

November 2015

2015 U.S. Goodwill Impairment Study

Introduction

Duff & Phelps and the Financial Executives Research Foundation (FERF) first published the results of their comprehensive Goodwill Impairment Study in 2009. This inaugural 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 of over 5,000 companies (by industry), as well as the findings of a survey of Financial Executives International (FEI) members.

Now in its seventh year of publication, the 2015 U.S. Goodwill Impairment Study (the "2015 Study") continues to examine general and industry goodwill impairment trends through December 2014, as well as reporting the 2015 results of the annual survey of FEI members.

This year's edition of the study has been expanded and now includes 8,705 publicly-traded companies (compared to 5,153 in 2013) providing a more comprehensive summary of goodwill impairment in the U.S.

Specially featured in this year's edition is an article entitled "Industry Focus: Oil & Gas", covering developments in a number of sectors within Energy. Plummeting oil prices have significantly impacted the Energy industry, leading to substantial goodwill and asset impairments for energy companies during 2014.

Inside

3	4	8	14	18	30
Goodwill Landscape	Industry Focus: Oil and Gas	Survey Results	Summary Statistics by Industry	Industry Spotlights	Goodwill Impairments by Sub-Industry
34	35	36			
Appendix: Company Base Set Selection and Methodology	About Duff & Phelps	About Financial Executives Research Foundation, Inc.			

Introduction

Purpose of the 2015 Study

- To report and examine the general and industry trends of goodwill and goodwill impairment of U.S. companies.
- To report the 2015 results of the annual goodwill impairment survey of FEI members (the “2015 Survey”).

2015 Study: Expanded Company Base Set

We expanded the company base set for the 2015 Study, using the S&P Capital IQ® database as the primary source of data. The primary difference in the current methodology compared to previous years is that the requirement that companies have stock returns data over the prior 5-year period was removed from the selection process. This selection criterion was deemed relevant to analyses included in previous studies performed shortly after the financial crisis of 2008-2009.

To bridge methodologies and allow for year-to-year comparisons, we created a 2013 pro forma year using the new selection methodology. Starting with the 2014 dataset, we recalculated the 2013 goodwill impairments and accompanying metrics. Further adjustments were made as appropriate to arrive at the 2013 pro forma figures. A more detailed description of the 2015 Study methodology is included in the **Appendix**.

As with prior studies, calendar years (not “most recent fiscal years”) were used to examine impairments during a specific period of time, regardless of company-specific choices of fiscal years.

Highlights of the 2015 Study

U.S. public companies recorded \$26 billion of goodwill impairment (“GWI”) in calendar year 2014, representing an increase from the \$22 billion in 2013 pro forma. Likewise, the number of GWI events increased from 274 to 341 over the same period. Average GWI per event decreased slightly from \$79 million (2013 pro forma) to \$75 million in 2014. Both figures were down significantly from the average under the prior 2013 methodology (\$108 million), likely due to the expanded data set in the 2015 Study.

Industries that recorded an increase in GWI in 2014 include, in order of magnitude (\$ billions):

- Energy (\$2.1 to \$5.8)
- Consumer Staples (\$1.0 to \$3.5)
- Financials (\$1.0 to \$3.1)
- Information Technology (\$1.6 to \$3.6)
- Industrials (\$3.2 to \$3.5)

The remaining industries recorded declines, with Healthcare plummeting from \$3.6 to \$0.4 billion (an 89% drop) and Materials from \$4.6 to \$2.7 billion (a 41% drop). Two of the top five largest impairment events of 2014 were in Energy, driving up the total for the industry. In fact, the impact of Energy on the overall 2015 Study was very pronounced: if Energy were excluded from 2013 pro forma and 2014, the aggregate GWI trend would have been flat.

The increased 2014 aggregate impairment amount was also consistent with generally observed U.S. macroeconomic trends. While the U.S. economic outlook continued to improve in 2014, with the S&P 500 Index increasing approximately 11%, plunging commodity prices in the latter half of the year affected certain industries disproportionately.

GWI concentration in 2014 was similar to the 2013 pro forma results. The top three GWI events amounted to 20% (or \$5.3 billion) of GWI totals in 2014, a slight decline from 21% (or \$4.7 billion) in 2013 pro forma.

Highlights of the 2015 Survey

The 2015 Survey continued to monitor FEI members’ use of the optional qualitative test when testing goodwill for impairment (a.k.a. “Step 0”). The 2015 Survey demonstrates record use of the Step 0 test since the option first became available. Specifically, 29% of public companies opted to use Step 0 in the 2013 Survey and this proportion increased to 43% in the 2014 Survey. Notably, the majority of public company respondents (54%) in the 2015 Survey are now taking advantage of the simplified test. Private companies show a similar trend as they continue to embrace Step 0: 40% of respondents currently apply it, which is nearly double the rate in the 2013 Survey (22%). In contrast, only 28% of all respondents prefer the quantitative test, down from 45% in the 2013 Survey.

Two-thirds now believe that Step 0 meets its stated objective of reducing costs, a significant increase from 50% in the 2014 Survey. In addition, nearly half of those that have never applied Step 0 will consider its use in the future.

Goodwill Landscape

The graphic below captures the evolution of goodwill from 2013 to 2014. For reference, we are also including a comparison of certain metrics based on the 2013 pro forma dataset, relative to the 2013 figures using the prior methodology in last year's study.

If one examines this graphic from the top down, the source of goodwill is provided with a deal summary (both number of deals and value) for transactions involving a controlling interest of 50% or more, acquired by U.S. incorporated publicly-traded companies [see M&A Activity].

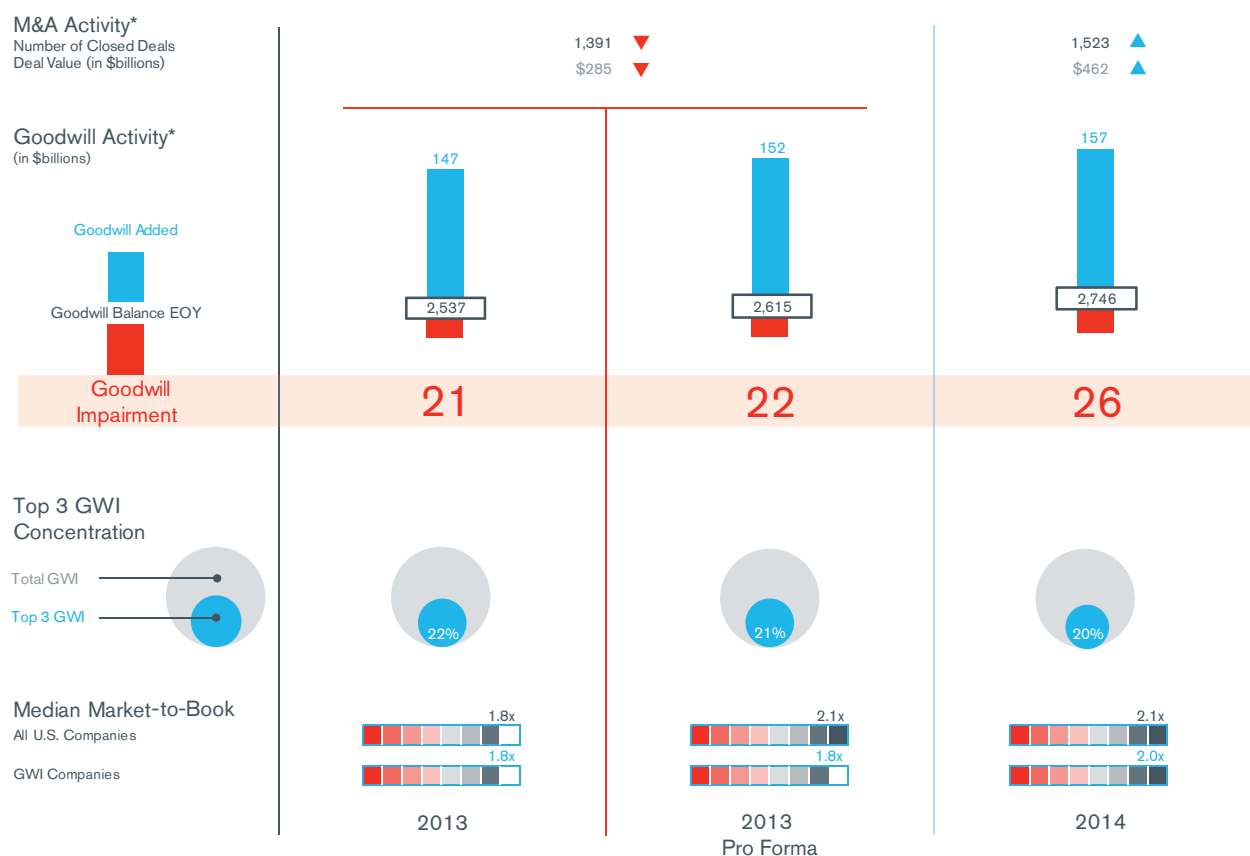
Based on the above criteria, deal activity saw an increase in both volume and value in 2014. The number of closed deals grew by 9% and the deal value increased by a steep 62%, leading to a slight increase in goodwill added to balance sheets, from \$152 billion in 2013 pro forma to \$157 billion in 2014. For context, the increase in goodwill added to balance sheets in 2013 due to the expanded data set is \$5 billion (\$147 billion in 2013 using the prior methodology vs. \$152 billion in 2013 pro forma using the new methodology).

The Goodwill Activity bar chart shows the annual aggregate GWI (see amounts in the red font, shaded area), as well as the amount of goodwill added annually (see amounts in blue font), with the end-of-year (EOY) aggregate goodwill balance sliding along the scale.

