
4. Survey Results

With the exception of the survey results section, the primary source of data for the *2011 Study* is Standard & Poor's Research Insight © 2011 and Capital IQ databases, © 2011 a division of the McGraw-Hill Companies. After excluding American Depositary Receipts (ADRs) and exchange traded funds (ETFs), the Research Insight database included 8,140 U.S.-based, U.S.-traded companies as of June 15, 2011. From this set, companies whose ticker was solely comprised of numbers, companies which did not have a Global Industry Classification Standard (GICS) designation, and companies which did not have returns data and market capitalization data over the study period were excluded, resulting in a base set of 5,038 companies. This base set ("All U.S. Companies"), which represents over 90 percent of U.S.-based, U.S.-traded market capitalization as of December 2010, was used to calculate all ratios, summary statistics, and portfolio returns throughout the *2011 Study*.

It is also important to note that calendar years (rather than "most recent fiscal year") were used in all cases in order to examine impairment values during a specific period of time, irrespective of company-specific choices of fiscal years.

[2] ASC 805 Glossary.
[3] ASC 350-20-35-11.
[4] ASC 350-20-35-28.

Goodwill Impairment and Market-to-Book Value

Market-to-Book Value Overview

While not a sole or definitive indicator of impairment, a company's market capitalization should not be ignored during Step 1 of a goodwill impairment test. Companies that take goodwill impairment charges ostensibly do so as a result of more-than-temporary changes in the financial and operating conditions of their reporting units, often corroborated by associated market capitalization declines. It seems reasonable that companies, which have historically relied upon their stock prices during up markets to justify no impairments in their businesses, should consider the implications of stock price declines as well.[5]

The 2008–2009 financial crisis highlighted the need for companies to consider their market capitalization during the impairment testing process. In a speech made during the crisis[6], an SEC staff member indicated that "it would not be reasonable for a registrant to simply ignore recent declines in their stock price, as the declines are likely indicative of factors the registrant should consider in their determination of fair value, such as a more-than-temporary repricing of the risk inherent in any company's equity that results in a higher required rate of return or a decline in the market's estimated future cash flows of the company." Nonetheless, the SEC recognized that the market capitalization of a registrant at a given point in time may not fully capture the fair value of reporting units in the aggregate. The SEC staff member acknowledged in the speech that certain factors need to be considered when market capitalization reconciliations are performed, including understanding recent trends in the registrant's market capitalization and evaluating any "control premium" in excess of that amount.

[5] Mark M. Donahue, MBA. "Impairment Revisited: Beware of goodwill impairment analyses during extreme market conditions", *The Value Examiner*, September/October 2010, pages 13–16.

[6] Robert G. Fox III, "Remarks before the 2008 AICPA National Conference on Current SEC and PCAOB Developments" (Washington, D.C., December 8, 2008).

Goodwill Impairment and Market-to-Book Value

Graph 1 plots the median market-to-book ratio for the following portfolios of companies:

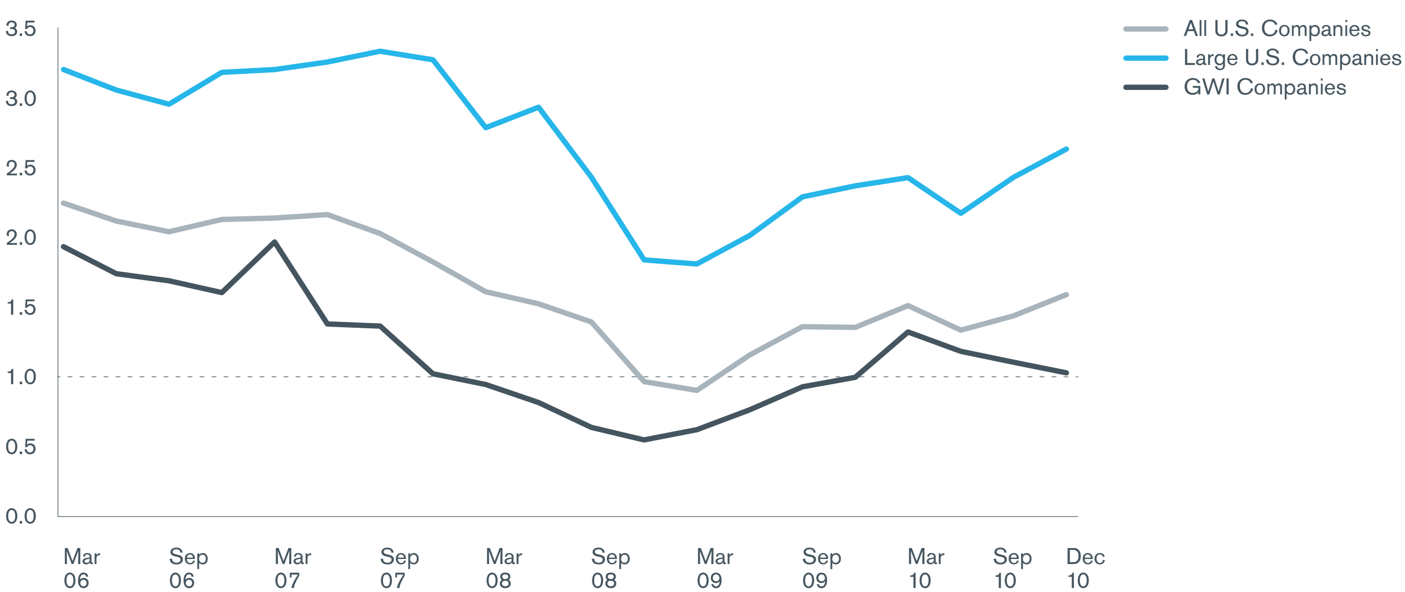
1. 5,038 U.S. publicly-traded companies (which are labeled for purposes of this study, "All U.S. Companies");
2. The 500 largest U.S. publicly-traded companies ("Large U.S. Companies"); and
3. U.S. publicly-traded companies that recorded a goodwill impairment charge ("GWI Companies").[7]

As illustrated in Graph 1, at the height of the financial crisis (the end of 2008 and the beginning of 2009), all three of these portfolios experienced relatively low market-to-book ratios. Around this time, the median (typical) company in the portfolio *All U.S. Companies* and the portfolio *GWI Companies* were trading at levels below the reported book value of equity. This implied that, at least temporarily, the market perceived the reported book values to be too high relative to the underlying value of these companies.

The median market-to-book value of the set *All U.S. Companies* fell slightly below 1.0 at the end of 2008, indicating that the median market capitalization was less than book value. The median *Large U.S. Company's* market-to-book ratio was higher over the entire period (March 2006–December 2010) relative to the median value of *All U.S. Companies*, but was still significantly depressed at the end of 2008. Rather unsurprisingly, the median goodwill impairment company had a lower market-to-book value ratio than both the median of *All U.S. Companies* and the median of *Large U.S. Companies* in any given quarter, and over the entire period.[8] In 2010, the median goodwill impairment company's market-to-book value decreased, (approaching once again a ratio of 1.0); in contrast, the median company in *All U.S. Companies* and the median company in *Large U.S. Companies* has shown a moderate improvement in median market-to-book value.

Graph 1: Median Market-to-Book Ratio for *All U.S. Companies*, *Large U.S. Companies*, and *GWI Companies*

March 2006–December 2010, Quarterly



[7] Source: Standard & Poor's Research Insight and Capital IQ databases. Market-to-book is defined as monthly market value divided by the common shareholder's interest in the company, including common stock, capital surplus, retained earnings and treasury stock adjustments. All portfolios reset quarterly. *All U.S. Companies* are represented by the median market-to-book ratio of 5,038 U.S.-based, publicly-traded firms. *Large U.S. Companies* are represented by the median market-to-book ratio of the 500 largest U.S.-based, publicly-traded firms as determined by market capitalization in the quarter measured. *GWI Companies* are represented by the median market-to-book ratio of all companies existing within the *All U.S. Companies* portfolio set that also took a goodwill impairment charge in the quarter measured.

[8] Source: Standard & Poor's Research Insight and Capital IQ databases.

Goodwill Impairment and Market-to-Book Value

While it is instructive to analyze the median market-to-book ratios of companies over time, it is also important to measure the *percentage* of U.S. firms that have market-to-book ratios less than 1.0 over similar periods. As illustrated in Graph 2, the percentage of such companies in each of the three portfolios increased significantly towards the end of 2008.[9]

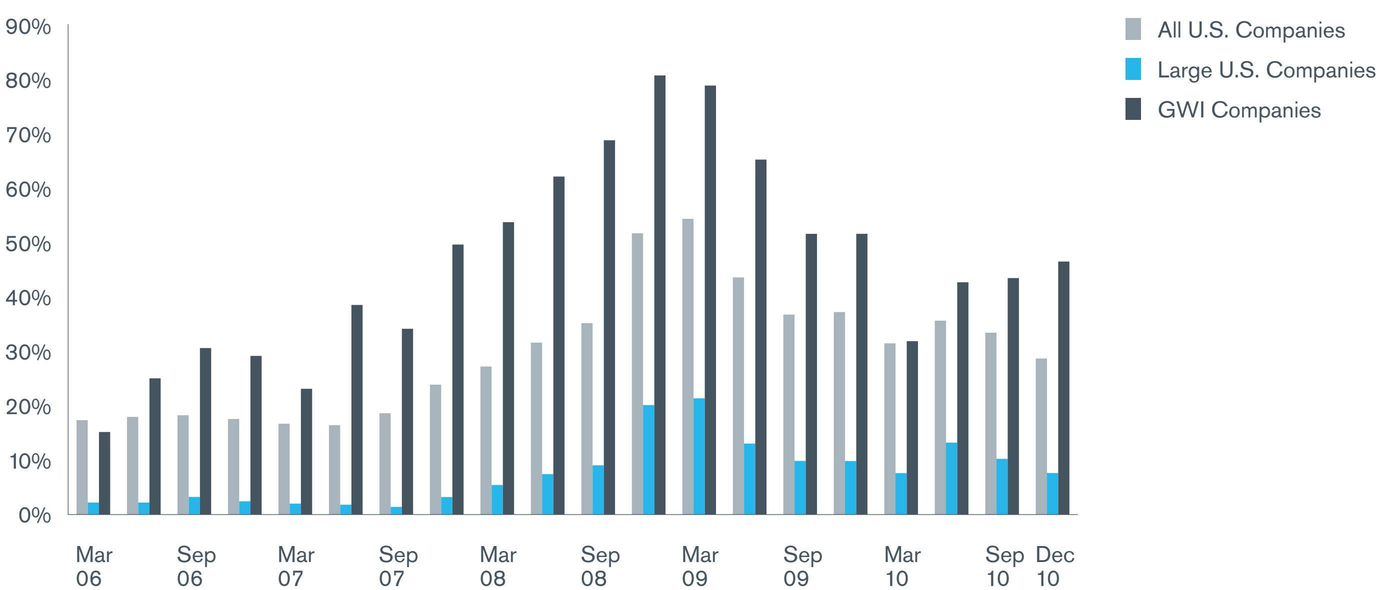
Large U.S. Companies had the lowest percentage of firms with market-to-book ratios less than 1.0 in any given quarter over the entire period (March 2006–December 2010). Even at the peak of the financial crisis, only 21 percent of *Large U.S. Companies* registered market-to-book value ratios lower than 1.0.

Conversely, and continuing with the pattern set previously, *GWI Companies* had the highest percentage within their ranks with market-to-book ratios less than 1.0, peaking at over 80 percent at the height of the financial crisis.

In spite of the improvement seen during 2009, at December 2010 the proportion of GWI companies with a market-to-book ratio less than 1.0 had again increased to about 46 percent.

Understanding the dynamics of the 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 either Step 1 or 2 of the goodwill impairment test. Reporting 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. A low market-to-book ratio will, however, likely create challenges in supporting the more likely than not conclusion required from a qualitative assessment.

Graph 2: Percentage of *All U.S. Companies*, *Large U.S. Companies*, and *GWI Companies* with Market-to-Book Value Ratios Less than 1.0
March 2006–December 2010, Quarterly



[9] Source: Standard & Poor's Research Insight and Capital IQ databases.

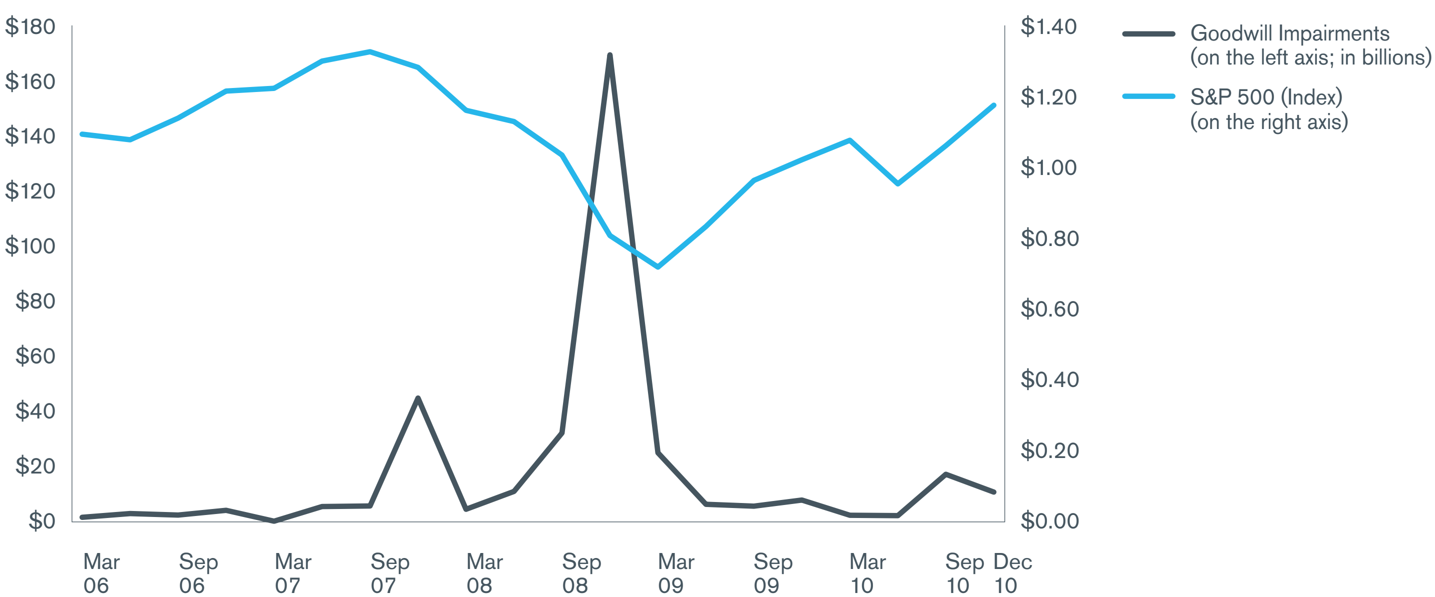
Goodwill Impairment and Market-to-Book Value

An additional perspective is provided in Graph 3, where the quarterly dollar amount of goodwill impairment charges (on the left axis) are plotted against an index representing the growth of $1 invested in the S&P 500 at year-end 2005 (on the right axis).[10]

It is noteworthy in Graph 3 that a very significant dollar amount of goodwill impairment over the 2006–2010 period occurred just as the financial crisis was reaching its zenith, and the stock market was nearing a low for the period. This, as expected, correlated with the drop in the market-to-book ratios.

Such a decline, along with the SEC staff speech cited earlier, likely had a significant impact on the number and magnitude of goodwill impairment charges at that point in time.

Graph 3: Goodwill Impairments, U.S. Companies (in $billions) vs. the S&P 500
(Year-end 2005 = $1.00)
March 2006–December 2010, Quarterly



[10] Source: Standard & Poor's Research Insight and Capital IQ databases. Goodwill impairment in Graph 3 is as of the period to which the impairment charges were attributed.

Summary Statistics by Industry

In order to assess the relative performance of a subject company and evaluate the impact of industry trends, it is beneficial to understand how other U.S. companies recorded impairments of goodwill within specific industries.[11] This information can facilitate the comparability of financial statements and provide a useful benchmark during the goodwill impairment testing process.

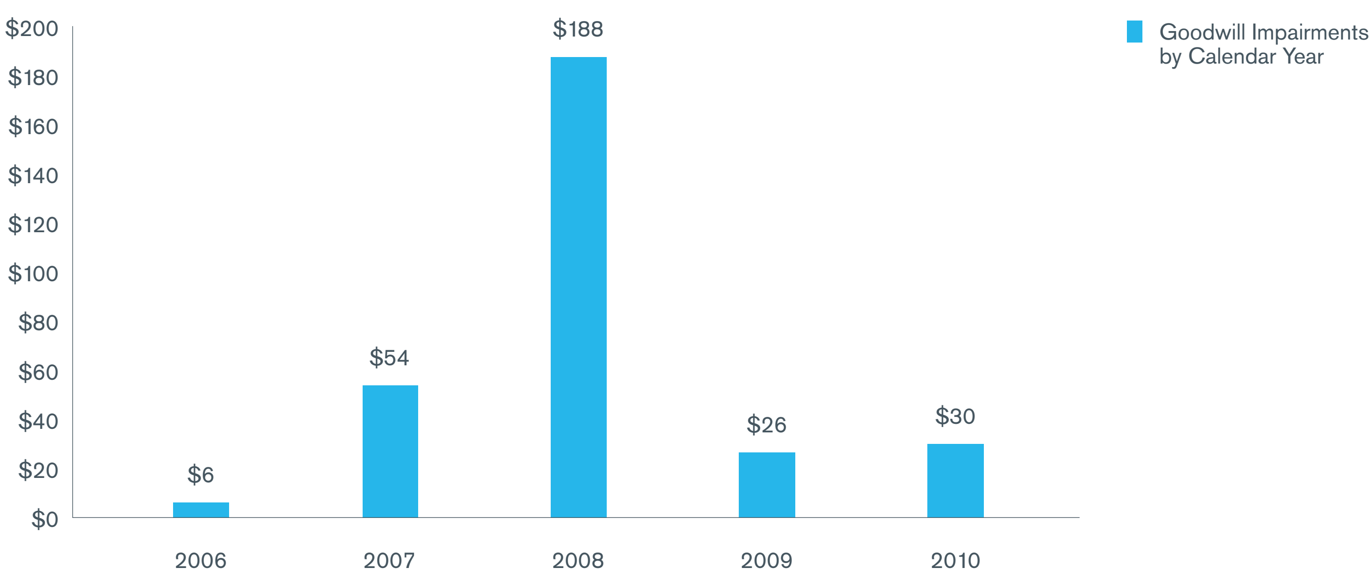
In this section, goodwill impairment information is compiled for U.S. companies over the time period 2006–2010. The analysis includes 5,038 U.S.-based, U.S.-traded companies, as previously described.[12]

An unprecedented aggregate amount of goodwill impairment was recorded by U.S. companies in calendar year 2008, as illustrated in Graph 4.[13]

In 2009, the amount of goodwill impaired dropped precipitously from approximately $188 billion in 2008 to $26 billion in 2009, representing an 86 percent decline.

The amount of goodwill impaired rose from approximately $26 billion in 2009 to $30 billion in 2010, including a $12.4 billion goodwill impairment by Bank of America. Excluding Bank of America's $12.4 billion goodwill impairment, the amount of goodwill impaired in 2010 was $17 billion, representing a 34.5 percent decrease year over year (difference due to rounding).

Graph 4: Goodwill Impairments, U.S. Companies (in $billions)
2006–2010



[11] Industries are defined throughout the *2011 Report* in accordance with Global Industry Classification Standard (GICS) codes.

[12] Companies that did not have returns and market capitalization data over the period analyzed were eliminated. Accordingly, the companies examined here were the survivors, and most likely have recorded fewer losses relative to including companies that filed for bankruptcy, were acquired, or otherwise ceased to exist as an independent publicly-traded entity.

[13] Source: Standard & Poor's Research Insight and Capital IQ databases.

Summary Statistics by Industry

Table 1 lists the total dollar value of goodwill impairments (in $billions) by industry from 2006 to 2010.[14] The total dollar value of goodwill impairments increased each year from 2006 to 2008. The largest increases (in dollar terms, compared to the previous year) generally occurred in 2008 (Consumer Discretionary, Financials, Energy, and Information Technology), and the largest decreases generally occurred in 2009 (Consumer Discretionary, Energy, and Information Technology).

A notable exception to these general trends is the large increase in the dollar value of goodwill impairment in Telecommunication Services from 2006 to 2007, and subsequent large dollar value decrease from 2007 to 2008. This anomaly results primarily from Sprint Nextel's write-off of nearly $30 billion in 2007, attributable to its acquisition of Nextel in 2005.

In 2010, the total dollar value of goodwill impairments decreased the most in Industrials, Information Technology, and Consumer Discretionary. The largest increases were in Financials, Healthcare, and Energy.

Financials, which had the largest aggregate amount of goodwill impairment in 2010 at $14.8 billion, would still be in the top three industries as far as reported goodwill impairments (in dollar terms) in 2010, even if Bank of America's impairment of $12.4 billion were excluded from the comparison.

Table 1: Goodwill Impairments, U.S. Companies, by Industry (in $billions)
2006–2010

	2006	2007	2008	2009	2010
Energy	$0.0	$5.0	$35.5	$0.3	$1.3
Materials	0.8	1.6	15.0	0.3	0.2
Industrials	0.4	2.4	16.3	5.3	2.5
Consumer Discretionary	0.6	7.5	46.3	2.3	1.7
Consumer Staples	0.1	0.0	3.8	2.3	2.2
Healthcare	1.4	0.4	6.2	0.9	3.9
Financials	0.1	1.0	34.8	10.7	14.8
Information Technology	1.9	6.4	28.8	3.1	0.8
Telecomm. Services	0.0	29.8	1.2	0.0	0.4
Utilities	0.8	0.0	0.5	1.3	2.0
Total	$6.1	$54.2	$188.4	$26.4	$29.7

[14] Source: Standard & Poor's Research Insight and Capital IQ databases. For a complete listing of goodwill impairments for 2010 at the GICS sub-industry level, see Appendix A.

Summary Statistics by Industry

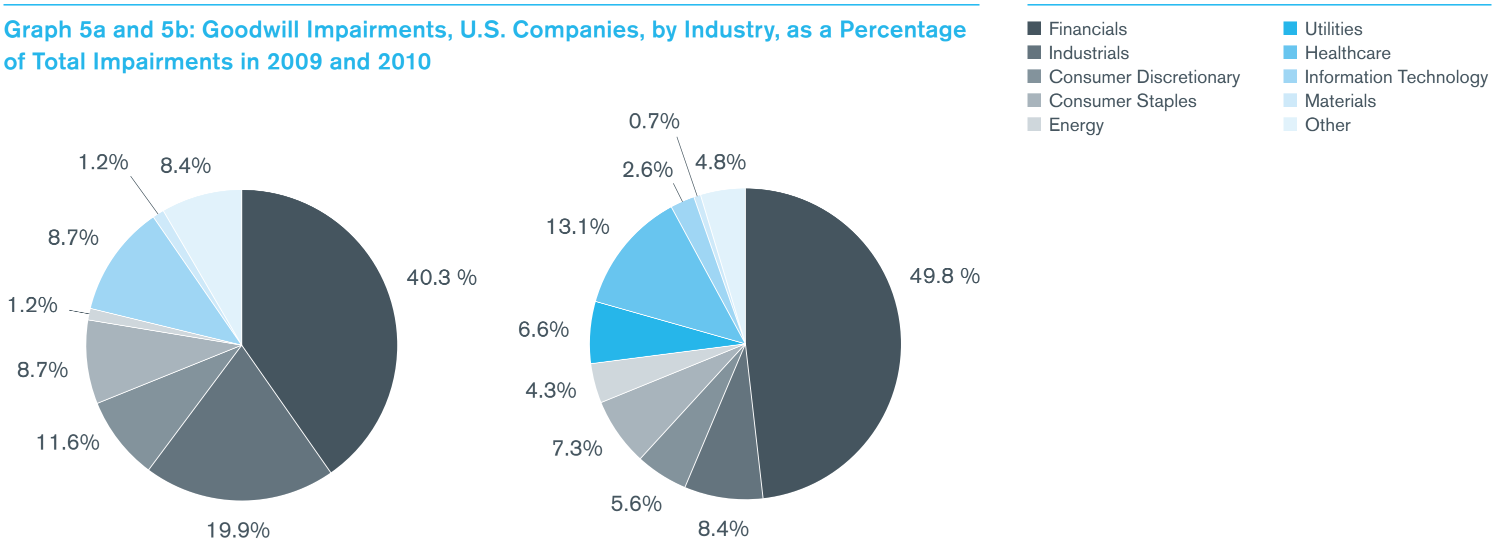
In Graphs 5a and 5b, goodwill impairments by industry (as a percentage of total goodwill impairments across all industries) are shown for 2009 and 2010.[15]

In 2009, Financials accounted for the largest percentage of goodwill impairment (40.3 percent), followed by Industrials (19.9 percent) and then Information Technology (11.6 percent).

In 2010, Financials again accounted for the largest percentage of goodwill impairment (49.8 percent), followed by Healthcare (13.1 percent) and then Industrials (8.4 percent).

Bear in mind that Graphs 5a and 5b represent the percentage of impairment by industry relative to the total amount of impairment across all industries in each year. For example, total goodwill impairment across all industries in 2010 was approximately $30 billion. Financials' goodwill impairment of $14.8 billion represented approximately 49.8 percent of this total ($14.8 / $30) (difference due to rounding).

Graph 5a and 5b: Goodwill Impairments, U.S. Companies, by Industry, as a Percentage of Total Impairments in 2009 and 2010



Graph 5a: 2009

Graph 5b: 2010

15 Source: Standard & Poor's Research Insight and Capital IQ databases. In Graph 5a (2009), "Other" is represented by the sum of goodwill impairment in the Healthcare, Telecommunications Services, and Utilities industries. In Graph 5b (2010), "Other" is represented by the sum of goodwill impairment in the Information Technology, Telecommunication Services, and Materials industries.

Summary Statistics by Industry

In order to better understand which industries were most affected by goodwill impairments over time, Table 2 provides the rank order (from 1 to 10) of total dollar value of goodwill impairment by industry for the period 2006–2010. Industries were ranked annually from the highest dollar value of goodwill impairment (ranked first) to the lowest dollar value of goodwill impairment (ranked 10th).

For example, in 2007 the Telecommunications Services industry impaired the most amount of goodwill (ranked 1st), but in 2010 the Telecommunications Services registered the ninth highest amount of goodwill impairment.

Another example is the Healthcare industry, which ranked seventh in overall goodwill impairment charges in 2009, but had the second highest amount of goodwill impairment in 2010.

While the largest company-level write off in 2010 was in the Financial industry (Bank of America's $12.4 billion write-off), the second and third largest were in the Healthcare and Consumer Staples industries: Boston Scientific Group (NYSE: BSX) and Supervalu (NYSE: SVU) impaired $1.81 billion and $1.61 billion of their goodwill, respectively, representing nearly 12 percent of all goodwill impairments in 2010.

Table 2: Rank Order of Goodwill Impairments, U.S. Companies, by Dollar Value, by Industry (1 = Highest, 10 = Lowest)
2006–2010

Rank Order	2006	2007	2008	2009	2010
1	Information Technology	Telecomm. Services	Consumer Discretionary	Financials	Financials
2	Healthcare	Consumer Discretionary	Energy	Industrials	Healthcare
3	Utilities	Information Technology	Financials	Information Technology	Industrials
4	Materials	Energy	Information Technology	Consumer Discretionary	Consumer Staples
5	Consumer Discretionary	Industrials	Industrials	Consumer Staples	Utilities
6	Industrials	Materials	Materials	Utilities	Consumer Discretionary
7	Financials	Financials	Healthcare	Healthcare	Energy
8	Consumer Staples	Healthcare	Consumer Staples	Materials	Information Technology
9	Energy	Consumer Staples	Telecomm. Services	Energy	Telecomm. Services
10	Telecomm. Services	Utilities	Utilities	Telecomm. Services	Materials

Summary Statistics by Industry

In Table 3, the percentage of companies (out of the 5,038 companies included in the study) that recorded goodwill impairment in each of 10 industries is shown over time (the largest percentage in each year is indicated in gray).

For example, 14.8 percent of the publicly-traded companies in Consumer Discretionary recognized a goodwill impairment in 2008.

In 2010, Utilities had the largest percentage of companies that impaired goodwill (5.9 percent), followed by Consumer Staples (4.8 percent). The average and median percentage of companies (across all industries) that impaired goodwill peaked in 2008, and has decreased in each of the last two years.

Table 3: Percentage of U.S. Companies that Recorded Goodwill Impairment by Industry
2006–2010

	2006	2007	2008	2009	2010
Energy	0.4%	1.4%	9.5%	2.8%	3.1%
Materials	1.5	3.8	11.4	4.2	2.1
Industrials	1.5	3.3	12.4	9.4	4.6
Consumer Discretionary	2.0	4.9	14.8	6.4	2.8
Consumer Staples	1.6	2.6	4.2	5.2	4.8
Healthcare	2.1	1.8	5.6	3.2	3.4
Financials	0.7	1.9	6.2	6.4	2.9
Information Technology	1.6	4.5	14.5	6.6	3.8
Telecommunication Services	1.4	5.8	10.1	4.3	3.7
Utilities	2.9	1.0	3.8	4.8	5.9
Average	1.6%	3.1%	9.2%	5.3%	3.7%
Median	1.5%	3.0%	9.8%	5.0%	3.6%

Summary Statistics by Industry

In Table 4, the percentage of companies (out of the 5,038 U.S. companies included in the study) *with* goodwill in each of 10 industries is shown over time (the largest percentage in each year is indicated in gray).

Approximately half of U.S. companies carry goodwill on their balance sheets. With the exception of 2006, Industrials had the highest percentage of companies with goodwill. Financials had the lowest percentage of companies with goodwill in each year over the 2006–2010 period.

Table 4: Percentage of U.S. Companies with Goodwill by Industry
2006–2010

	2006	2007	2008	2009	2010
Energy	36.8%	42.1%	39.6%	40.7%	39.5%
Materials	42.8	47.0	45.8	45.8	49.8
Industrials	58.7	64.0	63.0	62.1	64.5
Consumer Discretionary	55.3	57.2	54.2	52.5	54.3
Consumer Staples	52.6	55.7	56.3	55.2	59.6
Healthcare	44.0	46.7	46.0	47.0	50.0
Financials	28.3	33.8	32.5	29.8	29.3
Information Technology	58.9	60.7	58.4	57.0	61.9
Telecommunication Services	52.2	56.5	53.6	56.5	59.3
Utilities	51.0	54.8	55.8	54.8	57.8
Average	48.1%	51.9%	50.5%	50.2%	52.6%
Median	51.6%	55.3%	53.9%	53.7%	56.1%

Summary Statistics by Industry

In Table 5, the percentage of companies with goodwill that recorded a goodwill impairment in each of 10 industries is shown over time (the largest percentage in each year is indicated in gray).

It is important to note that Table 5 shows the percentage of companies *with goodwill* that recorded a goodwill impairment, while Table 3 displayed the percentage of companies that recorded impaired goodwill out the *complete group of 5,038 companies included in the study*.

In 2009 and 2010, approximately one out of five companies in the financial sector that had goodwill impaired it (21.4 percent in 2009, and 20.5 percent in 2010). Over all periods, the highest percentage of companies impairing goodwill was in Consumer Discretionary during 2008 (27.2 percent).

Table 5: Percentage of U.S. Companies with Goodwill that Recorded a Goodwill Impairment by Industry
2006–2010

	2006	2007	2008	2009	2010
Energy	1.0%	3.3%	23.9%	6.9%	12.1%
Materials	3.5	8.1	24.8	9.1	9.1
Industrials	2.5	5.2	19.7	15.2	9.9
Consumer Discretionary	3.6	8.5	27.2	12.2	7.4
Consumer Staples	3.0	4.7	7.4	9.4	9.8
Healthcare	4.8	3.9	12.2	6.8	8.2
Financials	2.6	5.6	19.2	21.4	20.5
Information Technology	2.8	7.4	24.8	11.6	7.3
Telecommunication Services	2.8	10.3	18.9	7.7	9.4
Utilities	5.7	1.8	6.9	8.8	13.6
Average	3.2%	5.9%	18.5%	10.9%	10.7%
Median	2.9%	5.4%	19.4%	9.3%	9.6%

Summary Statistics by Industry

Goodwill Impairment Ratios

Using the 5,038 U.S. companies included in the study, the ratios summarized in Table 6 were measured.

Table 6: Goodwill Impairment Ratios

		Intensity Measure	How?	Why?
Goodwill Intensity	Which industries had/have the most goodwill on their balance sheets?	GW/TA	Goodwill as a percentage of total assets, measured at year end 2006–2010	Indicates how significant an industry's goodwill is in relation to total assets.
Loss Intensity	Which industries' balance sheets got hit hardest by the impairments?	I/TA	Goodwill impairment loss in Year t as a percentage of total assets in Year t-1	Indicates how impairments impacted each industry's total assets.
Loss Intensity	Which industries' goodwill got hit hardest by the impairments?	I/GW	Goodwill impairment loss in Year t as a percentage of total goodwill in Year t-1	Indicates how impairments impacted each industry's goodwill.