For example, we can observe an increase in the goodwill impaired by U.S. companies from \$22 billion in calendar year 2013 on a pro forma basis to \$26 billion in 2014.

A limited number of events can have a dramatic impact on the annual impairment amounts. To provide perspective, the graphic below highlights the concentration of GWI amounts recorded in the top three events [see Top 3 GWI Concentration, as shown in the middle panel]. The top three GWI events accounted for 20% of the 2014 aggregate GWI amount. The 2013 pro forma concentration decreased slightly to 21% from 22% [see Top 3 GWI] as a result of the expanded dataset. It should be noted that the top three impairments (totaling \$4.7 billion) remained the same in 2013 using both the prior and the new methodology.

Lastly, while not a sole or definitive indicator of impairment, market capitalization should not be ignored during a goodwill impairment test. Market-to-book ratios for both the entirety of the 2015 Study as well as for those companies that recorded a GWI are also provided [see Median Market-to-Book in the bottom panel of the graphic]. The 2013 pro forma market-to-book ratio for all U.S. companies in the study climbed to 2.1x, compared to 1.8x under the prior methodology. This increase is a function of the expanded dataset.



*Source: S&P Capital IQ®. M&A Activity based on transactions closed in each year, where U.S. publicly-traded companies acquired a 50% or greater interest.

Industry Focus: Oil & Gas

One year ago, as of the preparation of the 2014 Study, the Oil & Gas industry was thriving due to continued production expansion and oil prices hovering around \$100 per barrel. Valuation multiples reflected expected continued sector growth, and the commodity price outlook remained favorable, as it had been for several years. The U.S. Oil & Gas industry was in its renaissance, thanks in part to the convergence of extensive domestic unconventional resources with technological advancements in hydraulic fracturing and horizontal drilling.

Only a year later, the Oil & Gas industry is dealing with a precipitous decline of historical proportions rivaling the downturns of 1985 and 2008. While prior downturns were linked to broader economic declines, the 2014 decline resulted from the combination of significantly increased U.S. supply and a conscious and intentional effort by major member countries of OPEC (Organization of Petroleum Exporting Countries) to regain lost market share from U.S. shale producers. Saudi Arabia and Iraq alone accounted for a supply increase in excess of 1 million barrels per day over the second half of 2014. Questions regarding demand growth from China only exacerbated the supply-driven price decline. In a matter of less than six months, both WTI (West Texas Intermediate) and Brent crude oil prices declined by almost 50% from their 2014 highs.

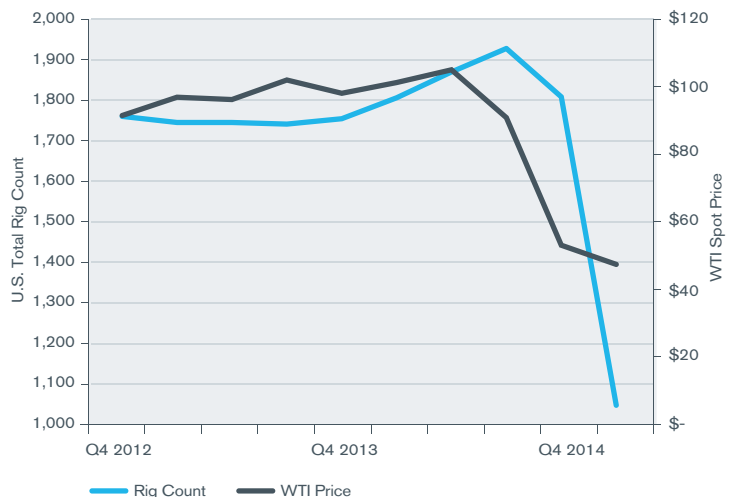
What OPEC did not anticipate was the resilience of U.S. production. Despite significant curtailment of capital spending and a drastic reduction in the operating rig count in the U.S. in the first quarter of 2015, oil production remained steady and even increased. Inefficient rigs were mothballed and exploration efforts are a fraction of their 2014 levels, but the newest equipment continues to drill new wells in the most productive and profitable shale plays. New wells are drilled at substantially lower costs in fewer days, and longer laterals continue to improve the yield of each well. Altogether these dynamics are likely to allow most U.S. Oil & Gas producers to maintain the production levels necessary to service their debt obligations in a \$40 to \$60 price per barrel range.

The combination of the U.S. shale resiliency with OPEC's unwillingness to reduce its production is likely to result in downward pressure on oil prices, possibly for years to come. And while OPEC underestimated the ability of the U.S. Oil & Gas industry to rapidly adjust to a substantially lower price environment, the adjustment was not without its costs.

One of the most immediate impacts was substantial equity/market capitalization declines across the Oil & Gas industry. Although Exploration and Production ("E&P") companies were hedged for much of their production in 2015, realized prices will be vastly lower across the sector in 2016 and 2017. In addition, E&P growth forecasts have been significantly reduced, a fact that has adversely impacted the growth expectations for midstream companies (including Master Limited Partnerships or "MLPs"). Oilfield Service ("OFS") companies share prices were perhaps hardest hit, as their income is largely linked to future drilling and exploration activities and they did not have the benefit of hedged revenue. OFS company response was unprecedented, both in terms of the speed and magnitude of their workforce reductions as well as the level of price reductions provided to E&P customers critical to sustaining production and drilling efforts.

In the face of this downturn, 2014 saw an increase in the number and magnitude of impairments in the Oil & Gas industry. However, analysis of goodwill impairments is inadequate to fully capture the impact of the downturn on the financial statements of Oil & Gas companies. Accordingly, in addition to analysis of goodwill impairments in the industry, this featured Industry Focus includes analysis of reserve and Property, Plant and Equipment (PP&E) write-downs recorded in 2014 versus the prior year, as well as sector-specific commentary.

U.S. Rig Count and WTI Spot Price



Source: Baker Hughes North America Rotary Rig Count

Industry Focus: Oil & Gas

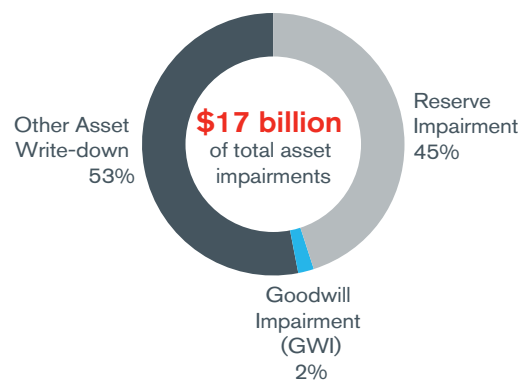
Exploration & Production

To understand the goodwill and asset impairments within the E&P sector, it is necessary to appreciate several specific industry accounting considerations. First, in many E&P transactions, the majority, if not all, of what would otherwise be characterized as excess purchase price is generally ascribed to reserves, resources and other identifiable assets rather than goodwill. Goodwill has become somewhat more common in E&P transactions during the last five years in mergers and public company acquisitions, when buyers have paid both for the economic benefit of reserves and resources, as well as the market's growing perception of the target's ability to add future reserves on an accretive basis. However, reserves and resources continue to represent the largest component of E&P balance sheets.

A major factor impacting the magnitude of asset impairments recorded by E&P companies in 2014 is whether they record reserves using the Full Cost method of accounting or the Successful Efforts method. For E&P companies using the Full Cost method, a "Current Price" (defined as the average of the trailing twelve months using the price from the first day of each month) is used in asset impairment tests. As three-quarters of the price points underlying Current Prices at December 31, 2014 were still close to \$100 per barrel, Full Cost impairments were limited in 2014. Reserve impairments are likely to accelerate through 2015 as months with pricing above \$90 per barrel are replaced with months below \$60 per barrel in the rolling twelve-month Current Price.

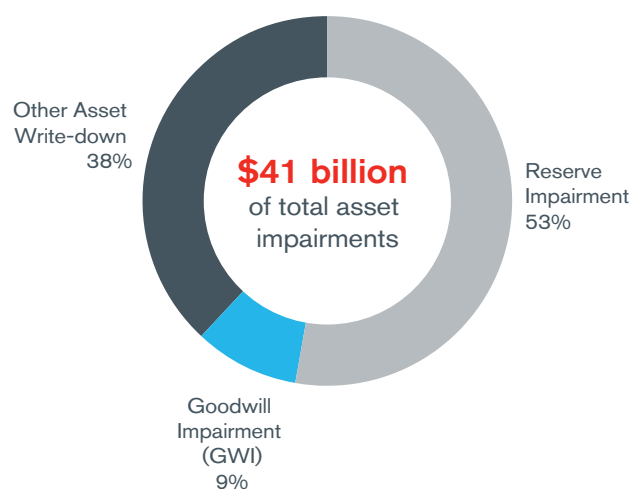
For E&P companies using the Successful Efforts method of accounting, lower price outlooks at the end of 2014 likely triggered impairment losses, although they may have been somewhat mitigated by outstanding hedges that will sustain favorable pricing through much of 2015. In addition, many industry analysts and E&P companies reflected a more rapid recovery to higher forward looking prices in their 2014 year-end outlook. Even for E&P companies using Successful Efforts, the evolving view that oil prices are likely to remain lower for longer, combined with the roll-off of beneficial hedges, is likely to result in additional goodwill and asset impairment charges during 2015. In fact, because the majority of value extracted from producing unconventional assets occurs within the first two to three years due to accelerated decline curves, the bulk of the output will occur prior to an expected rebound in pricing.

E&P 2013 Impairment



In the aggregate, goodwill, asset and reserve impairments in the E&P sector increased by almost 2.5 times in 2014 over 2013 levels, rising to over \$41 billion from \$17 billion. In both years, goodwill represented less than 10% of the total charges recorded. Given E&P asset values have a direct linkage to oil and other commodity prices, it is not surprising that the E&P sector accounted for approximately 90% of the impairments in the Oil & Gas industry in 2014. With hedges rolling off, price outlooks shifting lower and Current Prices declining as of the preparation of this 2015 Study, it is possible that E&P sector write-offs in 2015 may exceed \$50 billion or more as the industry grapples with continued oversupply.

E&P 2014 Impairment



Industry Focus: Oil & Gas

Midstream / MLPs

While the decline in oil and gas prices has affected transportation and storage companies, the impact is less correlated with underlying commodity prices, as most operators in the sector benefit from long-term contracts with firm quantity commitments. In addition, a significant portion of revenue is sourced through fee-based contracts with ship-or-pay, or minimum volume commitments. These contracts protect MLPs from commodity exposure and provide earnings stability critical to their investors.

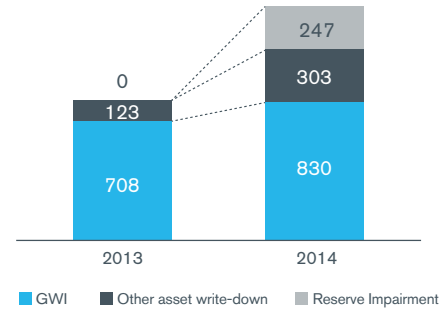
This insulation from commodity volatility has resulted in few goodwill or asset write-downs in 2014 and only a very modest increase over 2013. However, as E&P companies continue to pull back on drilling and exploration programs, midstream companies have had to reassess their growth and expansion plans. While existing assets are likely to remain insulated from the current downturn (with the possible exception of storage facilities with limited long-term volume commitments), MLPs who purchased competitors over the past several years at prices that factored in significant expansion may have goodwill impairment exposure. Otherwise, assuming domestic production volumes remain flat or increase modestly, midstream asset utilization rates should remain at levels necessary to support contracted pipeline and storage facilities, even if commodity pricing remains significantly lower than 2013 and 2014 levels, likely limiting goodwill and other asset impairment exposure.

While MLP unit prices did not decline significantly at the end of 2014, declines in 2015 reflect the reduction in the expected growth associated with expansions and new construction projects. However, exposure to impairment related to prevailing lower commodity prices will likely center on goodwill arising from recent acquisitions. In addition, most MLPs have a substantial "fair value cushion" (whereby the fair value of the reporting unit(s) exceeds their carrying amount(s), mitigating impairment risk), so it is likely that the Midstream / MLP sector will continue to represent the smallest portion of impairments (by dollar and count) within the Oil & Gas industry in 2015.

Oilfield Services

While the prices of OFS company shares, as well as their services declined substantially in the fourth quarter of 2014, the decline did not translate into a significant increase in the magnitude of impairments in 2014 versus 2013. However, while only 3% of the total sector goodwill was impaired in 2014, approximately 33% of the 143 publicly traded OFS companies in the U.S. (91) and Canada (52) recorded impairment charges. It is worth noting that while the E&P and MLP sectors are largely domestic and therefore linked closely to production from U.S. shale operations, many OFS companies, particularly those with the majority of the approximately \$29 billion of OFS sector goodwill, operate on a global basis.

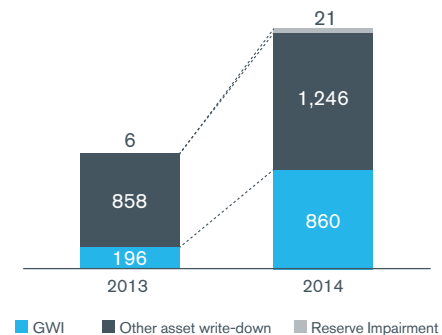
Midstream Impairments (\$ millions)



In assessing the relatively low magnitude of charges recorded in 2014, particularly relative to the share price declines for many OFS companies over the second half of the year, there are several factors that are worth noting. For one, large OFS companies are not entirely dependent on domestic well completions, and many benefit from geographic diversification. Many National Oil Companies ("NOCs") continued to drill on their planned schedule despite lower oil prices, and the OFS companies benefit in many cases from annual and multi-year contracts with both NOCs and other international producers. In addition, many OFS companies anticipate that delayed or deferred exploration and drilling will ultimately provide for future OFS demand growth, and they anticipate that even their U.S. and Canadian focused operations will ultimately return to targeted profitability levels, once they work through the business cycle.

Similar to Midstream, many OFS companies have grown organically during the most recent expansion (possibly augmented by a few minor acquisitions), and many OFS companies therefore started 2014 with a substantial fair value cushion. This cushion, combined with the relatively rapid recovery in oil prices predicted by analysts at the end of 2014, contributed to total impairments and write-offs only doubling from \$1 billion in 2013 to \$2 billion in 2014.

Oilfield Services Impairments (\$ millions)

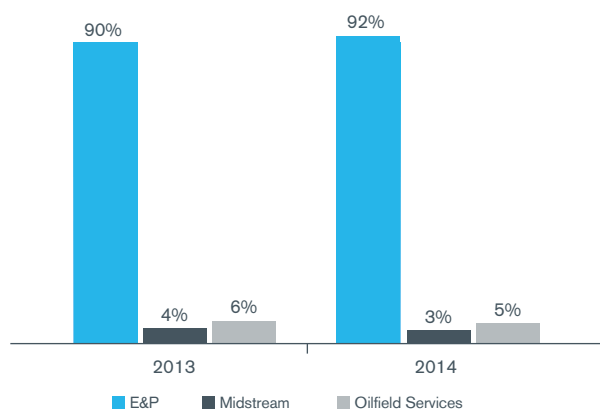


Industry Focus: Oil & Gas

While goodwill may have been somewhat shielded for many OFS companies, there was a substantial acceleration of the number of rigs that were stacked in the first quarter of 2015 as contracts expired and were not renewed. The combination of retired rigs and other excess equipment taken out of service will likely result in a significant increase in the magnitude of asset impairments in 2015. As of the preparation of this 2015 Study, approximately half of the rigs in service at the 2014 peak are now offline. Most are unlikely to return to service, particularly given the substantial number of new rigs on order that have been delayed but will likely be delivered and brought online when oil prices ultimately rebound.

An interesting dynamic affecting 2015 may be the impact of several major transactions, combined with anti-trust divestiture requirements, which may significantly increase the overall amount of goodwill in the OFS sector. If oil prices remain low throughout 2015 and no resolution of the global oversupply presents itself, continuing downward pressure on both forecasted oil prices and OFS drilling and day rates will impact the magnitude of impairments in 2015. As a result, impairments may substantially exceed the \$2 billion in charges recorded in 2014.

Overall Impairment Breakdown by Sector



Summary

Oil & Gas industry impairments in 2014 increased dramatically over recent years, primarily due to charges taken in the E&P sector. Specifically, the majority of impairments in the Oil & Gas industry in 2014 were recorded by E&P companies operating under the Successful Efforts method of accounting.

As global oil supply continues to outstrip demand into 2015 and commodity prices are expected to remain well below 2013 and 2014 levels into the second half of this decade, the magnitude of impairments in the E&P sector, and therefore the Oil & Gas industry overall, is likely to accelerate in 2015. In general, 2015 is likely to see greater impairments across the E&P sector, regardless of the method of accounting.

Both the WTI Current Price below \$60 per barrel as of the end of the third quarter of 2015 (versus approximately \$90 at the end of 2014) and write-offs through the first half of 2015 corroborate the likelihood that total charges in the E&P sector will significantly exceed the \$41 billion recorded in 2014.

While impairments in the midstream / MLP sector are likely to remain modest and OFS charges may increase in 2015, it is ultimately the continued exposure to lower oil and commodity prices in the E&P sector that is likely to result in the Oil & Gas industry continuing to be one of the sectors with the greatest exposure to goodwill and asset impairment charges in 2015.

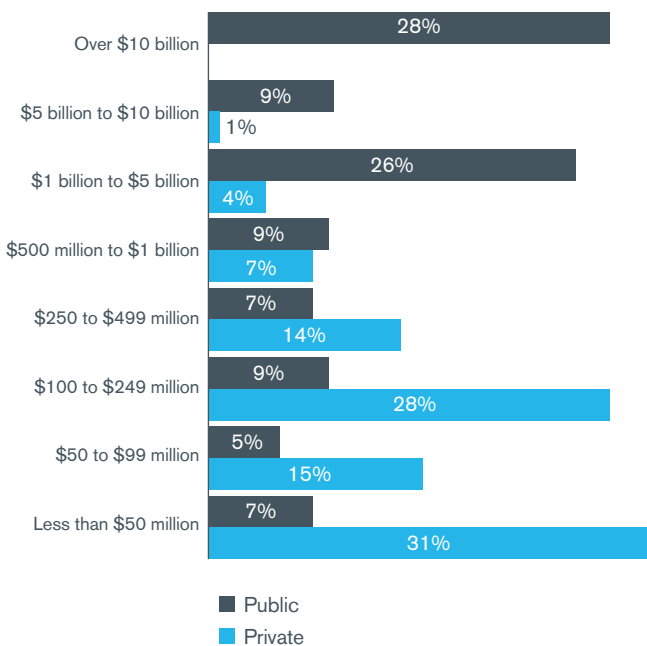
2015 Survey Results

During the summer of 2015, an electronic survey on goodwill impairments was conducted using a sample of FEI members representing both public and private companies. This survey is performed annually and provides insight into goodwill impairments and members' views on related topics.

The 2015 Survey demonstrates record use of the Step 0 test since the option first became available. Specifically, 29% of public companies opted to use Step 0 in the 2013 Survey and this proportion increased to 43% in the 2014 Survey. Notably, the majority of public company respondents (54%) in the 2015 Survey are now taking advantage of the simplified test. Private companies show a similar trend as they continue to embrace Step 0: 40% of respondents currently apply it, which is nearly double the rate in the 2013 Survey (22%).