The percentage of assets impaired (I/TA) combines the other two ratios used in this analysis:

(GW/TA)		(I/GW)		(I/TA)
$\frac{\text{Goodwill}}{\text{Total Assets}}$	x	$\frac{\text{Impairments}}{\text{Goodwill}}$	=	$\frac{\text{Impairments}}{\text{Total Assets}}$

Accordingly, goodwill impairments to total assets is a more comprehensive measure of loss intensity than the ratio of goodwill impairments divided by goodwill. Goodwill impairments to total assets can be called "the bigger they are the harder they fall" ratio, because companies with the greatest goodwill intensity will take the biggest balance sheet hit when recording goodwill impairments.

Summary Statistics by Industry

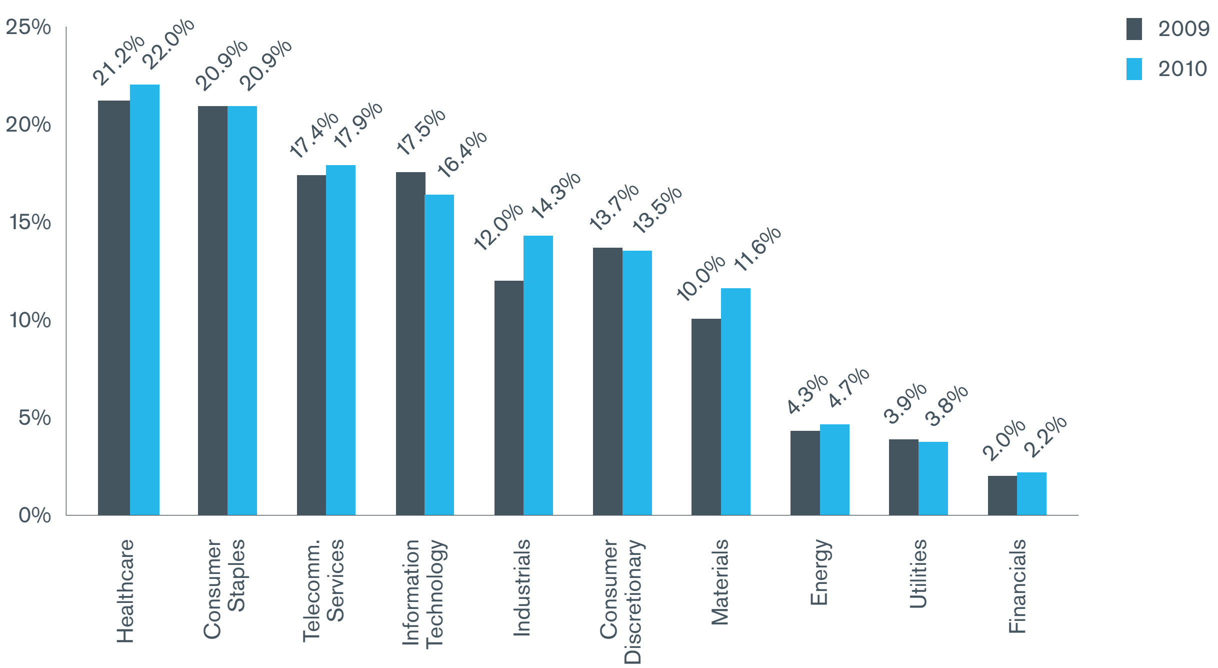
Goodwill Intensity (Goodwill to Total Assets)
Goodwill intensity is defined as goodwill as a percentage of total assets, and indicates how significant an industry's goodwill is in relation to its total assets. Because goodwill is recorded in a business combination, goodwill intensity is the greatest in industry sectors with significant mergers and acquisition activity in recent years.

While aggregate goodwill as a percentage of total assets for U.S. companies (across all industries) was approximately 6 percent in each year over the 2006–2010 period, this ratio can vary significantly among industries, as illustrated in Graph 6.

In 2009 and 2010, Healthcare had the highest goodwill intensity (GW/TA) at 21.2 and 22.0 percent, respectively. Contributing factors may include consolidation trends in the industry (i.e., a large number of transactions seen in the Healthcare space), as well as the fact that the purchase price consideration for Healthcare industry targets often contemplates high growth expectations from future unidentified/unproven technologies, which may make goodwill a significant component of the purchase price (Note: as defined in GICS, the Healthcare industry includes, but is not limited to, Biotechnology and Pharmaceutical companies.)

After Healthcare, goodwill intensity was highest in Consumer Staples and Information Telecommunications Services in 2009 and 2010. Energy, Utilities and Financials (in that order) had the lowest goodwill intensity in 2009 and 2010.

Graph 6: Goodwill Intensity, as Measured by Goodwill to Total Assets (GW/TA), by Industry (in %)
2009–2010



Summary Statistics by Industry

Table 7 lists each of the 10 industry's goodwill intensity over time as measured by goodwill to total assets (GW/TA), with 2010 sorted from highest to lowest (the largest percentage in each year is indicated in gray).

Although goodwill intensity was fairly stable between 2009 and 2010, this does not imply that the goodwill to total asset (GW/TA) ratio of any one industry is always stable over a longer period of time. For example, Telecommunications Services registered a GW/TA ratio of 11.9 percent in 2006; by 2010, this had increased to 17.9 percent.

Table 7: Goodwill Intensity, as Measured by Goodwill to Total Assets (GW/TA), by Industry (in %)
2006–2010

	2006	2007	2008	2009	2010
Healthcare	18.6%	21.5%	21.7%	21.2%	22.0%
Consumer Staples	21.5	21.4	20.9	20.9	20.9
Telecommunication Services	11.9	14.5	14.8	17.4	17.9
Information Technology	17.4	18.6	18.9	17.5	16.4
Industrials	14.7	12.2	12.5	12.0	14.3
Consumer Discretionary	15.1	14.3	13.8	13.7	13.5
Materials	10.7	11.0	9.3	10.0	11.6
Energy	6.4	6.1	4.3	4.3	4.7
Utilities	4.9	4.5	4.0	3.9	3.8
Financials	2.0	2.0	1.9	2.0	2.2
Average	12.3%	12.6%	12.2%	12.3%	12.7%
Median	13.3%	13.2%	13.1%	12.8%	13.9%

Summary Statistics by Industry

Loss Intensity

Two measures for evaluating loss intensity by industry are presented: (i) goodwill impairment to goodwill; and (ii) goodwill impairment to total assets.[16]

Goodwill impairment to goodwill (I/GW) is a measure of the magnitude of goodwill impairments; in other words, it measures the percent of an industry's goodwill that was impaired.

Goodwill impairment to total assets (I/TA) is a measure of the impact of goodwill impairments on an industry's average balance sheet. In other words, it measures the percent of an industry's total asset base that was impaired.

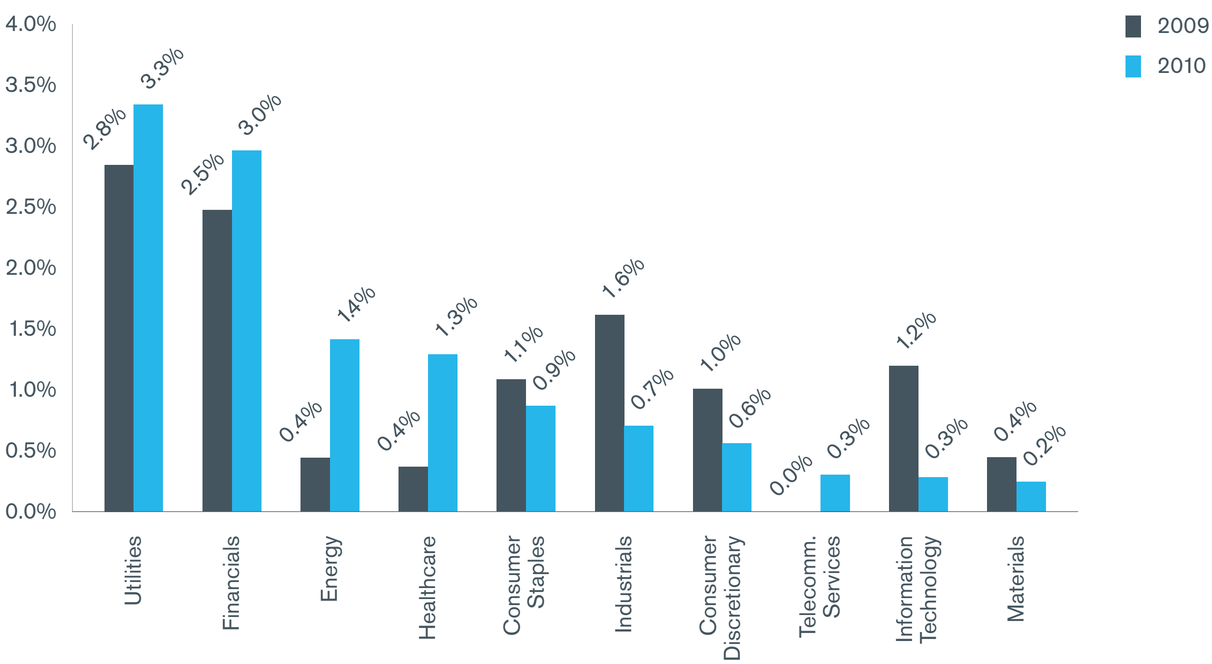
Goodwill Impairment to Goodwill

Graph 7 presents (I/GW) observed for 10 industries in 2009 and 2010.

An unprecedented aggregate dollar amount of goodwill was impaired by U.S. companies in calendar year 2008, followed by a steep aggregate drop in 2009 (see Graph 4).

In 2010, the industries showing a decline in impairments as a percentage of their goodwill compared to 2009 included Consumer Staples, Industrials, Consumer Discretionary, Information Technology and Materials. Industries showing an increase in impairments as a percentage of their goodwill compared to 2009 included Utilities, Financials, Energy, Healthcare, and Telecommunications Services.

Graph 7: Goodwill Loss Intensity, as Measured by Goodwill Impairment to Goodwill (I/GW), by Industry (in %)
2009–2010



[16] Loss intensity is measured by impairments taken in Year t divided by either total assets (in the case of I/TA) or goodwill (in the case of I/GW) in Year t-1.

Summary Statistics by Industry

Table 8 lists each of the 10 industry's loss intensity over time, as measured by goodwill impairment to goodwill (I/GW), with 2010 sorted from highest to lowest (the largest percentage in each year is indicated in gray).

2008 clearly provided record levels of goodwill impairment in the U.S. when compared to other years, due in good part to the financial crisis of late 2008 and early 2009.

For example, in 2008 Energy impaired almost 36 percent of its aggregate goodwill. A notable exception in this trend is the Telecommunications Services industry, which impaired an astonishing 46.3 percent of its aggregate goodwill in 2007. As noted earlier, this was primarily due to Sprint Nextel's write-off of nearly $30 billion, attributable to its acquisition of Nextel in 2005.

Over the entire 2006 2010 period, the industries that have impaired the *greatest* percentage of their goodwill are Telecommunications Services, Energy, and Consumer Discretionary. The industries that have impaired the *lowest* percentage of their goodwill over the same period are Industrials, Healthcare, and Consumer Staples.

Table 8: Goodwill Loss Intensity, as Measured by Goodwill Impairment to Goodwill (I/GW), by Industry (in %)
2006–2010

	2006	2007	2008	2009	2010
Utilities	1.8%	0.0%	1.2%	2.8%	3.3%
Financials	0.0	0.3	8.0	2.5	3.0
Energy	0.0	5.6	35.8	0.4	1.4
Healthcare	0.9	0.2	2.6	0.4	1.3
Consumer Staples	0.0	0.0	1.7	1.1	0.9
Industrials	0.1	0.8	5.2	1.6	0.7
Consumer Discretionary	0.3	2.9	18.1	1.0	0.6
Telecommunication Services	0.0	46.3	1.2	0.0	0.3
Information Technology	1.1	3.0	11.2	1.2	0.3
Materials	1.3	2.3	17.4	0.4	0.2
Average	0.6%	6.1%	10.2%	1.2%	1.2%
Median	0.2%	1.6%	6.6%	1.0%	0.8%

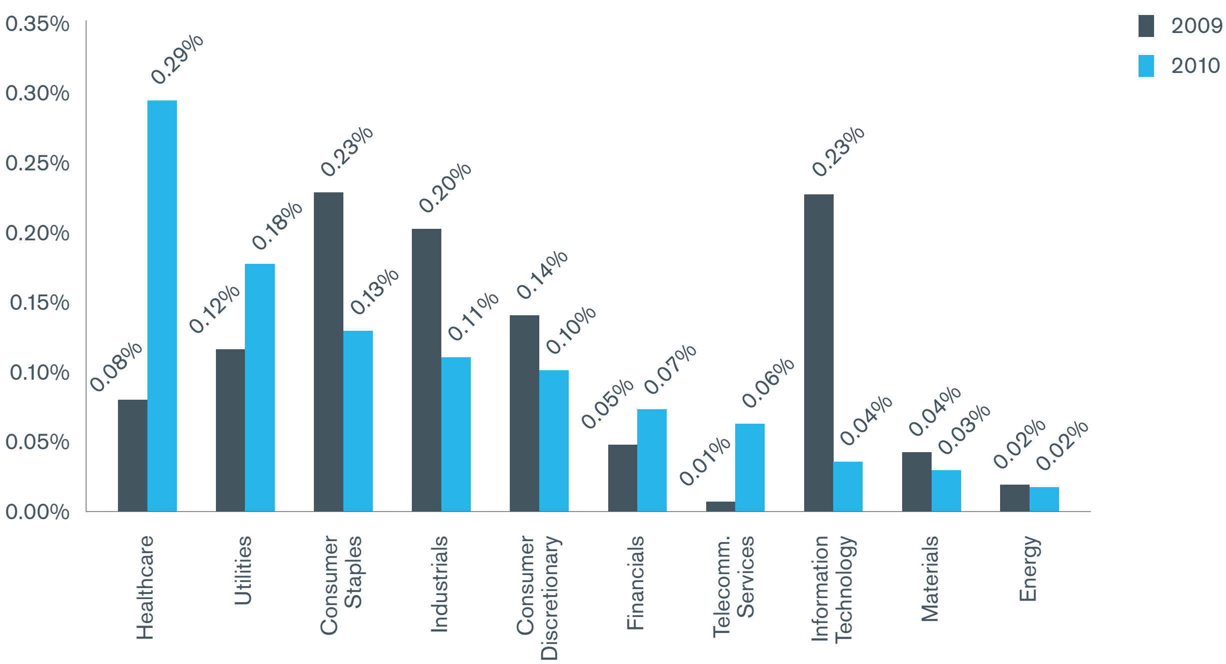
Summary Statistics by Industry

Goodwill Impairments to Total Assets

Graph 8 depicts goodwill impairment to total assets for 10 industries in 2009 and 2010. Goodwill impairment to total assets (I/TA) is a measure of which industries' balance sheets were most impacted by impairments.

In 2010, the industries that impaired the largest percentage of their total assets were Healthcare, Utilities, and Consumer Staples. The industries that impaired the smallest percentage of their total assets were Information Technology, Materials, and Energy. The main message from Graph 8 is that goodwill impairment charges represent a relatively small proportion of a company's total asset base.

Graph 8: Goodwill Loss Intensity, as Measured by Goodwill Impairment to Total Assets (I/TA), by Industry (in %)
2009–2010



Summary Statistics by Industry

Table 9 lists each of the 10 industry's loss intensity over time, as measured by goodwill impairment to total assets (I/TA), with 2010 sorted from highest to lowest (the largest percentage in each year is indicated in gray).

Table 9: Goodwill Loss Intensity, as Measured by Goodwill Impairment to Total Assets (I/TA), by Industry (in %)
2006–2010

	2006	2007	2008	2009	2010
Healthcare	0.2%	0.0%	0.6%	0.1%	0.3%
Utilities	0.1	0.0	0.1	0.1	0.2
Consumer Staples	0.0	0.0	0.4	0.2	0.1
Industrials	0.0	0.1	0.6	0.2	0.1
Consumer Discretionary	0.0	0.4	2.6	0.1	0.1
Financials	0.0	0.0	0.2	0.0	0.1
Telecommunication Services	0.0	5.5	0.2	0.0	0.1
Information Technology	0.2	0.5	2.1	0.2	0.0
Materials	0.1	0.2	1.9	0.0	0.0
Energy	0.0	0.4	2.2	0.0	0.0
Average	0.1%	0.7%	1.1%	0.1%	0.1%
Median	0.0%	0.2%	0.6%	0.1%	0.1%

Returns-Based Analysis

Financial and academic studies have analyzed the effect, if any, that goodwill impairment has on stock prices, both before and after goodwill is found to be impaired.

One study (among others) found that "Impairments are associated with low market returns *before* the impairment, indicating that market investors anticipate goodwill impairments"[17] (emphasis added).