To reflect the need for periodic quantitative updates following the adoption of Step 0, we included two additional response options in this year's survey. These options address if the entity, having considered the use of Step 0, had instead reverted to a fair value indication from a recent acquisition, or had performed a "refresh" of their quantitative (Step 1) analysis.

Question 2: What is the revenue for your company? (N=219)

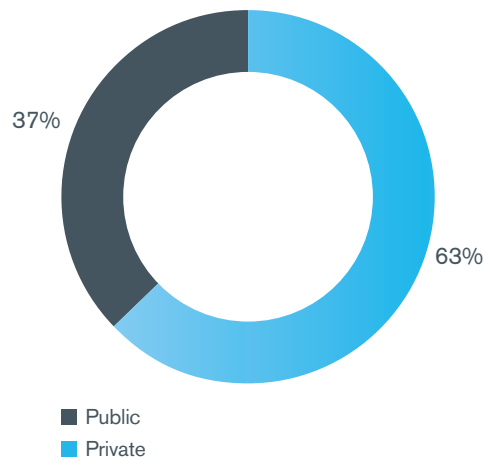


Respondents that refreshed their quantitative analysis (13% of public and 5% of private respondents) are considered to be Step 0 users in the 2015 Survey, and are included in the totals (see Question 9). It is also notable that two-thirds of respondents now believe that Step 0 meets its stated objective of reducing costs, a significant increase from 50% in the 2014 Survey (see Question 11).

Question 1: What is your company's industry? (N=219)

Public Company (81)		Private Company (138)	
Industry	% of Total	Industry	% of Total
Manufacturing	20%	Manufacturing	14%
Medical/Pharmaceutical	12%	Technology	9%
Banking/Financial Services	9%	Professional Services	8%
Consumer Goods	9%	Healthcare Services	7%
Technology	6%	Energy/Utilities/Oil & Gas	6%
Healthcare Services	4%	Insurance	4%
Energy/Utilities/Oil & Gas	4%	Non-Profit Organizations	4%
Insurance	4%	Banking/Financial Services	4%
Construction/Engineering	4%	Construction/Engineering	4%
Food/Restaurant	4%	Food/Restaurant	4%
High-Tech or Software	4%	High-Tech or Software	4%
Telecommunications	4%	Real Estate	4%
Retail	2%	Distribution	4%
Arts/Entertainment	2%	Consumer Goods	3%
Service	2%	Transportation	3%
Other (less than 2%)	10%	Medical/Pharmaceutical	2%
		Retail	2%
		Other (less than 2%)	14%

Question 3: Is your company public or private? (N=219)



Goodwill Impairment 2015 Survey Results

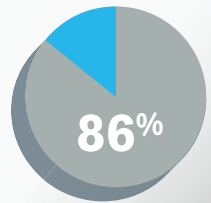
Two-thirds now believe that Step 0 meets its stated objective of reducing costs, a significant increase from 50% in the 2014 Survey. In addition, nearly half of those that have never applied Step 0 will consider its use in the future.

Of those private companies that will not adopt the PCC alternative for intangible assets (ASU 2014-18), only 14% expect to become public business entities.

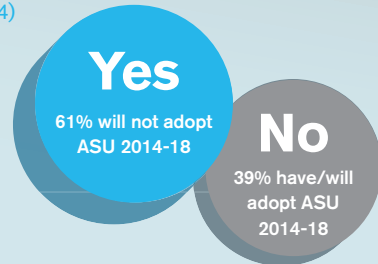
Question 15 asked respondents to rank their views regarding various aspects of PCC's work and its future agenda. The analysis on the right as well as below is based on all respondents who expressed an opinion on these issues.

Nearly two-thirds of all respondents agree that the PCC should transition into an advisory role to the FASB, with the objective of continuing to simplify rules for all companies.

Did not recognize a goodwill impairment in 2014
(Question 7)

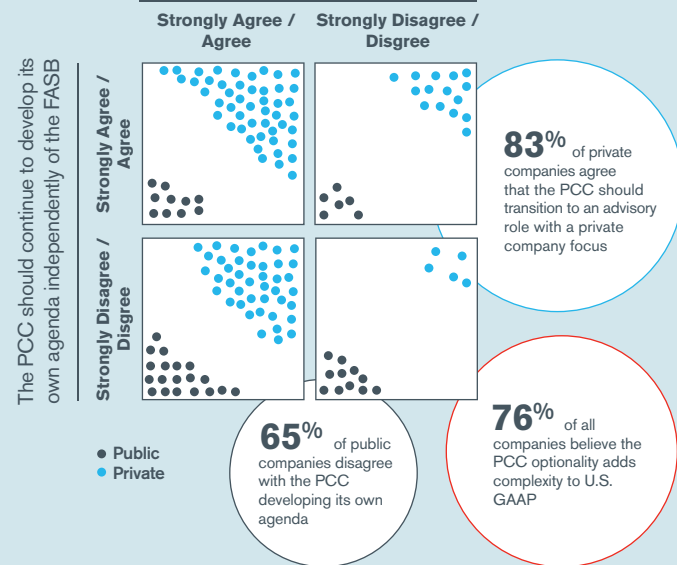


Private companies seem to prefer to continue recognizing customer-related intangible assets and noncompetition agreements
(Question 14)



(Question 15)

The PCC should transition into an advisory role to the FASB, with the objective of continuing to simplify rules for private companies



67%

Step 0 meets its stated objective of reducing costs
(Question 11)

46%

never applied Step 0 but will consider its use in the future
(Question 12)

86%

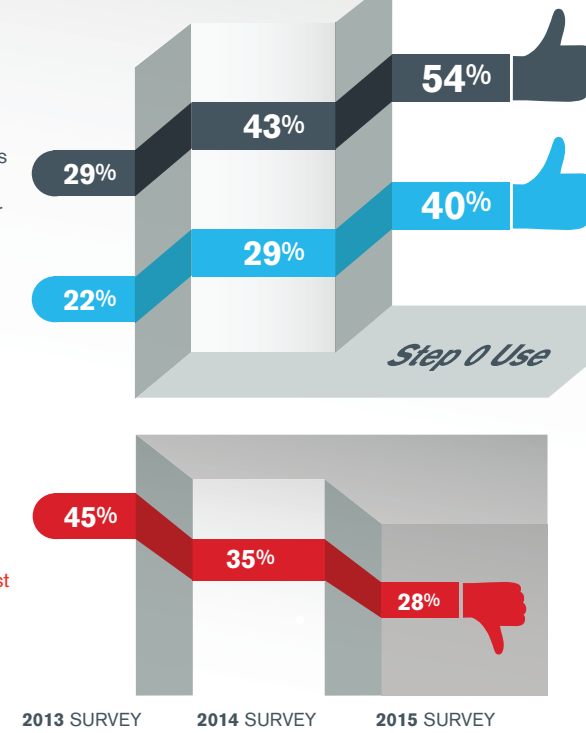
of those respondents that applied Step 0 passed for all reporting units tested
(Question 10)

Step 0 Use
(Question 9)

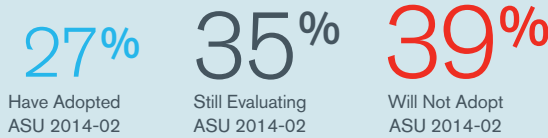
Public companies that have applied Step 0 to some or all reporting units

Private companies that have applied Step 0 to some or all reporting units

All companies (both public and private) that prefer the quantitative test



Status of private companies' adoption of ASU 2014-02, which allows the application of a simplified accounting model for goodwill
(Question 13)



SURVEY DEMOGRAPHICS

	Public (37%)	Private (63%)
Small	Manufacturing (8) Medical/Pharmaceutical (5) Financial Services (3)	Technology (12) Manufacturing (11) Professional Services (10)
Large	Manufacturing (8) Consumer Goods (7) Medical/Pharmaceutical (5)	Manufacturing (9) Distribution (4) Const./Engineering (3) Food/Restaurant (3) Transportation (3)

219 Total Responses

Survey Demographics

The 2015 Survey demonstrates record use of the Step 0 test since the option first became available. Specifically, 29% of public companies opted to use Step 0 in the 2013 Survey and this proportion increased to 43% in the 2014 Survey. Notably, the majority of public company respondents (54%) in the 2015 Survey are now taking advantage of the simplified test. Private companies show a similar trend as they continue to embrace Step 0: 40% of respondents currently apply it, which is nearly double the rate in the 2013 Survey (22%).

A significant portion (39%) of private companies indicate that they will not adopt the PCC alternative for goodwill impairment testing (ASU 2014-02). Close to 90% of companies in this subgroup will not adopt the PCC alternative for intangible assets (ASU 2014-18) either, compared to 61% for private companies overall.

103 private companies with revenue less than \$250 million provided 47% of this year's responses. Technology, Manufacturing and Professional Services were the most prevalent industries in this group.

Survey responses are provided on the following two pages. Overall responses, as well as those of the four subsets of respondents (small vs. large companies; public vs. private companies) have been detailed for additional insight into the views of these four groups.

2015 Survey Results*

	Public		Private		Overall
	< \$1bn	> \$1bn	< \$250mm	> \$250mm	
(4) How many reporting units do you have as of the most recent reporting period? (N = 219)					
1	37%	8%	38%	11%	26%
2 to 5	53%	49%	41%	57%	47%
6 to 10	3%	24%	14%	17%	15%
More than 10	7%	20%	8%	14%	11%
	100%	100%	100%	100%	100%
(5) Did you use a valuation consultant for your most recent goodwill impairment test or anticipate doing so for an upcoming test? (N = 219)					
Yes	40%	47%	17%	37%	30%
No	60%	53%	83%	63%	70%
	100%	100%	100%	100%	100%
(6) The AICPA published an Accounting and Valuation Guide, "Testing Goodwill for Impairment" in 2013 providing best practices guidance on this topic. Which of the following applies to you? (N = 214)					
The goodwill impairment testing process has been updated to incorporate this guidance	47%	31%	31%	40%	35%
We were comfortable with the testing process in place and have not updated it	33%	67%	35%	37%	42%
Not aware of this publication	20%	2%	35%	23%	23%
	100%	100%	100%	100%	100%
(7) Has your company recognized any goodwill impairment(s) during your most recent annual reporting period? (N = 213)					
Yes	13%	16%	13%	12%	14%
No	87%	84%	87%	88%	86%
	100%	100%	100%	100%	100%
(8) Do you anticipate any goodwill impairment(s) during an upcoming interim or annual test? (N = 216)					
Yes	3%	4%	14%	18%	11%
No	97%	96%	86%	82%	89%
	100%	100%	100%	100%	100%
(9) In your most recent goodwill impairment analysis (interim or annual), did you apply the optional qualitative assessment (Step 0)? (N = 205)					
Yes, for selected reporting units	24%	20%	3%	14%	12%
Yes, for all reporting units	14%	24%	27%	34%	26%
No, we prefer the quantitative test and proceed directly to Step 1	38%	24%	29%	26%	28%
No, Step 0 was considered but we used the Fair Value indication from a recent acquisition	10%	0%	14%	6%	9%
No, Step 0 was considered but we had to refresh our quantitative (Step 1) analysis	10%	14%	3%	9%	8%
No, Step 0 was considered but not applied due to lack of practical guidance	0%	6%	5%	9%	5%
No, Step 0 was considered but not deemed to be cost effective	3%	12%	18%	3%	12%
	100%	100%	100%	100%	100%
(10) For those reporting units to which you applied Step 0, did you conclude that: (N= 76)					
There was no impairment for any of the reporting units tested under Step 0	82%	91%	86%	80%	86%
A Step 1 analysis was required for some reporting units	18%	5%	11%	20%	12%
A Step 1 analysis was required for all reporting units	0%	5%	4%	0%	3%
	100%	100%	100%	100%	100%

* Totals may not foot due to rounding differences.

2015 Survey Results*

	Public		Private		Overall					
	< \$1bn	> \$1bn	< \$250mm	> \$250mm						
(11) Do you believe that the optional qualitative goodwill impairment assessment (Step 0) meets its stated objective of reducing costs? (N = 195)										
Yes	77%	63%	63%	76%	67%					
No	23%	38%	38%	24%	33%					
	100%	100%	100%	100%	100%					
(12) If you have never applied Step 0 to any reporting units, will you be considering its use in future periods? (N = 35)										
Yes	43%	36%	58%	40%	46%					
No	57%	64%	42%	60%	54%					
	100%	100%	100%	100%	100%					
(13) ASU 2014-02 provides private companies with an option to apply an alternative (simplified) accounting model for goodwill. Which of the following best describes your situation? (N = 213)										
Public company, so this option is not available	100%	100%	0%	0%	38%					
Adopted ASU 2014-02, with impairment test based on a triggering event at the entity level	0%	0%	12%	17%	8%					
Adopted ASU 2014-02, with impairment test based on a triggering event at the reporting unit level	0%	0%	12%	14%	8%					
Did not adopt ASU 2014-02 because we expect to become a public business entity	0%	0%	8%	9%	5%					
Have not yet adopted ASU 2014-02, but are evaluating the various options	0%	0%	33%	40%	22%					
Have not and will not be adopting ASU 2014-02 for other reasons	0%	0%	34%	20%	19%					
	100%	100%	100%	100%	100%					
(14) ASU 2014-18 provides private companies with an option to no longer recognize certain customer-related intangible assets and noncompetition agreements separately from goodwill. Which of the following best describes your situation? (N = 213)										
Public company, so this option is not available	100%	100%	0%	0%	38%					
Have early adopted ASU 2014-18 and will be applying it in 2015	0%	0%	8%	12%	6%					
Will adopt ASU 2014-18 when the first in-scope business combination occurs	0%	0%	29%	32%	18%					
Will not adopt ASU 2014-18, because we expect to become a public business	0%	0%	8%	9%	5%					
Will not be adopting ASU 2014-18 for other reasons	0%	0%	55%	47%	33%					
	100%	100%	100%	100%	100%					
(15) The Financial Accounting Foundation (FAF) has requested feedback about the Private Company Council's (PCC) work and its future agenda.										
To what extent do you agree or disagree with each of the following statements: [Rank with: Strongly Agree; Agree; Disagree; Strongly Disagree; Not Sure/Not Applicable]	Public (49) vs Private (115)									
	Strongly Agree		Agree		Disagree		Strongly Disagree		Total	
The PCC should continue to develop its own agenda independently of the FASB	15%	20%	21%	38%	46%	31%	19%	10%	100%	100%
The PCC should transition into an advisory role to the FASB, with the objective of continuing to simplify rules for private companies	20%	31%	45%	52%	24%	11%	10%	6%	100%	100%
The PCC should transition into an advisory role to the FASB, with the objective of continuing to simplify rules for ALL companies	33%	25%	35%	39%	27%	21%	6%	15%	100%	100%
The optionality available in current PCC accounting standards can result in significantly different financial statements, adding complexity to U.S. GAAP	16%	18%	63%	56%	16%	22%	4%	4%	100%	100%

* Totals may not foot due to rounding differences. † Not Sure/Not Applicable responses are excluded from the results shown.

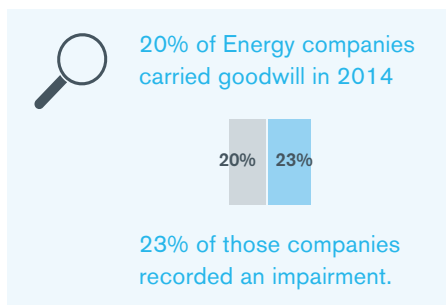
Summary Statistics by Industry

(Table 1)

Table 1 summarizes the annual amount of GWI and number of GWI events by industry, the proportion of companies within each industry that carry goodwill, and the percentage of those that recorded a GWI. This format allows for a ready comparison of data across industries over time.¹

Industries are listed in descending order of their total GWI amounts for 2014. For example, Energy tops the list with its \$5.8 billion aggregate impairment.

Additionally, the graphs on the right in Table 1 provide for a quick comparison of (i) the preponderance of companies with goodwill within each industry; and (ii) the proportion of those companies that have recorded a GWI. For example:



In light of the dataset expansion for the 2015 Study, an additional column has been added to Table 1. This “2013 Pro Forma” column is included to provide a basis for comparison to the current dataset for 2014. (See the **Introduction** section for a discussion about the expanded company base set for the 2015 Study and the creation of a 2013 pro forma year for comparison purposes. Also refer to the **Appendix** for a description of the 2015 Study methodology.)

Goodwill Impairments

The *first row* of Table 1 data for each industry presents the annual dollar amounts of GWI (\$ billions), immediately followed by the number of impairment events (shown in parentheses).²

In general, 2014 was a year of mixed results for the ten industries. Overall, based on the expanded dataset for 2013 and 2014, the total GWI increased from \$21.7 billion in 2013 pro forma to \$25.7 billion in 2014 (an 18% rise). The number of GWI events increased from 274 to 341 for the same period. Average GWI per event decreased slightly from \$79 million (2013 pro forma) to \$75 million in 2014. Both figures were down significantly from the average under the prior 2013 methodology (\$108 million) likely due to the expanded data set in the 2015 Study.

Industries that recorded an increase in GWI include (\$ billions):

- Energy (\$2.1 to \$5.8)
- Consumer Staples (\$1.0 to \$3.5)
- Financials (\$1.0 to \$3.1)
- Information Technology (\$1.6 to \$3.6)
- Industrials (\$3.2 to \$3.5)

The remaining industries recorded declines, with Healthcare plummeting from \$3.6 to \$0.4 billion (an 89% drop) and Materials from \$4.6 to \$2.7 billion (a 41% drop).

Two of the top five largest impairment events of 2014 were in Energy, driving up the total for the industry. In fact, the impact of Energy on the overall 2015 Study was very pronounced: if Energy were excluded from 2013 pro forma and 2014, the aggregate GWI trend would have been flat.

Percent of Companies with Goodwill

Since companies that do not carry goodwill on their books are also not susceptible to a GWI, for perspective, the *third row* in Table 1 provides the proportion of companies with goodwill within each industry. Overall, approximately one-third of U.S. companies carry some amount of goodwill on their balance sheets, with the average remaining somewhat consistent at approximately 32% over the last two years within the expanded dataset. This proportion declined from approximately 43% in prior years, because of the 3,500 or so companies that were added to the study, only 13% carried goodwill. This decline occurred in nine of the ten industries, with Financials being the exception.

Percent with Goodwill Recording a GWI

The *fourth row* in Table 1 indicates the percentage of the companies with goodwill that recorded a GWI. This differs from the *first row*, where the percentages are based on all companies in each industry, rather than limited to those that carry goodwill on their balance sheets.

In 2014, Energy topped the list at 23% as the industry with the highest proportion of companies with goodwill recognizing a GWI. Energy also showed a substantial increase from 2013 based on both the old and new datasets. With the exception of Healthcare, all other industries saw an uptick in this ratio, with notable increases seen in Consumer Staples (from 8.7% to 14.6%), Consumer Discretionary (from 10.7% to 14.1%), and Financials (from 4.4% to 7.7%).