Another study found that "impairments are negatively associated with corporate performance *after* the impairment"[18] (emphasis added). The authors of this study also find evidence that investors and financial analysts revise their expectations downwards following a goodwill impairment announcement and those revisions are related to the size of the impairment.

Others remark on the amount of time between probable goodwill impairment and the actual accounting entry indicating that the goodwill is impaired. As one study stated, "…we find that goodwill impairments lag deteriorating operating performance and stock returns by at least two years. Furthermore, the announcements of goodwill impairments elicit little market response. The evidence suggests that goodwill impairment decisions by management are not a timely reflection of the changes in estimated future underlying cash flows but rather a delayed response to the almost complete exhaustion of the goodwill."[19]

A recent study has constructed alternative measures to accounting goodwill that the authors believe to be better predictors of future impairment charges and post acquisition operating performance. For instance, the authors measure the market value of goodwill[20] and find that it significantly improves the prediction of operating returns.[21]

[17] Alciatore, M., P. Easton, and N. Spear. 2000. "Accounting for the Impairment of Long-Lived Assets: Evidence from the Petroleum Industry," Journal of Accounting and Economics 29: 151-172. Henning, S., B. Lewis, and W. Shaw. 2000. "Valuation of the Components of Purchased Goodwill," Journal of Accounting Research 38: 375-386.Herschey, M., and V. Richardson. 2003. "Investor Underreaction to Goodwill Write-Offs," Financial Analysts Journal, November/December: 75-84.

[18] Li, Z., Shroff, P.K., Venkataraman, R., and Zhang, I. (2010) "Causes and Consequences of Goodwill Impairment Losses." Working paper.

[19] Li, K.K. and Sloan, R.G. (2011) "Has Goodwill Accounting Gone Bad?." Working paper.

[20] The authors define market value of goodwill as the goodwill that would have been recognized had the acquisition been carried out at full market value (i.e., with a zero future economic profit for the acquirer), which according to them excludes any overpayments or underpayments from this goodwill measure.

[21] Lys, T.Z., Vincent, L., and Yehuda, N. (2011). "The Nature and Implications of Acquisition Goodwill." Working paper.

Returns-Based Analysis

Relative Performance by Goodwill Impairment Characteristic

What is the performance of companies that have impaired goodwill relative to the market in general? In order to study this issue, portfolios were created with certain characteristics (see Table 10), and then the relative performance of each was calculated over time.

Market-capitalization-weighted returns for each of the portfolios were calculated, and indices representing the growth of $1 invested at year-end 2005 were constructed for each portfolio and compared to an index representing an investment of $1 in the S&P 500 Index (the "market") over the same period.[22]

It important to note that there is some overlap of characteristics between the S&P 500 Index and the *YES/NO* portfolios and the loss intensity portfolios, since the S&P 500 Index includes some companies that did (and did not) recognize goodwill impairment from 2006 through 2010. Having said that, most companies in the S&P 500 have never impaired goodwill (see Table 11[23]), and the effect of the overlap is mitigated.[24]

Table 10: Market-Capitalization-Weighted Portfolios (by Characteristic)
January 2006–December 2010

A	B	C
YES/NO Portfolios Impairment or No Impairment	**Loss Intensity Portfolios (I/TA)** Impairment to Total Assets High Intensity or Low Intensity	**Loss Intensity Portfolios (I/GW)** Impairment to Goodwill High Intensity or Low Intensity
Goodwill Impairment **(YES)** Companies with goodwill impairment in any period (2006–2010)	Loss Intensity **(HIGH)** Companies with High Goodwill Loss Intensity I/TA	Loss Intensity **(HIGH)** Companies with High Goodwill Loss Intensity I/GW
Goodwill Impairment **(NO)** Companies without goodwill impairment in any period (2006–2010)	Loss Intensity **(LOW)** Companies with Low Goodwill Loss Intensity I/TA	Loss Intensity **(LOW)** Companies with Low Goodwill Loss Intensity I/GW

Table 11: Percentage of S&P 500 Constituent Companies that Recorded a Goodwill Impairment, by Year
2006–2010

2006	2007	2008	2009	2010
1.8%	4.8%	14.6%	7.6%	5.2%

[22] Market-capitalization-weighted returns were calculated at the company level for each of the 60 months in the time horizon studied for each portfolio; the sum of these represents the portfolio return.
[23] Source: Standard & Poor's Research Insight and Capital IQ databases.
[24] The exception is the "NO" portfolios, which will necessarily have significant overlap with the S&P 500 for the characteristic "no impairment".

Returns-Based Analysis

A. YES/NO Portfolios: Companies with Impaired Goodwill vs. Companies without Impaired Goodwill

In an attempt to broadly gauge the performance differences between companies that impair goodwill and companies that do not impair goodwill[25], two separate portfolios were constructed by performing the following steps:

- Identified companies that impaired goodwill in any quarter over the period March 2006 through December 2010. This set of companies made up the "Goodwill Impairment (YES)" portfolios.
- Identified companies that did not impair goodwill in any quarter over the period March 2006 through December 2010. This set of companies made up the "Goodwill Impairment (NO)" portfolios.[26]

The returns of these two portfolios and the S&P 500 are then compared, as presented in Graph 9.

Over the time horizon 2006–2010, companies that *had not* recorded a goodwill impairment outperformed both companies that *had* recorded a goodwill impairment and the S&P 500 index, as illustrated in Graph 9.

An investment of $1 in December 2005 in the S&P 500 Index would have grown to $1.12 at the end of December 2010, and an investment of $1 in December 2005 in the "Goodwill Impairment (NO)" portfolio would have grown to $1.39 at the end of December 2010. An investment of $1 in December 2005 in the "Goodwill Impairment (YES)" portfolio, however, would have decreased to $0.96 by the end of December 2010.

Graph 9: Goodwill Impairment (YES) and Goodwill Impairment (NO) Portfolios vs. the S&P 500
Index (Year-End 2005 = $1.00)
January 2006–December 2010

[25] Source: Standard & Poor's Research Insight and Capital IQ databases. Base set: 5,038 U.S.-based, U.S.-traded-firms, excluding funds and ETFs which had monthly returns and market capitalization data over the period January 2006–December 2010. Companies with market caps less than $10 million were excluded. Portfolios were re-set quarterly.

[26] Since the majority of companies did not impair goodwill over the period studied, the portfolio of companies that had not impaired goodwill was larger than the set of companies that had impaired goodwill.

Returns-Based Analysis

B. Loss Intensity Portfolios (I/GW):
Companies with High Goodwill Impairment to Goodwill vs. Companies with Low Goodwill Impairment to Goodwill

This ratio measures the percentage of goodwill written off during any given period.

In an attempt to compare the performance of companies that impair a larger proportion of their goodwill versus companies that impair a smaller proportion of their goodwill, two separate portfolios were constructed by performing the following steps:

- Identified those companies (of the 5,038 companies included in the study) that recorded a goodwill impairment.

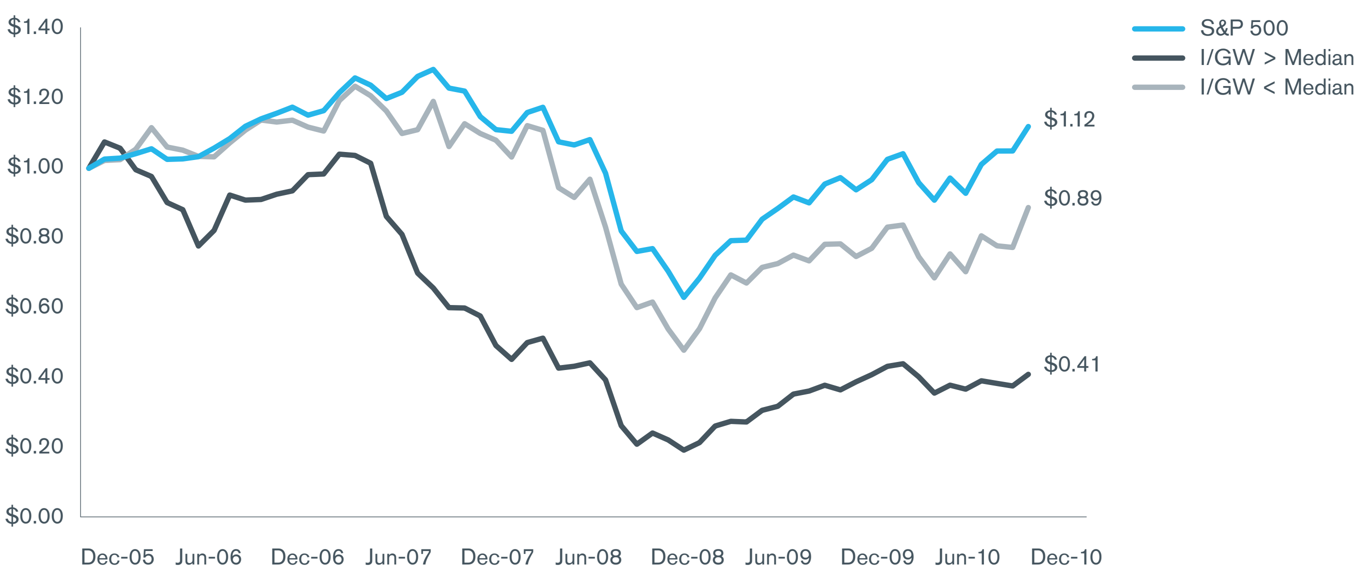
Of those, the companies were further segregated in the following manner:

- Identified companies that had impairment to total goodwill (I/GW) ratios greater than the median impairment to goodwill (I/GW) ratio.
- Identified companies that had impairment to total goodwill (I/GW) ratios less than the median impairment to goodwill (I/GW) ratio.[27]

The portfolio comprised of companies with impairment to goodwill (I/GW) ratios *less* than the median outperformed the portfolio comprised of companies with impairment to goodwill ratios *greater* than the median over the 2006–2010 period, as illustrated in Graph 10.

An investment of $1 in December 2005 in the S&P 500 Index would have grown to $1.12 at the end of December 2010, outperforming both the "I/GW < Median" portfolio and the "I/GW > Median" portfolio, which would have decreased to $0.89 and $0.41, respectively.

Graph 10: Loss Intensity Portfolios: Goodwill Impairment to Goodwill (I/GW)
Index (Year-End 2005 = $1.00)
January 2006–December 2010



[27] Based on a sample of firms that recorded a goodwill impairment. Source: Standard & Poor's Research Insight and Capital IQ databases. Base set: 5,038 U.S.-based, U.S.-traded-firms, excluding funds and ETFs which had monthly returns and market capitalization data over the period January 2006–December 2010. Companies with market caps less than $10 million were excluded. Portfolios were re-set quarterly.

Returns-Based Analysis

C. Loss Intensity Portfolios (I/TA): Companies with High Goodwill Impairment to Total Assets vs. Companies with Low Goodwill Impairment to Total Assets

Goodwill impairment to total assets (I/TA) is a measure of which asset bases were most affected by impairments.

Once again, to compare the performance of companies that impaired a larger proportion of their asset base versus companies that impaired a smaller proportion of their asset base, two separate portfolios were constructed by performing the following steps:

- Identified those companies (of the 5,038 companies included in the study) that recorded a goodwill impairment.

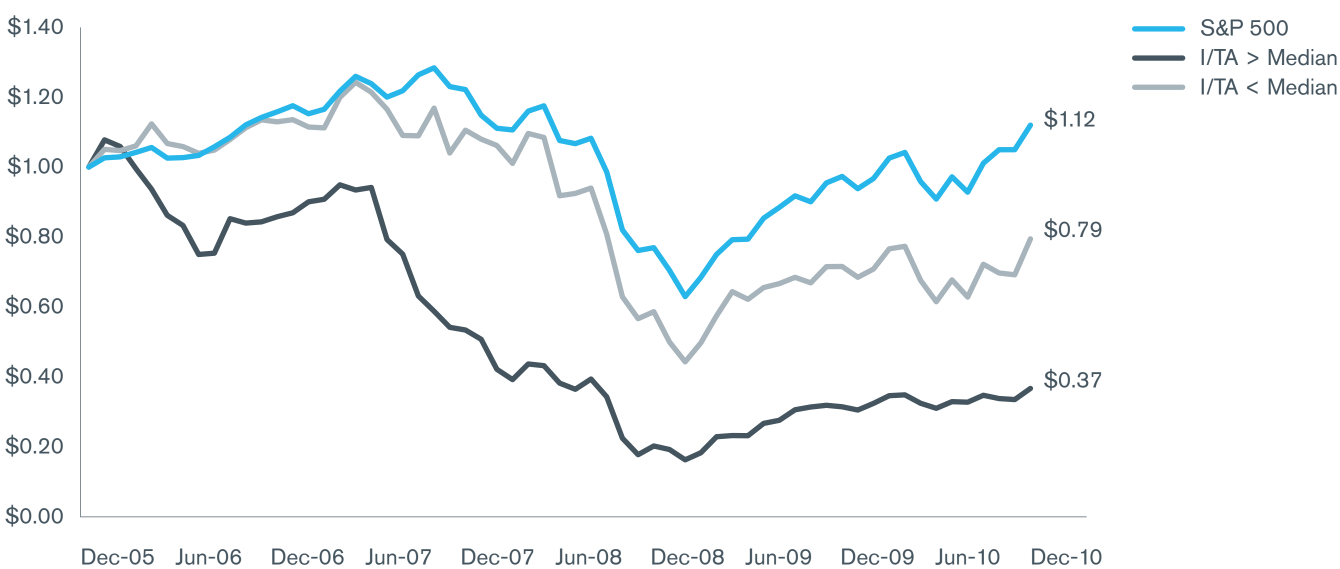
Of those, the companies were further segregated in the following manner:

- Identified companies that had impairment to total assets (I/TA) ratios greater than the median impairment to total assets (I/TA) ratio.
- Identified companies that had impairment to total assets (I/TA) ratios less than the median impairment to total asset ratio (I/TA).[28]

The portfolio comprised of companies with impairment to total assets ratios (I/TA) *less* than the median impairment to total assets ratio outperformed the portfolio comprised of companies with I/TA ratios *greater* than the median over the 2006–2010 period.

Again, an investment of $1 in December 2005 in the S&P 500 Index would have grown to $1.12 at the end of December 2010, outperforming both the "I/TA < Median" portfolio and the "I/TA > Median" portfolio, which would have decreased to $0.79 and $0.37, respectively.

Graph 11: Loss Intensity Portfolios: Goodwill Impairment to Total Assets (I/TA)
Index (Year-End 2005 = $1.00)
January 2006–December 2010



[28] Based on a sample of firms that recorded a goodwill impairment. Source: Standard & Poor's Research Insight and Capital IQ databases. Base set: 5,038 U.S.-based, U.S.-traded-firms, excluding funds and ETFs which had monthly returns and market capitalization data over the period January 2006–December 2010. Companies with market caps less than $10 million were excluded. Portfolios were re-set quarterly.

Returns-Based Analysis

Relative Performance Before and After Goodwill is Impaired

As noted in the *2009 Study*:

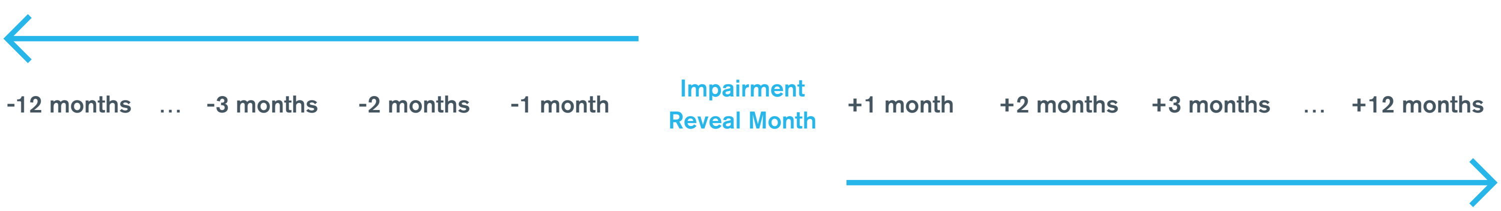
"Impairments are associated with low market returns before the impairment, indicating that market investors anticipate goodwill impairments.[29] Impairments are negatively associated with corporate performance after the impairment, indicating that goodwill, once written off, does not continue to produce operating income.[30]"

The *2010 Study* took a closer look at performance of companies before and after goodwill is impaired, relative to the market in general.[31] The *2011 Study* updates this analysis.

To do this, all (quarterly) occurrences of goodwill impairment over the 2006–2010 period were first mapped to the month that they were made public (i.e. the "reveal" month), using the filing date of the financial statement in which the impairment was originally announced as a proxy for the reveal month.[32]

Then, for all companies revealing impairments in each month from January 2005 to December 2009, market-capitalization weighted portfolio returns were calculated for the 12 months before the impairment reveal month, and for the 12 months after the impairment reveal month, as shown in Figure 1.