In aggregate, the average annual industry impairment percentages for companies with goodwill increased from 10.1% in 2013 pro forma to 12.3% in 2014.

1. The information covering the period between 2011 and 2013 was carried forward from prior studies.

2. The number of events is broadly defined in this study: it captures whether or not a company has recorded goodwill impairments in any given year (i.e., a binary “yes” or “no” decision). Thus, while a company could have recorded multiple goodwill impairments during a calendar year, it will still be considered a single event for purposes of this study.

2014 Goodwill Impairment

(Table 1)

2014 (Companies)	2011	2012	2013	2013 Pro Forma		2014	
	Goodwill Impairments: \$ billions (number of events)					Companies with GW	Percent Recording GWI
	Percent of Total Companies that Recorded GWI						
	Percent of Companies with Goodwill						
	Percent of Companies with Goodwill that Recorded GWI						
Energy (696)	1.4 (8) 2.9% 34.3% 8.3%	2.4 (11) 3.5% 33.5% 10.5%	2.2 (14) 4.4% 32.1% 13.6%	2.1 (19) 2.7% 20.1% 13.6%	5.8 (32) 4.6% 20.0% 23.0%	20%	23%
Information Technology (1,535)	3.3 (45) 5.6% 55.3% 10.2%	22.0 (53) 6.5% 54.2% 12.0%	1.4 (45) 5.7% 53.7% 10.6%	1.6 (58) 3.8% 35.0% 10.8%	3.6 (66) 4.3% 36.2% 11.9%	36%	12%
Industrials (1,108)	2.8 (38) 6.4% 61.6% 10.4%	6.5 (50) 8.2% 60.2% 13.6%	3.0 (45) 7.4% 59.2% 12.4%	3.2 (61) 5.5% 39.3% 14.0%	3.5 (69) 6.2% 39.4% 15.8%	39%	16%
Consumer Staples (467)	5.0 (13) 7.0% 51.9% 13.4%	1.3 (14) 7.0% 48.3% 14.4%	1.0 (9) 4.6% 49.5% 9.4%	1.0 (10) 2.1% 24.6% 8.7%	3.5 (18) 3.9% 26.3% 14.6%	26%	15%
Financials (1,475)	5.8 (33) 2.2% 28.5% 7.7%	2.8 (24) 1.6% 28.9% 5.4%	1.0 (13) 0.8% 29.4% 2.9%	1.0 (22) 1.5% 33.6% 4.4%	3.1 (40) 2.7% 35.1% 7.7%	35%	8%
Consumer Discretionary (1,253)	2.9 (47) 7.5% 53.7% 13.9%	4.5 (38) 5.9% 51.9% 11.3%	2.9 (35) 5.7% 53.4% 10.6%	3.1 (46) 3.7% 34.3% 10.7%	2.8 (61) 4.9% 34.5% 14.1%	35%	14%
Materials (657)	1.2 (10) 4.3% 49.8% 8.7%	3.6 (10) 3.8% 43.5% 8.8%	4.5 (8) 2.9% 43.8% 6.7%	4.6 (18) 2.7% 20.2% 13.5%	2.7 (18) 2.7% 19.8% 13.8%	20%	14%
Healthcare (1,243)	3.7 (27) 4.3% 40.3% 10.7%	6.0 (28) 4.4% 39.6% 11.1%	3.4 (21) 3.3% 41.0% 8.0%	3.6 (34) 2.7% 26.3% 10.4%	0.4 (29) 2.3% 27.6% 8.5%	28%	9%
Utilities (161)	0.0 (1) 1.0% 56.7% 1.8%	2.1 (4) 4.0% 55.6% 7.3%	0.4 (2) 2.1% 56.7% 3.6%	0.4 (3) 1.9% 37.3% 5.0%	0.2 (5) 3.1% 39.1% 7.9%	39%	8%
Telecomm. Services (110)	2.8 (5) 8.1% 53.2% 15.2%	0.1 (3) 4.8% 55.6% 8.6%	1.1 (1) 1.7% 53.3% 3.1%	1.1 (3) 2.7% 34.5% 7.9%	0.1 (3) 2.7% 31.8% 8.6%	32%	9%
Total (8,705)	29.1 (227) 4.5% 44.4% 10.2%	51.4 (235) 4.5% 43.4% 10.5%	20.9 (193) 3.7% 43.4% 8.6%	21.7 (274) 3.1% 31.1% 10.1%	25.7 (341) 3.9% 31.9% 12.3%	32%	12%

Summary Statistics by Industry

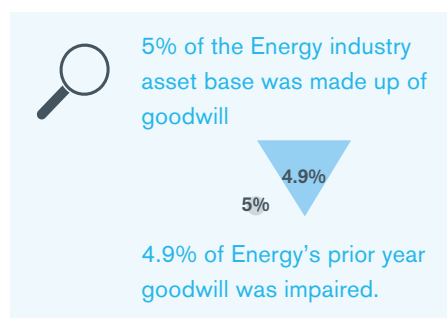
(Table 2)

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

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

The first loss intensity measure, goodwill impairment to goodwill (GWI/GW), indicates the magnitude of goodwill impairments. In other words, it measures the proportion of an industry's goodwill that is impaired each year.

These first two metrics are captured visually for 2014 on the graphs on the right of Table 2. For example:



The second loss intensity measure, goodwill impairments to total assets (GWI/TA), quantifies the percent of an industry's total asset base that was impaired. Note that the use of the expanded dataset did not have a significant impact on these measures. (See the **Introduction** section for a discussion about the expanded company base set for the

		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	Indicates how significant an industry's goodwill is in relation to total assets.
Loss Intensity	Which industries' goodwill got hit hardest by impairments?	GWI/GW	Goodwill impairments (total) as a percentage of the prior year's total goodwill	Indicates how impairments impacted each industry's goodwill.
Loss Intensity	Which industries' balance sheets got hit hardest by impairments?	GWI/TA	Goodwill impairments (total) as a percentage of the prior year's total assets	Indicates how impairments impacted each industry's total assets.

2015 Study and the creation of a 2013 pro forma year. Also refer to the **Appendix** for a description of the 2015 Study methodology).

Goodwill Intensity

The *first row* in Table 2 illustrates Goodwill to Total Assets (GW/TA) reported over time for each industry, with 2014 specifically highlighted in the gray circle of the graphic displayed farthest on the right.

Aggregate goodwill as a percentage of total assets for U.S. companies (across all industries) was approximately 6% in each of the years. However, this ratio can vary significantly by industry; for example, in 2014 it ranged from 1.5% for Financials to 23.0% for Healthcare.

Healthcare (which includes, but is not limited to, Biotechnology and Pharmaceutical companies) continued to exhibit the highest goodwill intensity during the period. Contributing factors include ongoing transaction activity as well as high growth expectations from future (yet-to-be-identified) technologies, which may make goodwill a significant component of an acquisition price.

Within each industry, goodwill intensity has been fairly stable over time and across datasets. Three industries exhibited a notable upward movement in 2014 when compared to 2013 pro forma (in order of magnitude):

- Telecomm Services (16.8% to 17.9%)
- Information Technology (18.6% to 19.3%)
- Materials (12.9% to 13.5%)

Goodwill Impairment to Goodwill

The *second row* of Table 2 presents the first measure of loss intensity (GWI/GW) recognized for each industry over time, with 2014 metrics displayed in the triangle portion of the graphic located on the far right.

While the total amount of impairment increased from \$21.7 billion in 2013 pro forma to \$25.7 billion in 2014 (Table 1), there was a significant increase in Energy GWI from \$2.1 to \$5.8 billion. This led to a jump in its loss intensity factor from 1.9% in 2013 pro forma to 4.9% in 2014. Information Technology (0.4% to 0.9%), Consumer Staples (0.4% to 1.3%), and Financials (0.3% to 0.8%) also increased. All other industries held steady or displayed a decline in loss intensity from 2013 pro forma to 2014.

Goodwill Impairment to Total Assets

This second measure of loss intensity is presented in the third row of Table 2 for each industry. Goodwill impairment charges represent a relatively small proportion of a company's total asset base. Materials' 0.6% GWI/TA ratio in 2013 pro forma and 0.3% in 2014 was the largest of any industry in the expanded dataset. The total of all industries has remained at 0.1% during the period shown (2011-2014).