Figure 1



[29] Alciatore, M., P. Easton, and N. Spear. 2000. "Accounting for the Impairment of Long-Lived Assets: Evidence from the Petroleum Industry," Journal of Accounting and Economics 29: 151-172. Henning, S., B. Lewis, and W. Shaw. 2000. "Valuation of the Components of Purchased Goodwill," Journal of Accounting Research 38: 375-386.Herschey, M., and V. Richardson. 2003. "Investor Underreaction to Goodwill Write-Offs," Financial Analysts Journal, November/December: 75-84.

[30] Li, Z. P. Shroff, R. Venkataraman. 2006. "Goodwill Impairment Loss: Causes and Consequences." University of Minnesota Working Paper.

[31] The "market" is defined here at the S&P 500 Index.

[32] This was a simplification in the sense that some companies may announce the magnitude of goodwill impairment prior to filing their financial statements with the SEC.

Returns-Based Analysis

Example: For all companies that revealed goodwill impairment in January of 2005, a portfolio was formed and market-capitalization-weighted returns were calculated for each of the 12 months *before* (January 2004–December 2004), and each of the 12 months *after* (February 2005–January 2006). Then, for all companies that revealed goodwill impairment in February of 2005, the same calculations were made; then March 2005, and so on. The last reveal month was December 2009, for which returns were calculated from December 2008–November 2009, and from January 2010–December 2010.

These calculations analyzed 1,259 individual impairment events and involved the creation of 1,440 individual sets of market-capitalization-weighted portfolio returns over the January 2005 to December 2009 period.[33] A sample of the results of these calculations is provided in Table 12.[34]

Example: The portfolio made up of companies that "revealed" goodwill impairment as of December 2009 had a return of 6.0 percent in the second month *after* the reveal month, and a return of 2.0 percent 12 months *before* the reveal month (see Table 12).

Table 12: "Reveal Portfolio" Returns Before and After Each Impairment Reveal Month (in %)
Reveal Months: January 2005–December 2009

"Reveal Portfolio" Returns										
-12 months	…	-3 months	-2 months	-1 month	Reveal Month	+1 month	+2 months	+3 months	…	+12 months
2.0%		4.1%	-2.7%	9.8%	Dec-09	-6.7%	6.0%	11.7%		5.6%
-9.9		9.9	5.6	-6.8	Nov-09	5.3	-2.8	7.1		2.2
-33.0		8.0	4.7	10.0	Oct-09	2.4	-1.4	-7.7		3.8
-1.5		-6.4	8.9	-6.2	Feb-05	-12.7	-13.6	-32.0		23.1
4.8		-7.4	2.9	22.5	Jan-05	1.1	-15.4	-8.5		-10.0

[33] January 2005 to December 2009 is a 60-month period. For each month within this period, 12 sets of market-capitalization-weighted portfolio returns were calculated going forward, and 12 sets of market-capitalization-weighted portfolio returns were calculated going backward, totaling 1,440 individual sets of returns (60 x 12 x 2).

[34] In the interest of space, Tables 12 and 13 are abbreviated, and do not show all 60 reveal months.

Returns-Based Analysis

The "before impairment" and "after impairment" returns compiled in Table 12 can be compared to the returns of the market (the S&P 500). To do so, it is necessary to first construct an equivalent table of market returns in the exact same fashion as the portfolio returns in Table 12. A sample of the equivalent market returns is compiled in Table 13.

Table 13: Market Returns Before and After Each Impairment Reveal Month (in %)
January 2005–December 2009

					Market Returns					
-12 months	…	-3 months	-2 months	-1 month	Reveal Month	+1 month	+2 months	+3 months	…	+12 months
1.1%		3.7%	-1.9%	6.0%	Dec-09	-3.6%	3.1%	6.0%		6.7%
-7.2		3.6	3.7	-1.9	Nov-09	1.9	-3.6	3.1		0.0
-16.8		7.6	3.6	3.7	Oct-09	6.0	1.9	-3.6		3.8
1.4		4.0	3.4	-2.4	Feb-05	-1.8	-1.9	3.2		0.3
1.8		1.5	4.0	3.4	Jan-05	2.1	-1.8	-1.9		2.6

Returns were then calculated for both the Reveal Portfolios and the S&P 500 (as of each reveal month) over the following periods:

Before: Months -7 to -12

Before: Months -1 to -6

After: Months +1 to +6

After: Months +7 to +12

Finally, the S&P 500 performance over each of these periods was geometrically subtracted from the performance of the Reveal Portfolios over each equivalent period. This computation enabled the analysis of the portfolios comprised of impairment companies relative to the market over these periods.[35]

[35] The number of companies reporting goodwill impairment has increased in more recent years. Whereas in the first 30 reveal months (January 2005–June 2007) there were 473 companies with impaired goodwill, in the second 30 reveal months (July 2007–December 2009) there were 786 companies with impaired goodwill. The average portfolio across all periods had 21 companies; the median (typical) portfolio had 16 companies. 12 of the 60 company sets had fewer than 5 companies. The largest company set had 73 companies.

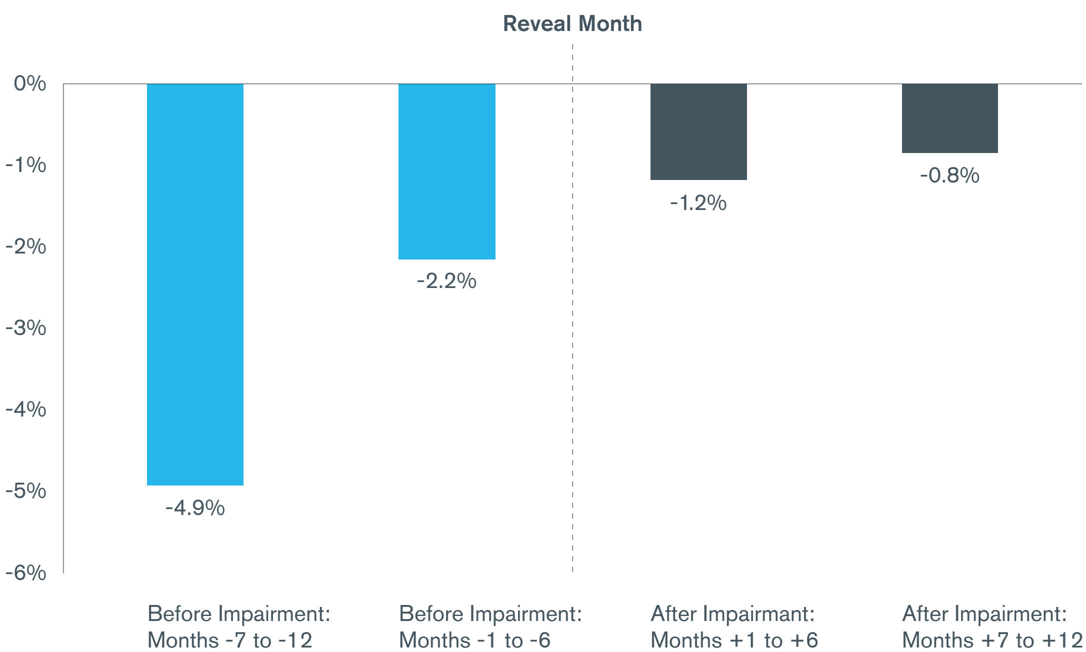
Returns-Based Analysis

The average of these values represents the average relative performance of the Reveal Portfolios versus the market in each of the 6-month periods studied (see Graph 12). For example, the average relative performance of the Reveal Portfolios in the first six months after impairment (for all 60 reveal months) was -1.2 percent.

The overall results are consistent with the findings from the *2010 Study*:

- Companies with goodwill impairments underperform the market both before and after the impairment of goodwill.
- Most of the underperformance occurs prior to the actual impairment date, indicating that in general, investors are aware of the issues that may lead to a subsequent impairment long before the actual impairment is taken.
- As time goes on, the underperformance relative to the market tends to diminish.

Graph 12: Performance Relative to the S&P 500 Before and After Goodwill is Impaired (in %)
Goodwill Impairment "Reveal" Months January 2005–December 2009



Survey Results

During the summer of 2011, an electronic survey on goodwill impairments was taken using a sample of FEI members associated with both public and private companies. This is a new feature of the this year's report relative to the *2010 Study*, which only surveyed members of public companies. This year's survey documents the differences between the answers received from public and private company respondents.

When asked "Has your company recognized goodwill or other asset impairments in 2010 or 2011?", 29 percent of public companies and 18 percent of private companies said that their company had recognized an impairment, representing a decrease from 2008, when a record number of impairments were recognized during the financial crisis.

This survey was done to better understand the reasons for goodwill impairments and the valuation techniques that were used. Percentages in these tables reflect the percentages of total responses.[36]

Question 1: What is your company´s industry?

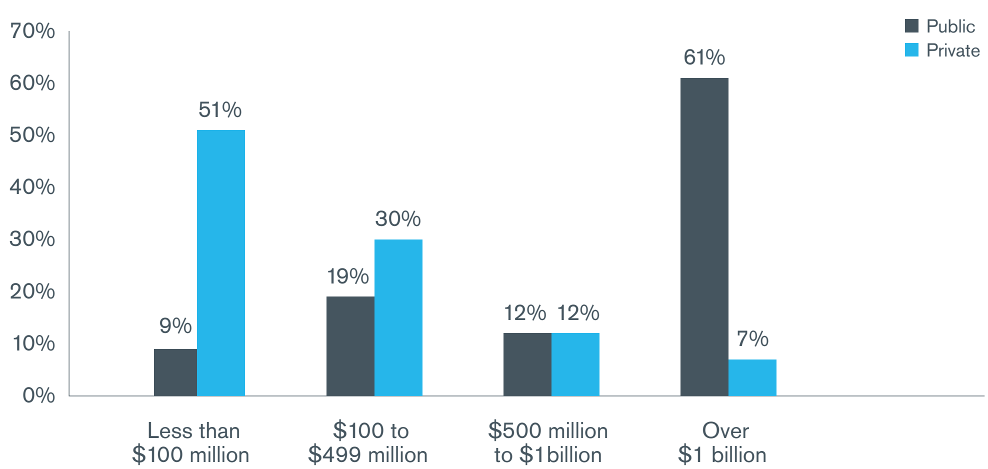
Public Company

Industry	% of Total
Manufacturing	19%
Medical/Pharmaceutical	11%
Banking/Financial Services	6%
Aerospace/Defense	6%
Energy/Utilities/Oil & Gas	5%
Telecommunications	5%
Technology	5%
Service	5%
Consumer Goods	4%
Healthcare Services	4%
Retail	3%
Insurance	3%
High-Tech or Software	2%
Education	2%
Distribution	2%
Construction/Engineering	2%
Computer Services	2%
Professional Services	2%
Food/Restaurant	2%
Transportation	1%
Wholesale	1%
Automotive	1%
Electronic	1%
Advertising	1%
Internet/Multimedia	1%

Private Company

Industry	% of Total
Manufacturing	25%
Banking/Financial Services	10%
Insurance	6%
Technology	6%
Healthcare Services	6%
Construction/Engineering	6%
Arts/Entertainment/Media	5%
Aerospace/Defense	5%
Service	4%
Medical/Pharmaceutical	4%
Professional Services	3%
Consumer Goods	2%
Consulting/Employment Agency	2%
Hotel/Motel	2%
High-Tech or Software	2%
Retail	2%
Wholesale	2%
Energy/Utilities/Oil & Gas	2%
Non-Profit Organizations	2%
Food/Restaurant	2%
Transportation	1%
Mineral/Mining	1%
Computer Services	1%
Real Estate	1%
Preparation Service	1%

Question 2: What is the revenue for your company?

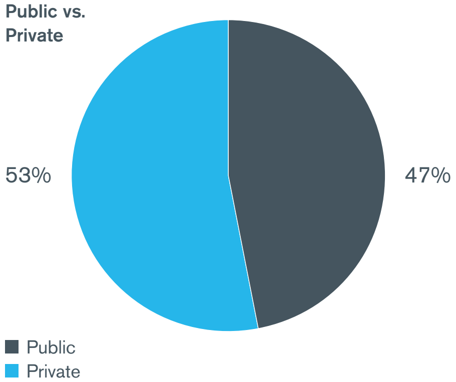


[36] Some totals may not add up to 100% due to rounding.

Survey Results

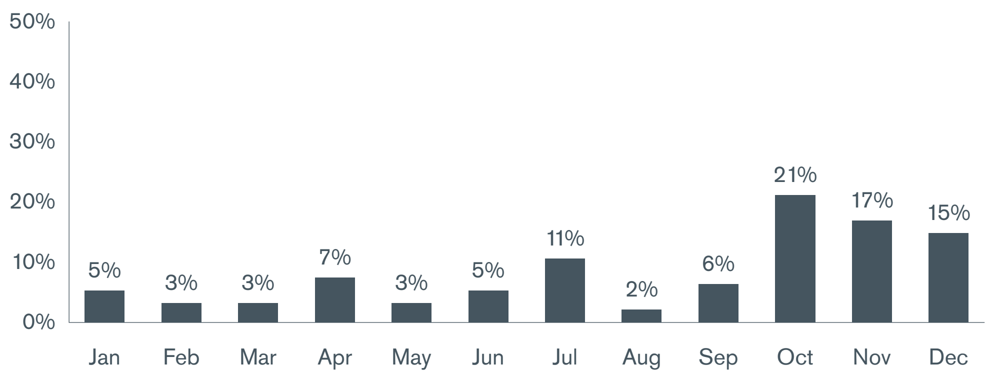
Question 3: Is your company public or private?

Public vs. Private

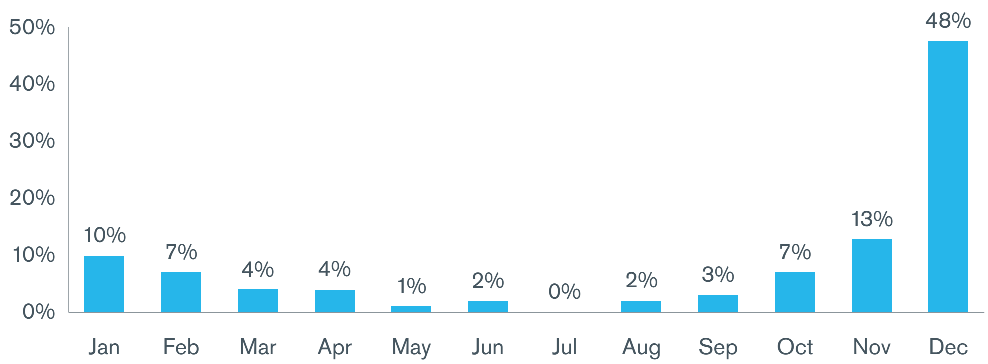


Question 4: In what month do you do your annual impairment testing?

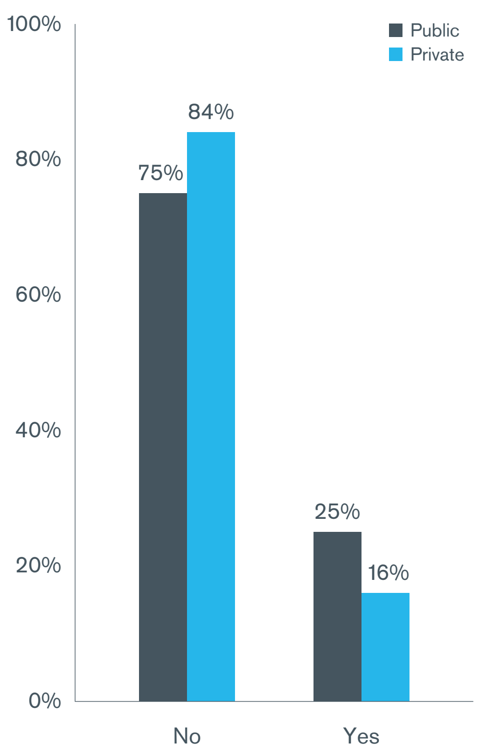
Public Company



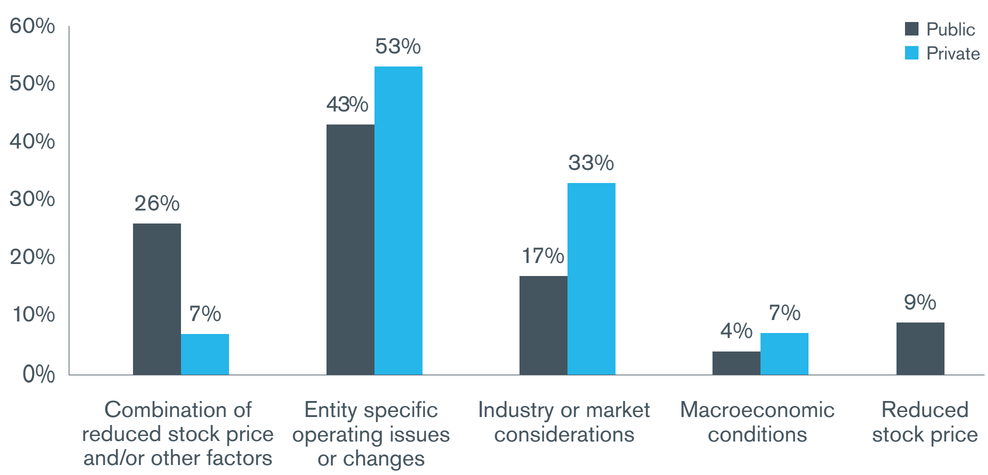
Private Company



Question 5: During 2010 or 2011, did you perform an interim goodwill impairment test?

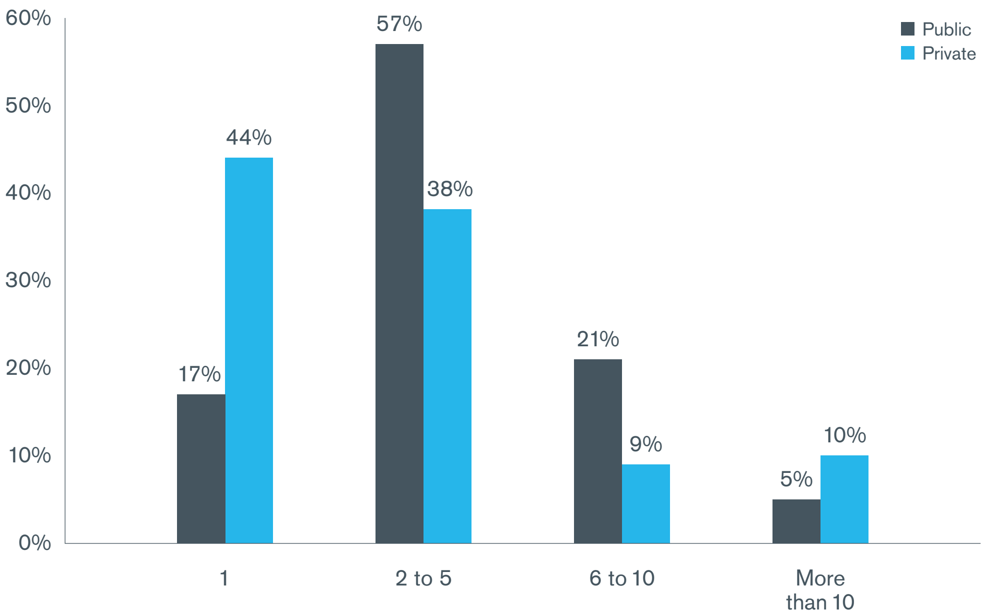


Question 6: If you answered Yes to question #5, what was the nature of the triggering event?

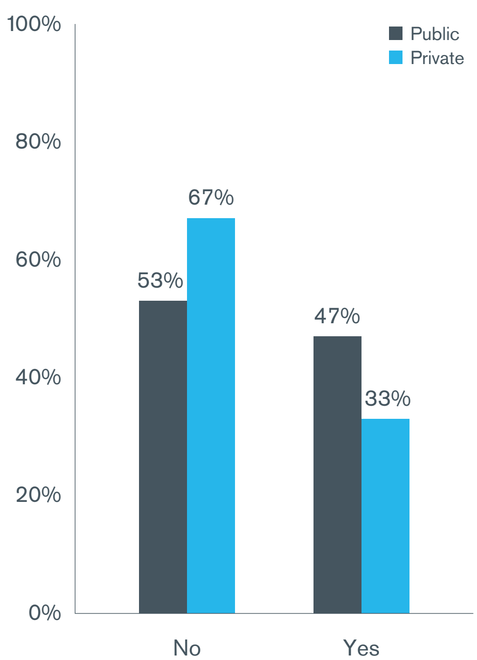


Survey Results

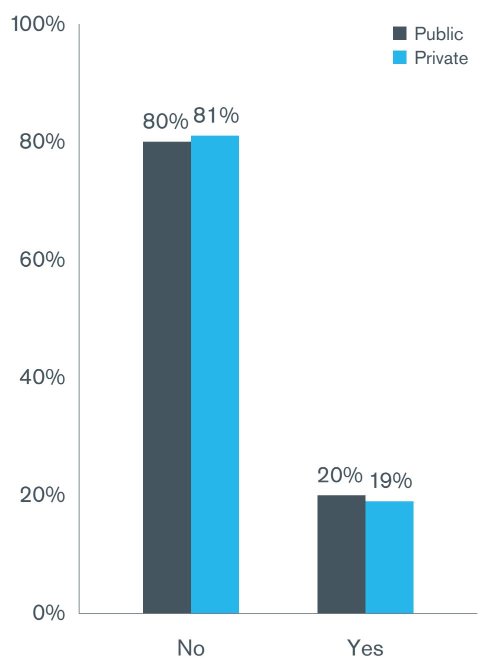
Question 7: How many reporting units do you have as of the most recent reporting period?



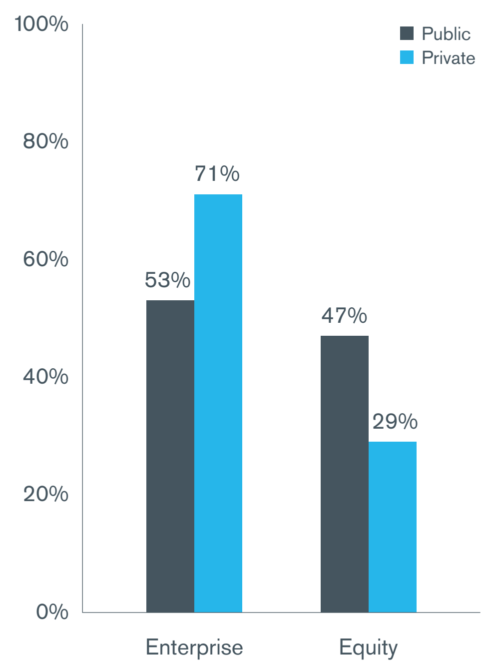
Question 8: Do you use a valuation consultant?



Question 9: Do you anticipate additional goodwill or other asset impairments during an upcoming interim or annual test?

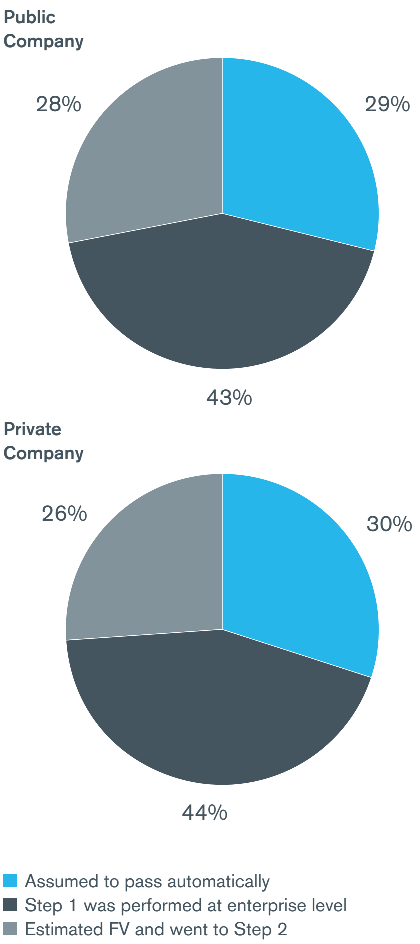


Question 10: Do you perform Step 1 of the goodwill impairment test by comparing the the Fair Value of the Equity or Enterprise Value to their respective carrying amounts?

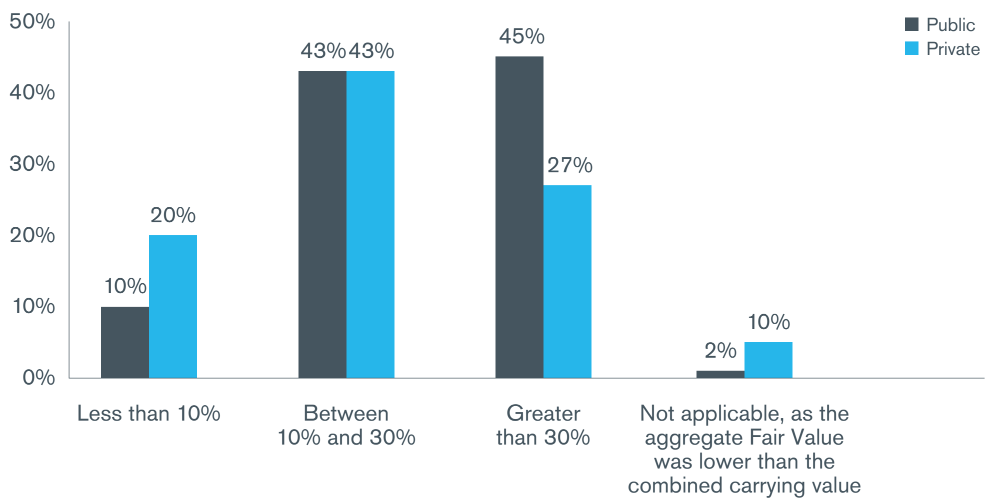


Survey Results

Question 11: If any of your reporting units had a zero or negative carrying amount how did you address the issue?



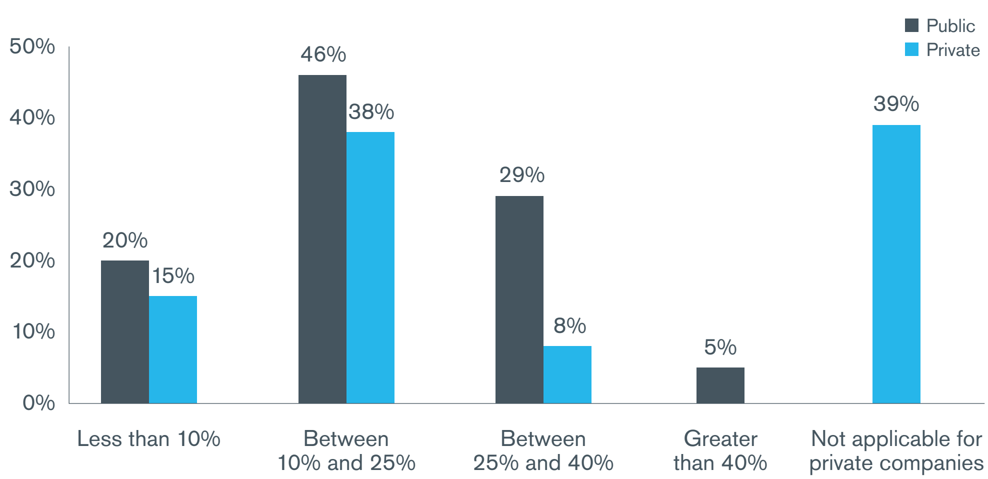
Question 12: In your latest analysis, by what margin did the aggregate Fair Value of the reporting units exceed their carrying value?



Question 13: Which approach was used to support the control premium?

	Public	Private
General–market based studies	71%	53%
Specific analysis of cash flow improvement	7%	17%
Combination of the above	21%	30%

Question 14: What was the assumed level of control premium above the entity's market capitalization (in your latest analysis)?

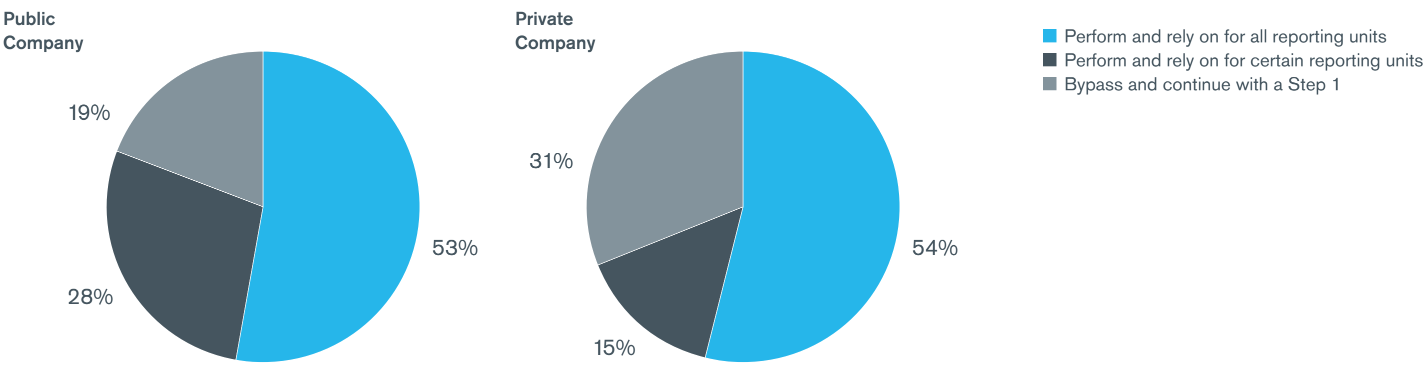


Survey Results

Question 15: Have you been successful in carrying forward prior reporting unit valuations and applying a qualitative assessment?

	Public	Private
Not attempted	54%	52%
No, such analysis was prepared but not accepted upon audit review	8%	7%
Yes, however it was difficult sustaining the analysis upon audit review	6%	8%
Yes, without significant auditor issues	33%	34%

Question 16: The Proposed Accounting Standards Update (ASU) *Testing Goodwill for Impairment* proposes the use of a qualitative assessment prior to Step 1. If adopted do you expect to:



Question 17: Why might you bypass the qualitative option?

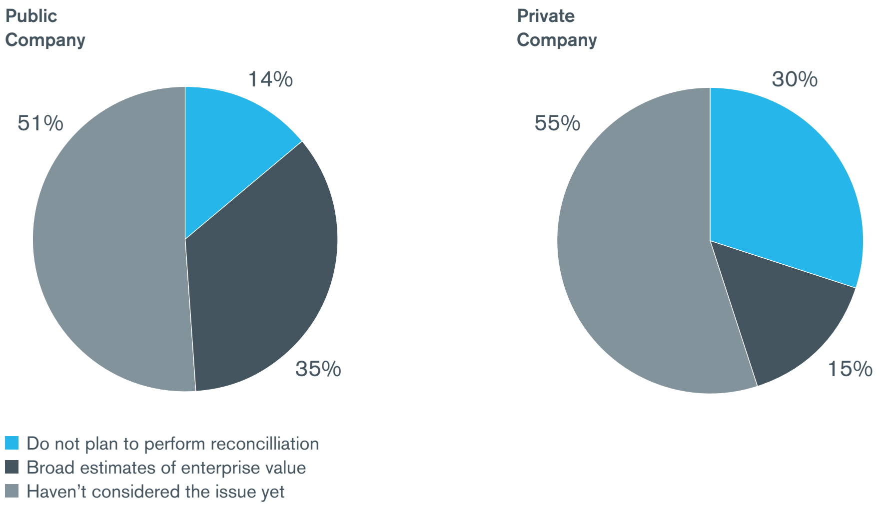
	Public	Private
Higher level of comfort supporting a quantitative	42%	27%
Internal control procedures require a quantitative assessment	3%	1%
Results of enterprise/equity value analyses are used for benchmarking and other purposes internally	6%	12%
Auditors unlikely to accept	23%	36%
All of the above	22%	20%
Other	5%	3%

Question 18: If other, please specify

Public Company	Private Company
We don't anticipate bypassing the qualitative assessment. Believe that impairment is more likely than not Divestment of reporting unit where the FV is lower than the GAAP Basis Believe the quantitative valuation would also be required anyway Unfortunately have historic goodwill analysis thus quantitative would be more relevant at this time.	—

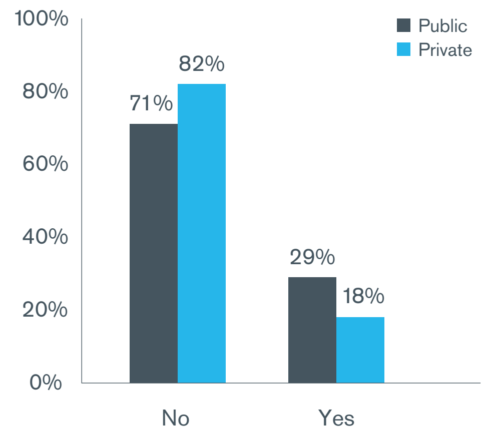
Survey Results

Question 19: If you expect to perform the qualitative assessment for one or more of your reporting units, how would you address the reconciliation to the current market capitalization?



Question 20: Has your company recognized goodwill or other asset impairments in 2010 or 2011?