2014 Goodwill Impairment

(Table 2)

2014 (Companies)	2011	2012	2013	2013 Pro Forma		2014
	Goodwill Intensity (GW/TA) Loss Intensity (GWI/GW) Loss Intensity (GWI/TA)					GW/TA GWI/GW
Energy (696)	4.0% 2.2% 0.1%	4.4% 3.3% 0.1%	4.5% 2.2% 0.1%	5.0% 1.9% 0.1%	5.0% 4.9% 0.2%	5% 4.9%
Information Technology (1,535)	18.2% 1.2% 0.2%	18.4% 6.7% 1.3%	18.8% 0.4% 0.1%	18.6% 0.4% 0.1%	19.3% 0.9% 0.2%	19% 0.9%
Industrials (1,108)	15.0% 0.9% 0.1%	15.5% 1.9% 0.3%	16.2% 0.8% 0.1%	16.4% 0.8% 0.1%	16.5% 0.8% 0.1%	17% 0.8%
Consumer Staples (467)	21.0% 2.1% 0.4%	19.5% 0.5% 0.2%	20.1% 0.4% 0.1%	20.8% 0.4% 0.1%	20.0% 1.3% 0.3%	20% 1.3%
Financials (1,475)	1.8% 1.3% 0.0%	1.7% 0.6% 0.0%	1.8% 0.2% 0.0%	1.6% 0.3% 0.0%	1.5% 0.8% 0.0%	2% 0.8%
Consumer Discretionary (1,253)	13.3% 1.4% 0.2%	13.1% 2.0% 0.2%	14.2% 1.0% 0.1%	13.8% 1.1% 0.1%	13.6% 0.9% 0.1%	14% 0.9%
Materials (657)	13.6% 1.6% 0.2%	13.1% 3.8% 0.5%	12.8% 4.3% 0.6%	12.9% 4.5% 0.6%	13.5% 2.6% 0.3%	14% 2.6%
Healthcare (1,243)	21.6% 1.3% 0.3%	23.5% 2.0% 0.4%	23.1% 0.9% 0.2%	22.9% 1.0% 0.2%	23.0% 0.1% 0.0%	23% 0.1%
Utilities (161)	4.1% 0.0% 0.0%	5.0% 4.3% 0.2%	4.8% 0.6% 0.0%	4.8% 0.6% 0.0%	4.5% 0.3% 0.0%	5% 0.3%
Telecomm. Services (110)	19.0% 2.3% 0.4%	18.9% 0.1% 0.0%	18.7% 0.8% 0.2%	16.8% 0.8% 0.2%	17.9% 0.1% 0.0%	18% 0.1%
Total (8,705)	5.9% 1.4% 0.1%	6.0% 2.3% 0.1%	6.2% 0.8% 0.1%	6.3% 0.9% 0.1%	6.4% 1.0% 0.1%	6% 1.0%

Industry Spotlights

In contrast to Tables 1 and 2, the Industry Spotlights allow the reader a more in-depth look at the 2014 statistics for the respective industries.

Industry Spotlights cover ten industry sectors. They provide a focus on relevant metrics and statistics for the respective industries. Each spotlight displays a variety of data as well as the top three companies that recognized the highest amount of goodwill impairment for the year.

Highlights

Energy recognized \$5.8 billion of GWI making it the hardest hit in 2014. The amount of GWI more than doubled from \$2.1 billion in 2013 pro forma. Two of the top five impairment events took place in Energy. The remaining three top impairments occurred in Materials, Consumer Staples and Financials.

Information Technology had the largest net increase in goodwill during 2014 with approximately \$64 billion added while \$4 billion was impaired.

Note that the timeframe for the two graphics on the top of each Spotlight has been modified to accommodate the expanded dataset in this year's study. The change in methodology created a less meaningful comparison in the particular case of Consumer Staples relative to past studies, where a 5-year trend was depicted. During 2014, several large consumer products multinationals were materially impacted by foreign currency losses (due to the significant strength of the U.S. dollar during 2014). In addition, there were a few large divestitures in the industry. Combined, these factors depressed the year-end goodwill balance for the industry and this explains why Consumer Staples appears to have a negative goodwill addition of \$1 billion from 2013 to 2014 (see Consumer Staples Spotlight).

Market-to-Book Value

While not a sole or definitive indicator of impairment, a company's market capitalization should not be ignored during a goodwill impairment test. 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 Step 0 "more-likely-than-not" (greater than a 50% likelihood) conclusion that the fair value of a reporting unit is not less than its carrying amount, required from a qualitative assessment.

Guide

The guide below provides a brief description of the components of the Industry Spotlights.

Goodwill Trends

Provides the goodwill amounts for 2013 pro forma and 2014, as well as the aggregate goodwill additions and impairments over that period.

2013: \$2.1Bn
2014: \$5.8Bn
2013-2014: \$3.7Bn Impaired

Impairment History

Annual amounts and number of goodwill impairment events. To enable transitional comparisons, data for 2013 has been provided under both the prior methodology and the new methodology that expanded the dataset (2013 pro forma). The industry market-to-book ratio (red line) provides some context for the annual impairment measures, although it is not predictive in and of itself.

Market-to-Book Ratio Distribution

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

1.5
1.0
0.5

Summary Statistics

Goodwill Intensity (GW/TA), Goodwill Impairment to Goodwill (GWI/GW), Companies with Goodwill and the percentage of those that recorded goodwill impairment reported for calendar year 2014 are depicted here and also in Tables 1 and 2.

321
4.5%
2.2%

Size of Industry

Represents the size of the industry relative to the combined size of all the companies included in the 2015 Study sample, measured in terms of market capitalization.

Index

Five year index of the industry sector and the S&P 500 Index. Summarizes the relative performance of the industry: reflects what a \$1 investment in the beginning of 2010 would be worth at the end of the 2014.

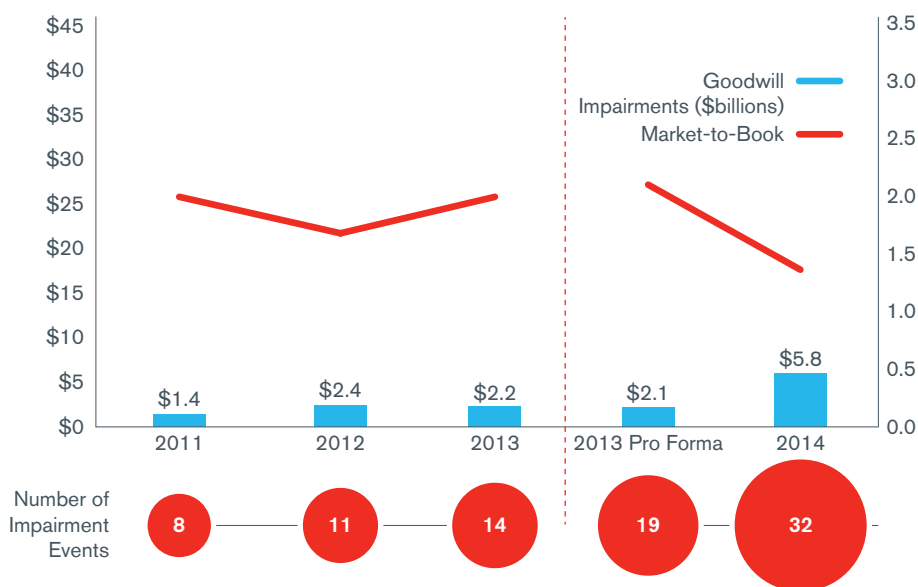
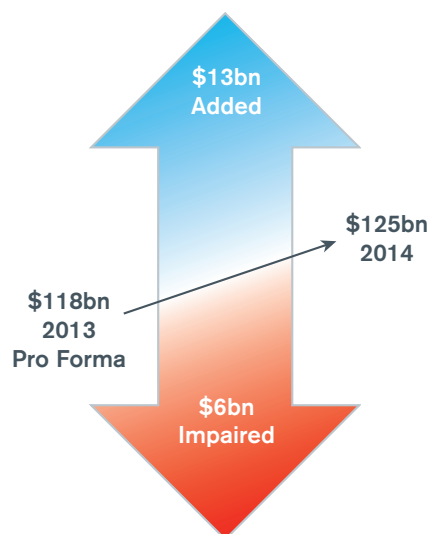
\$1.00
\$2.50
\$1.88

2014 Industry Spotlight

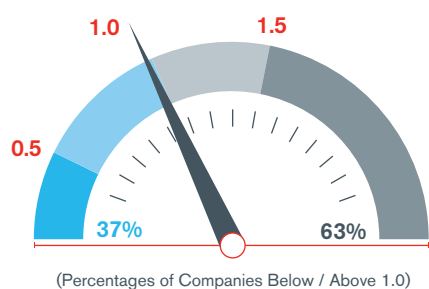
Energy

GICS Code 10

Goodwill Trends 2013 Pro Forma – 2014



Market-to-Book Ratio Distribution (Based on Number of Companies)



696
Companies

5.0%
Goodwill to Total Assets (GW/TA)

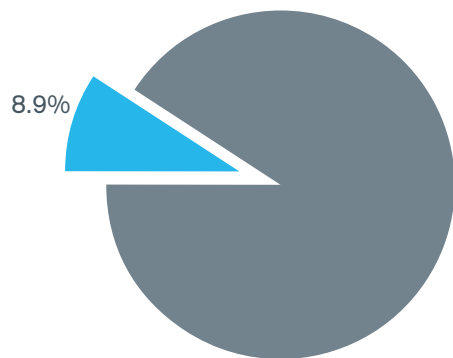
4.9%
Percent of Goodwill Impaired (GWI/GW ratio)

20.0%
Companies with Goodwill

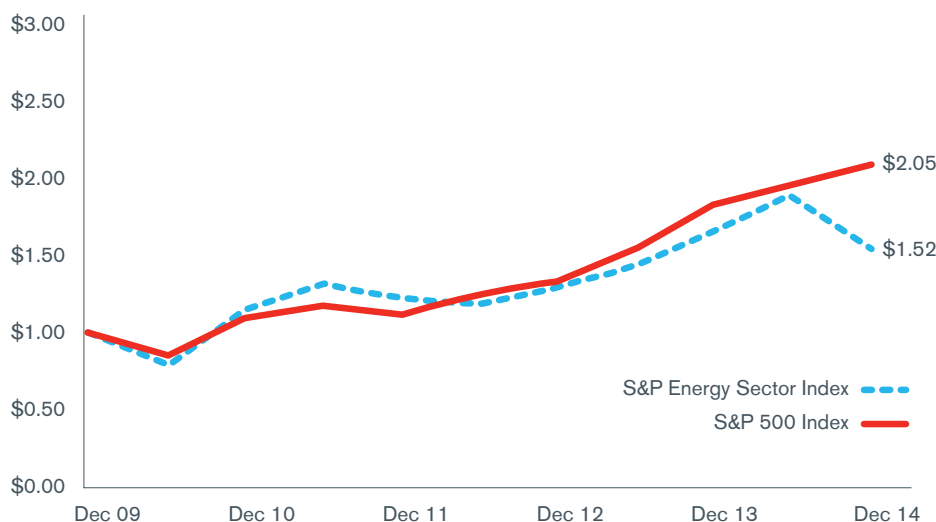
23.0%
Percent of Companies with Goodwill that Recorded a Goodwill Impairment in 2014