If Yes, please proceed.
If No, please go to question #30.

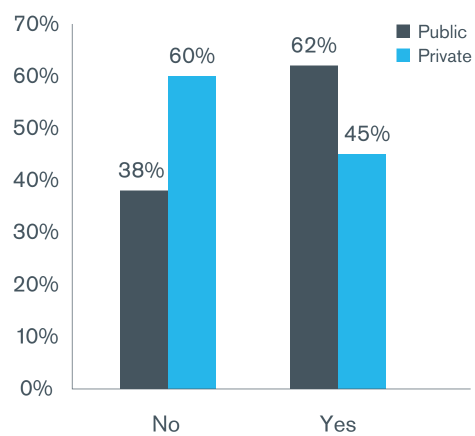


Question 21: When did you recognize the impairment?

Public	**2010**	**2011**
Selected individually or with others	88%	38%
Selected individually	62%	12%
Both Selections	27%	

Private	**2010**	**2011**
Selected individually or with others	100%	0%
Selected individually	100%	0%
Both Selections	0%	

Question 22: Were "early warnings" of potential impairment disclosed in the Management Discussion & Analysis (MD&A) in reporting period(s) prior to the impairment?



Survey Results

Question 23: What types of assets did you impair?

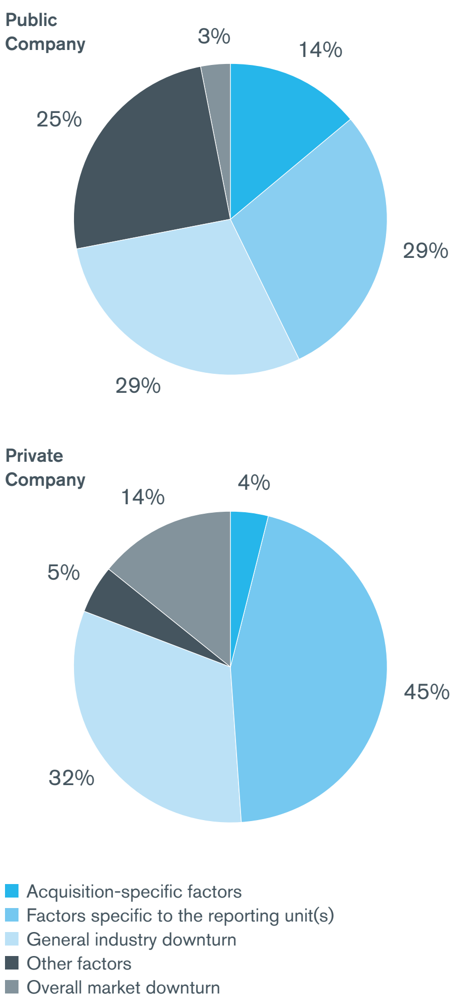
Choices (select all that apply):
Goodwill
Long-lived assets
Indefinite-lived assets
Financial assets

Public	Goodwill	Long-lived assets	Indefinite-lived assets	Financial assets
Selected individually or with others	55%	55%	18%	9%
Selected individually	36%	36%	0%	0%
Two Selections:				
Goodwill and Long-Lived	5%			
Goodwill and Indefinite	9%			
Goodwill and Financial	0%			
Long-Lived and Financial	0%			
Indefinite and Long-Lived	5%			
Indefinite and Financial	0%			
Three Selections:				
Goodwill and Long-Lived and Indefinite	0%			
Goodwill and Indefinite and Financial	0%			
Long-Lived and Indefinite and Financial	5%			
Financial and Long-Lived and Goodwill	5%			
All Four Selections	0%			

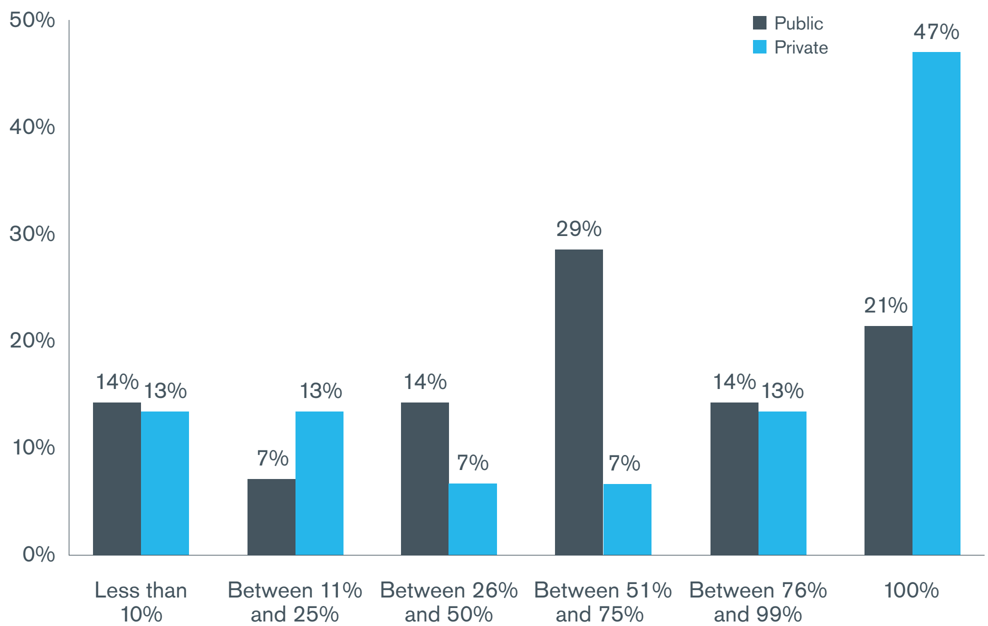
Private	Goodwill	Long-lived assets	Indefinite-lived assets	Financial assets
Selected individually or with others	76%	52%	5%	5%
Selected individually	48%	19%	0%	0%
Two Selections:				
Goodwill and Long-Lived	24%			
Goodwill and Indefinite	0%			
Goodwill and Financial	0%			
Long-Lived and Financial	5%			
Indefinite and Long-Lived	0%			
Indefinite and Financial	0%			
Three Selections:				
Goodwill and Long-Lived and Indefinite	5%			
Goodwill and Indefinite and Financial	0%			
Long-Lived and Indefinite and Financial	0%			
Financial and Long-Lived and Goodwill	0%			
All Four Selections	0%			

Survey Results

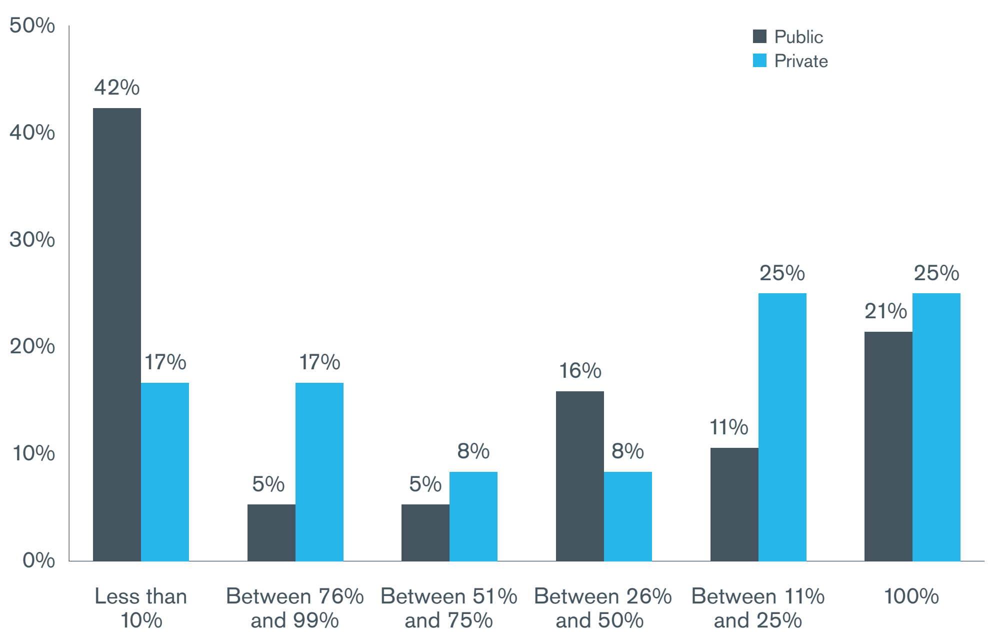
Question 24: What was the reason for the most recent impairment?



Question 25: If goodwill was impaired, what was the percentage write-down?

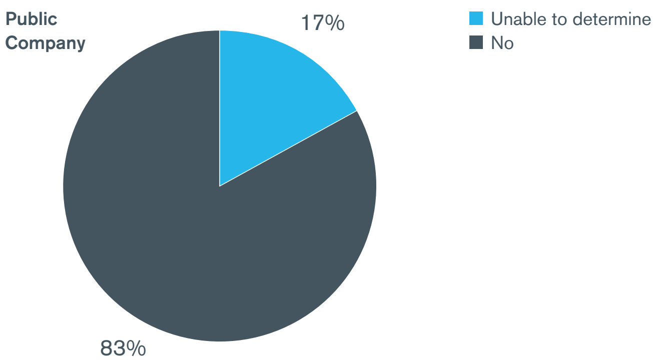


Question 26: If assets other than goodwill were impaired, what was the percentage write-down?

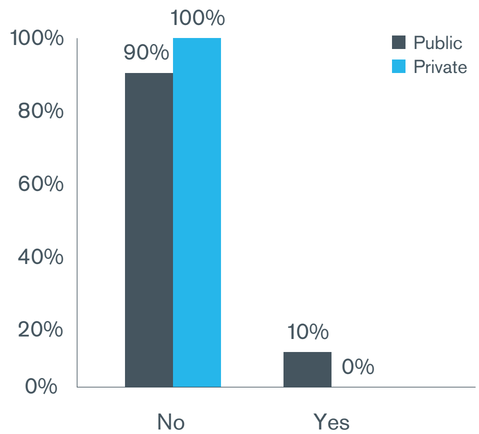


Survey Results

Question 27: Did the impairment have an effect on your company´s stock price?



Question 28: Have you received SEC comments as to the timing and/or amount of impairment during the last twelve months?



Question 29: What was the biggest challenge you faced in the most recent impairment?

Responses were grouped as follows:

Public Company

Cost
- Costly (greater than $1M) in third party valuation costs to perform goodwill impairment testing procedures during the last 6 mos.

Risk Premium/Valuation Issues
- Step 2 amount determination
- Valuation of assets
- Reconciling management's enterprise value (internal cash flow projections WACC and terminal growth rate) to the market capitalization

Forecasting
- Forecast of future results
- Forecasting future operating income
- Estimates of future cash flows and trying to be realistic on anticipated growth
- Providing support for revenue growth rates in current economic environment was very difficult

Reporting Unit Issues
- The entire process is ridiculous at the reporting unit level. It should be for company as a whole

Private Company

Cost
- Cost/time to complete forecasting
- Waste of money for a private company
- Convincing the Audit Committee it was necessary

Risk Premium/Valuation Issues
- Proving the other asset values that spring from having to do step 2
- Determining the proper fair value
- Making sure the method for determining enterprise value was fair and appropprirate

Forecasting
- Supporting future projected growth given recent history of industry downturn

Lack of Comparables
- Identifying market comparisons as we are a private entity

Auditor issues
- Auditors don't understand the standard/the mechanics or the rules (for instance they think a reconciliation to stock prices is required)
- Getting auditors to accept our roll-forward of last years analysis

Appendix A

Goodwill Intensity:
- Goodwill to Total Assets (GW/TA)

Loss Intensity:
- Goodwill Impairment to Total Assets (I/TA)
- Goodwill Impairment to Goodwill (I/GW)

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

GICS Code	GICS Sub-Industry Name	Number Co's (2010)	GW/TA (2009)	GW/TA (2010)	Goodwill Impairment (2010) (in $millions)	I/TA (2010)	I/GW (2010)
	Energy				**$1,264 (sector total)**		
10101010	Oil and Gas Drilling	12	10.95%	10.22%	$ 11	0.01%	0.10%
10101020	Oil and Gas Equipment and Services	51	14.91%	18.50%	$ 217	–	0.92%
10102010	Integrated Oil and Gas	12	1.46%	1.50%	–	–	–
10102020	Oil and Gas Exploration and Production	133	4.75%	4.57%	–	–	–
10102030	Oil and Gas Refining and Marketing	15	1.67%	1.85%	–	–	–
10102040	Oil and Gas Storage and Transportation	41	4.28%	3.51%	$ 1,037	0.45%	5.32%
10102050	Coal and Consumable Fuels	21	0.58%	1.23%	–	–	–
	Material				**$217 (sector total)**		
15101010	Commodity Chemicals	19	2.85%	5.85%	$ 56	0.29%	3.56%
15101020	Diversified Chemicals	12	14.90%	13.53%	–	–	–
15101030	Fertilizers and Agricultural Chemicals	12	11.97%	12.57%	–	–	–
15101040	Industrial Gases	5	12.92%	12.20%	–	–	–
15101050	Specialty Chemicals	49	19.65%	18.52%	$ 7	0.01%	0.06%
15102010	Construction Materials	13	2.22%	26.35%	–	–	–
15103010	Metal and Glass Containers	9	26.91%	25.61%	$ 72	0.24%	0.87%
15103020	Paper Packaging	11	20.71%	21.72%	–	–	–
15104010	Aluminum	4	12.51%	12.42%	–	–	–
15104020	Diversified Metals and Mining	46	0.63%	0.52%	$ 82	0.17%	4.08%
15104030	Gold	32	7.34%	9.61%	–	–	–
15104040	Precious Metals and Minerals	12	–	–	–	–	–
15104050	Steel	26	12.11%	6.52%	–	–	–
15105010	Forest Products	5	0.22%	–	–	–	–
15105020	Paper Products	9	7.99%	7.89%	–	–	–
	Industrials				**$2,505 (sector total)**		
20101010	Aerospace and Defense	71	29.28%	28.18%	$ 5	–	–
20102010	Building Products	22	20.11%	17.36%	$ 804	3.36%	13.02%
20103010	Construction and Engineering	28	13.32%	14.14%	$ 252	0.35%	2.11%
20104010	Electrical Components and Equipment	64	31.01%	30.98%	$ 92	0.10%	0.29%
20104020	Heavy Electrical Equipment	9	9.74%	7.52%	–	–	–
20105010	Industrial Conglomerates	12	5.37%	6.64%	–	–	–
20106010	Construction and Farm Machinery and Heavy Trucks	37	5.70%	5.52%	$ 106	0.05%	0.69%
20106020	Industrial Machinery	92	31.06%	30.60%	–	–	–
20107010	Trading Companies and Distributors	27	3.72%	11.62%	$ 6	0.02%	0.15%
20201010	Commercial Printing	14	29.19%	29.93%	–	–	–
20201050	Environmental and Facilities Services	45	35.02%	34.69%	$ 6	0.01%	0.03%

Appendix A

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GICS Code	GICS Sub-Industry Name	Number Co's (2010)	GW/TA (2009)	GW/TA (2010)	Goodwill Impairment (2010) (in $millions)	I/TA (2010)	I/GW (2010)
	Industrials (continued)						
20201060	Office Services and Supplies	21	20.06%	21.05%	$ 38	0.16%	0.79%
20201070	Diversified Support Services	31	29.02%	29.41%	$ 284	1.48%	3.60%
20201080	Security and Alarm Services	7	3.81%	6.55%	–	–	–
20202010	Human Resource and Employment Services	23	18.88%	21.40%	$ 453	3.09%	17.08%
20202020	Research and Consulting Services	28	42.70%	42.54%	$ 439	2.61%	2.85%
20301010	Air Freight and Logistics	18	8.25%	7.71%	–	–	–
20302010	Airlines	15	0.15%	0.17%	–	–	–
20303010	Marine	8	2.74%	2.31%	–	–	–
20304010	Railroads	7	0.33%	0.32%	–	–	–
20304020	Trucking	24	2.16%	2.40%	$ 20	0.05%	1.27%
20305010	Airport Services	2	22.11%	23.41%	–	–	–
20305020	Highways and Railtracks	–	–	–	–	–	–
20305030	Marine Ports and Services	–	–	–	–	–	–
	Consumer Discretionary				**$1,671 (sector total)**		
25101010	Auto Parts and Equipment	40	17.25%	15.53%	–	–	–
25101020	Tires and Rubber	3	4.90%	3.81%	–	–	–
25102010	Automobile Manufacturers	8	0.09%	0.16%	–	–	–
25102020	Motorcycle Manufacturers	2	0.35%	0.32%	–	–	–
25201010	Consumer Electronics	11	3.45%	3.98%	–	–	–
25201020	Home Furnishings	13	20.99%	19.41%	$ 9	0.06%	0.34%
25201030	Homebuilding	21	2.16%	0.65%	$ 656	1.34%	68.82%
25201040	Household Appliances	8	17.87%	11.56%	–	–	–
25201050	Housewares and Specialties	15	28.20%	26.98%	$ 20	0.06%	0.23%
25202010	Leisure Products	31	12.00%	10.53%	–	–	–
25202020	Photographic Products	1	11.79%	4.71%	$ 626	8.14%	65.78%
25203010	Apparel, Accessories and Luxury Goods	40	12.15%	13.76%	$ 2	–	0.04%
25203020	Footwear	12	2.53%	2.44%	$ 5	0.03%	1.09%
25203030	Textiles	6	0.86%	1.26%	–	–	–
25301010	Casinos and Gaming	45	5.73%	5.87%	$ 21	0.03%	0.48%
25301020	Hotels, Resorts and Cruise Lines	17	8.61%	8.03%	–	–	–
25301030	Leisure Facilities	16	7.61%	8.67%	–	–	–
25301040	Restaurants	48	8.52%	8.31%	$ 3	–	0.04%
25302010	Education Services	17	20.27%	19.59%	$ 6	0.05%	0.12%
25302020	Specialized Consumer Services	21	17.57%	15.81%	–	–	–
25401010	Advertising	21	36.54%	31.43%	–	–	–
25401020	Broadcasting	19	29.30%	29.64%	–	–	–
25401025	Cable and Satellite	11	14.35%	14.68%	–	–	–
25401030	Movies and Entertainment	39	34.41%	33.75%	$ 282	0.14%	0.40%
25401040	Publishing	24	40.40%	40.26%	$ 29	0.04%	0.09%
25501010	Distributors	20	14.29%	13.50%	–	–	–
25502010	Catalog Retail	2	1.81%	6.30%	$ 10	1.61%	24.18%
25502020	Internet Retail	16	9.66%	18.32%	–	–	–
25503010	Department Stores	9	5.68%	5.66%	–	–	–
25503020	General Merchandise Stores	8	0.24%	0.41%	–	–	NA

Appendix A

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

GICS Code	GICS Sub-Industry Name	Number Co's (2010)	GW/TA (2009)	GW/TA (2010)	Goodwill Impairment (2010) (in $millions)	I/TA (2010)	I/GW (2010)
	Consumer Discretionary (continued)						
25504010	Apparel Retail	40	4.38%	4.51%	–	–	–
25504020	Computer and Electronics Retail	7	17.48%	16.99%	–	–	0.01%
25504030	Home Improvement Retail	2	1.50%	1.52%	$ 1	–	0.05%
25504040	Specialty Stores	37	10.73%	10.29%	–	–	–
25504050	Automotive Retail	19	12.68%	10.32%	$ 2	0.01%	0.04%
25504060	Home Furnishing Retail	8	1.98%	1.84%	–	–	–
	Consumer Staples				**$2,168 (sector total)**		
30101010	Drug Retail	6	28.05%	28.41%	–	–	–
30101020	Food Distributors	9	14.72%	13.71%	–	–	–
30101030	Food Retail	10	11.11%	7.55%	$ 1,840	2.74%	19.03%
30101040	Hypermarkets and Super Centers	4	8.14%	7.70%	–	–	–
30201010	Brewers	2	12.02%	11.46%	–	–	–
30201020	Distillers and Vintners	5	29.47%	30.91%	–	–	–
30201030	Soft Drinks	14	10.72%	17.45%	–	–	–
30202010	Agricultural Products	13	2.72%	3.41%	–	–	0.01%
30202030	Packaged Foods and Meats	65	31.66%	30.64%	$ 32	–	0.04%
30203010	Tobacco	7	21.50%	20.96%	$ 26	0.04%	0.12%
30301010	Household Products	12	36.93%	36.17%	$ 258	0.14%	0.39%
30302010	Personal Products	45	10.58%	10.20%	$ 12	0.06%	0.66%
	Healthcare				**$3,905 (sector total)**		
35101010	Healthcare Equipment	139	27.28%	25.00%	$ 2,027	1.38%	4.04%
35101020	Healthcare Supplies	41	19.78%	33.19%	$ 1,150	6.25%	17.08%
35102010	Healthcare Distributors	13	14.76%	17.11%	–	–	–
35102015	Healthcare Services	61	46.00%	48.38%	$ 164	0.22%	0.48%
35102020	Healthcare Facilities	34	24.29%	22.87%	$ 13	0.02%	0.08%
35102030	Managed Healthcare	18	21.02%	21.63%	$ 178	0.08%	0.36%
35103010	Healthcare Technology	27	12.74%	14.43%	–	0.01%	0.01%
35201010	Biotechnology	187	15.74%	15.70%	$ 6	0.01%	0.04%
35202010	Pharmaceuticals	83	16.91%	18.41%	$ 1	–	–
35203010	Life Sciences Tools and Services	58	32.64%	29.93%	$ 366	0.55%	1.88%
	Financials				**$14,800 (sector total)**		
40101010	Diversified Banks	8	1.71%	2.06%	–	–	–
40101015	Regional Banks	358	2.41%	2.35%	$ 582	0.03%	1.09%
40102010	Thrifts and Mortgage Finance	148	0.33%	1.78%	$ 2	–	0.03%
40201020	Other Diversified Financial Services	6	2.63%	2.38%	$12,400	0.20%	7.19%
40201030	Multi-Sector Holdings	8	0.19%	0.14%	–	–	–
40201040	Specialized Finance	17	24.04%	14.15%	$ 20	0.02%	0.10%
40202010	Consumer Finance	24	3.32%	3.08%	$ 745	0.15%	3.96%
40203010	Asset Management and Custody Banks	567	4.53%	4.65%	–	–	–
40203020	Investment Banking and Brokerage	40	0.96%	0.94%	$ 32	–	0.16%
40203030	Diversified Capital Markets	1	0.49%	0.56%	–	–	–
40301010	Insurance Brokers	14	29.64%	30.37%	$ 11	0.02%	0.06%

Appendix A

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

GICS Code	GICS Sub-Industry Name	Number Co's (2010)	GW/TA (2009)	GW/TA (2010)	Goodwill Impairment (2010) (in $millions)	I/TA (2010)	I/GW (2010)
	Financials (continued)						
40301020	Life and Health Insurance	22	0.61%	0.85%	$ 44	–	0.43%
40301030	Multi-line Insurance	13	0.83%	0.51%	$ 474	0.03%	3.87%
40301040	Property and Casualty Insurance	59	4.57%	5.60%	$ 25	–	0.05%
40301050	Reinsurance	11	0.46%	0.42%	–	–	–
40402010	Diversified REITs	15	0.01%	0.01%	$ 3	0.01%	39.78%
40402020	Industrial REITs	6	1.36%	0.17%	$ 369	1.63%	91.64%
40402030	Mortgage REITs	21	0.19%	0.18%	–	–	–
40402040	Office REITs	16	–	–	–	–	–
40402050	Residential REITs	16	0.17%	0.12%	$ 4	0.01%	4.50%
40402060	Retail REITs	29	0.21%	0.05%	$ 5	–	1.78%
40402070	Specialized REITs	29	0.33%	0.33%	$ 86	0.08%	18.72%
40403010	Diversified Real Estate Activities	5	–	–	–	–	NA
40403020	Real Estate Operating Companies	22	–	0.06%	–	–	NA
40403030	Real Estate Development	14	0.01%	1.22%	–	–	–
40403040	Real Estate Services	6	32.59%	30.42%	–	–	–
	Information Technology				**$775 (sector total)**		
45101010	Internet Software and Services	119	19.39%	15.18%	$ 46	0.04%	0.18%
45102010	IT Consulting and Other Services	61	19.78%	16.16%	$ 140	0.02%	0.27%
45102020	Data Processing and Outsourced Services	33	19.29%	19.25%	$ 252	0.25%	0.59%
45103010	Application Software	121	34.22%	33.87%	$ 16	0.03%	0.08%
45103020	Systems Software	52	26.85%	24.71%	–	–	–
45103030	Home Entertainment Software	8	21.82%	20.43%	–	–	–
45201020	Communications Equipment	111	15.53%	16.51%	$ 90	0.05%	0.30%
45202010	Computer Hardware	15	17.23%	17.12%	$ 176	0.08%	6.33%
45202020	Computer Storage and Peripherals	51	17.52%	18.04%	$ 25	0.04%	0.22%
45203010	Electronic Equipment and Instruments	86	27.07%	19.94%	$ 13	0.08%	0.36%
45203015	Electronic Components	21	7.07%	6.74%	–	–	–
45203020	Electronic Manufacturing Services	32	4.34%	4.36%	–	–	–
45203030	Technology Distributors	22	6.74%	6.33%	$ 1	–	0.06%
45204010	Office Electronics	3	14.38%	27.96%	–	–	–
45301010	Semiconductor Equipment	45	7.74%	6.91%	–	–	–
45301020	Semiconductors	83	7.42%	7.12%	$ 16	0.01%	0.10%
	Telecommunications Services				**$439 (sector total)**		
50101010	Alternative Carriers	22	14.87%	15.50%	–	–	–
50101020	Integrated Telecommunication Services	30	19.69%	20.03%	–	–	–
50102010	Wireless Telecommunication Services	17	6.04%	5.96%	$ 439	0.42%	2.47%
	Utilities				**$1,975 (sector total)**		
55101010	Electric Utilities	31	3.71%	3.77%	$ 746	0.14%	2.17%
55102010	Gas Utilities	26	5.66%	6.62%	–	–	–
55103010	Multi-Utilities	24	3.82%	3.55%	$ 589	0.15%	3.90%
55104010	Water Utilities	11	0.69%	0.57%	–	–	–
55105010	Independent Power Producers and Energy Traders	12	3.71%	2.80%	$ 640	0.59%	20.08%

Appendix B: Quick Accounting Reference Guide

Goodwill

Below is an extract from ASU 2011-08 showing the amendments to the Accounting Standards Codification. Certain elements of this extract are pending with a transition date of December 15, 2011. Please see the FASB Codification for details.

Subsequent Measurement

350-20-35-3 An entity may first assess qualitative factors, as described in paragraphs 350-20-35-3A through 35-3G, to determine whether it is necessary to perform the two-step goodwill impairment test discussed in paragraphs 350-20- 35-4 through 35-19. If determined to be necessary, the two-step impairment test shall be used to identify potential goodwill impairment and measure the amount of a goodwill impairment loss to be recognized (if any).

Recognition and Measurement of an Impairment Loss

Qualitative Assessment

350-20-35-3A An entity may assess qualitative factors to determine whether it is more likely than not (that is, a likelihood of more than 50 percent) that the fair value of a reporting unit is less than its carrying amount, including goodwill.

350-20-35-3B An entity has an unconditional option to bypass the qualitativeassessment described in the preceding paragraph for any reporting unit in any period and proceed directly to performing the first step of the goodwill impairment test. An entity may resume performing the qualitative assessment in any subsequent period.

350-20-35-3C In evaluating whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount, an entity shall assess relevant events and circumstances. Examples of such events and circumstances include the following:

a. Macroeconomic conditions such as a deterioration in general economic conditions, limitations on accessing capital, fluctuations in foreign exchange rates, or other developments in equity and credit markets

b. Industry and market considerations such as a deterioration in the environment in which an entity operates, an increased competitive environment, a decline in market-dependent multiples or metrics (consider in both absolute terms and relative to peers), a change in the market for an entity's products or services, or a regulatory or political development

c. Cost factors such as increases in raw materials, labor, or other costs that have a negative effect on earnings and cash flows

d. Overall financial performance such as negative or declining cash flows or a decline in actual or planned revenue or earnings compared with actual and projected results of relevant prior periods

e. Other relevant entity-specific events such as changes in management, key personnel, strategy, or customers; contemplation of bankruptcy; or litigation

f. Events affecting a reporting unit such as a change in the composition or carrying amount of its net assets, a more-likely-than-not expectation of selling or disposing all, or a portion, of a reporting unit, the testing for recoverability of a significant asset group within a reporting unit, or recognition of a goodwill impairment loss in the financial statements of a subsidiary that is a component of a reporting unit

g. If applicable, a sustained decrease in share price (consider in both absolute terms and relative to peers).

350-20-35-3D If, after assessing the totality of events or circumstances such as those described in the preceding paragraph, an entity determines that it is not more likely than not that the fair value of a reporting unit is less than its carrying amount, then the first and second steps of the goodwill impairment test are unnecessary.

350-20-35-3E If, after assessing the totality of events or circumstances such as those described in paragraph 350-20-35-3C(a) through (g), an entity determines that it is more likely than not that the fair value of a reporting unit is less than its carrying amount, then the entity shall perform the first step of the two-step goodwill impairment test.

350-20-35-3F The examples included in paragraph 350-20-35-3C(a) through (g) are not all-inclusive, and an entity shall consider other relevant events and circumstances that affect the fair value or carrying amount of a reporting unit in determining whether to perform the first step of the goodwill impairment test. An entity shall consider the extent to which each of the adverse events and circumstances identified could affect the comparison of a reporting unit's fair value with its carrying amount. An entity should place more weight on the events and circumstances that most affect a reporting unit's fair value or the carrying amount of its net assets. An entity also should consider positive and mitigating events and circumstances that may affect its determination of whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount. If an entity has a recent fair value calculation for a reporting unit, it also should include as a factor in its consideration the difference between the fair value and the carrying amount in reaching its conclusion about whether to perform the first step of the goodwill impairment test.

Appendix B

350-20-35-3G An entity shall evaluate, on the basis of the weight of evidence, the significance of all identified events and circumstances in the context of determining whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount. None of the individual examples of events and circumstances included in paragraph 350-20-35-3C(a) through (g) are intended to represent standalone events or circumstances that necessarily require an entity to perform the first step of the goodwill impairment test. Also, the existence of positive and mitigating events and circumstances is not intended to represent a rebuttable presumption that an entity should not perform the first step of the goodwill impairment test.

3. Amend paragraph 350-20-35-8A, with a link to transition paragraph 350-20-65-1, as follows:

Step 1

350-20-35-4 The first step of the goodwill impairment test, used to identify potential impairment, compares the fair value of a reporting unit with its carrying amount, including goodwill.

350-20-35-5 The guidance in paragraphs 350-20-35-22 through 35-24 shall be considered in determining the fair value of a reporting unit.

350-20-35-6 If the carrying amount of a reporting unit is greater than zero and its fair value exceeds its carrying amount, goodwill of the reporting unit is considered not impaired; thus, the second step of the impairment test is unnecessary. If the carrying amount of the reporting unit is zero or negative, the guidance in paragraph 350-20-35-8A shall be followed.

350-20-35-7 In determining the carrying amount of a reporting unit, deferred income taxes shall be included in the carrying amount of the reporting unit, regardless of whether the fair value of the reporting unit will be determined assuming it would be bought or sold in a taxable or nontaxable transaction.

350-20-35-8 If the carrying amount of a reporting unit exceeds its fair value, the second step of the goodwill impairment test shall be performed to measure the amount of impairment loss, if any.

350-20-35-8A If the carrying amount of a reporting unit is zero or negative, the second step of the impairment test shall be performed to measure the amount of impairment loss, if any, when it is more likely than not (that is, a likelihood of more than 50 percent) that a goodwill impairment exists. In considering whether it is more likely than not that a goodwill impairment exists, an entity shall evaluate, using the process described in paragraphs 350-20-35-3F through 35-3G, whether there are adverse qualitative factors, including the examples of events and circumstances provided in paragraph 350-20- 35-3C(a) through (g). In evaluating whether it is more likely than not that the goodwill of a reporting unit with a zero or negative carrying amount is impaired, an entity also should take into consideration whether there are significant differences between the carrying amount and the estimated fair value of its assets and liabilities, and the existence of significant unrecognized intangible assets.

Step 2

350-20-35-9 The second step of the goodwill impairment test, used to measure the amount of impairment loss, compares the implied fair value of reporting unit goodwill with the carrying amount of that goodwill.

350-20-35-10 The guidance in paragraphs 350-20-35-14 through 35-17 shall be used to estimate the implied fair value of goodwill.

350-20-35-11 If the carrying amount of reporting unit goodwill exceeds the implied fair value of that goodwill, an impairment loss shall be recognized in an amount equal to that excess. The loss recognized cannot exceed the carrying amount of goodwill.

350-20-35-12 After a goodwill impairment loss is recognized, the adjusted carrying amount of goodwill shall be its new accounting basis.

350-20-35-13 Subsequent reversal of a previously recognized goodwill impairment loss is prohibited once the measurement of that loss is recognized.

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International Standard Book Number:
978-1-61509-073-0

Printed in the United States of America

First Printing

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FINANCIAL EXECUTIVES RESEARCH FOUNDATION gratefully acknowledges the following companies for generously supporting FERF's 2011 Annual Corporate Campaign

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