1.3
Market-to-Book Ratio (median)

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



Index (Year End 2009 = \$1)



Top 3 Industry Goodwill Impairments

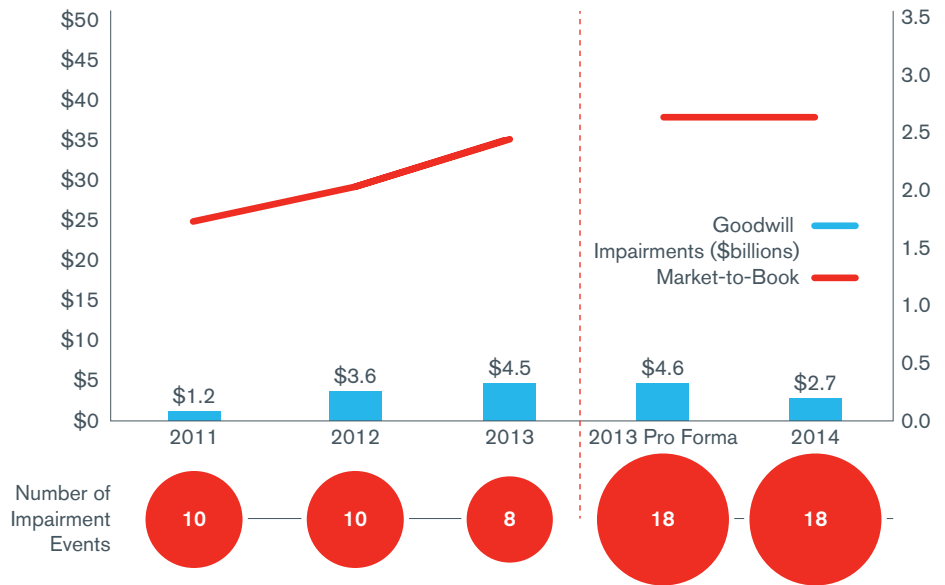
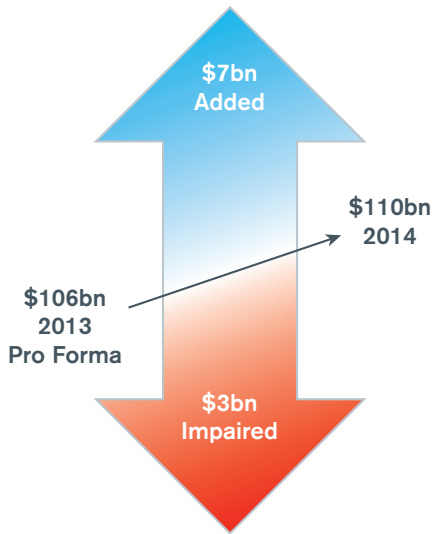
Devon Energy Corporation	\$1,941 million
Apache Corp.	\$1,266 million
Energy Transfer Equity, L.P.	\$370 million

2014 Industry Spotlight

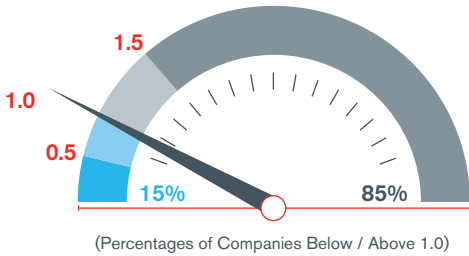
Materials

GICS Code 15

Goodwill Trends 2013 Pro Forma – 2014



Market-to-Book Ratio Distribution (Based on Number of Companies)



657
Companies

13.5%
Goodwill to Total Assets (GW/TA)

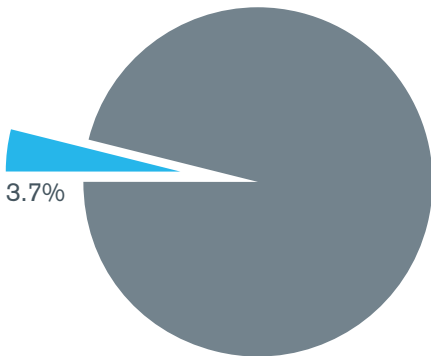
2.6%
Percent of Goodwill Impaired (GWI/GW ratio)

19.8%
Companies with Goodwill

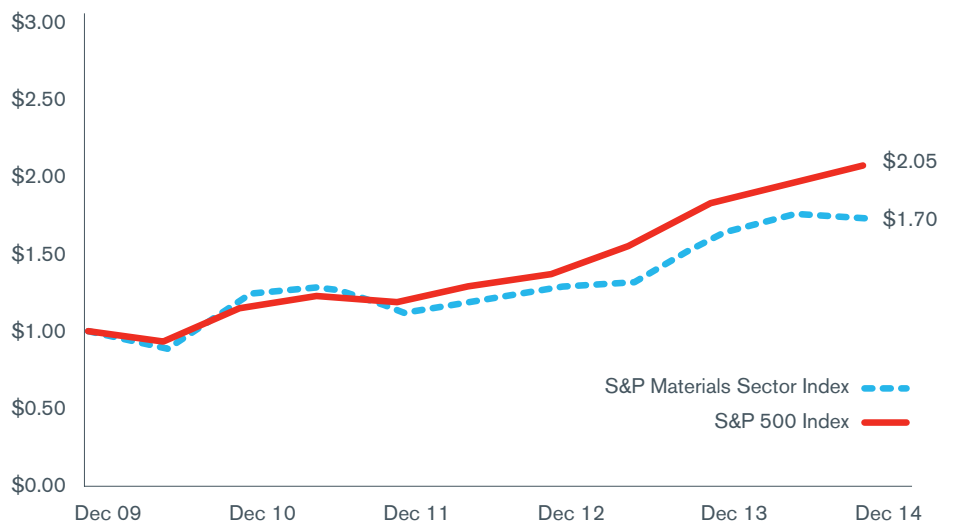
13.8%
Percent of Companies with Goodwill that Recorded a Goodwill Impairment in 2014

2.6
Market-to-Book Ratio (median)

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



Index (Year End 2009 = \$1)



Top 3 Industry Goodwill Impairments

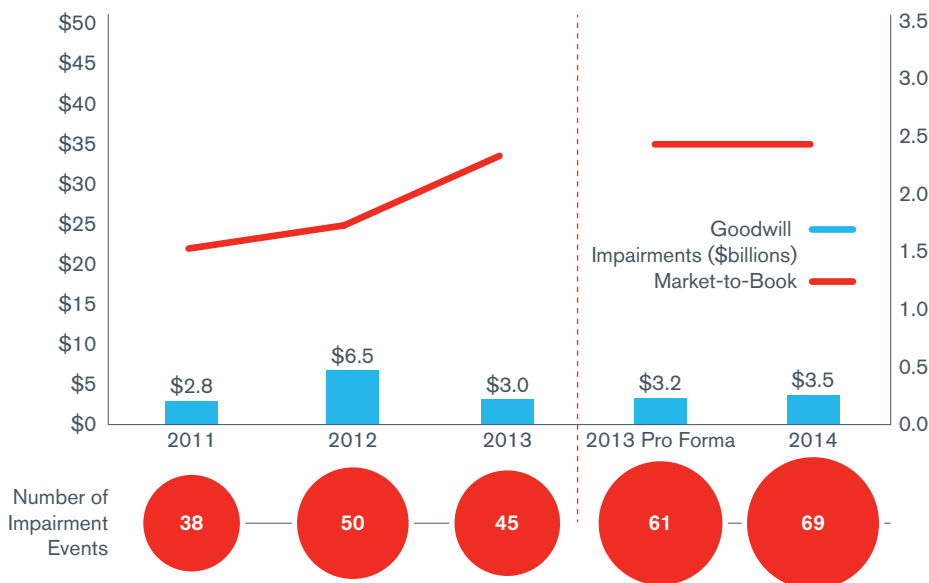
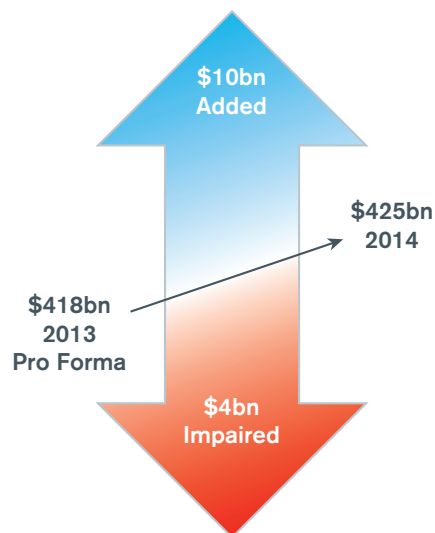
- Freeport-McMoRan Inc.\$1,717 million
- Air Products & Chemicals Inc.\$305 million
- OM Group Inc.\$169 million

2014 Industry Spotlight

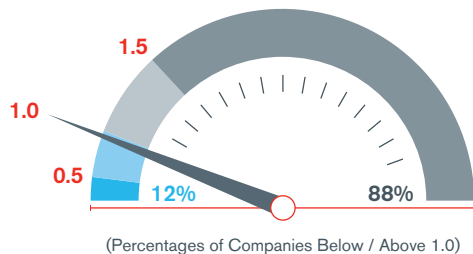
Industrials

GICS Code 20

Goodwill Trends 2013 Pro Forma – 2014



Market-to-Book Ratio Distribution (Based on Number of Companies)



1,108
Companies

16.5%
Goodwill to Total Assets (GW/TA)

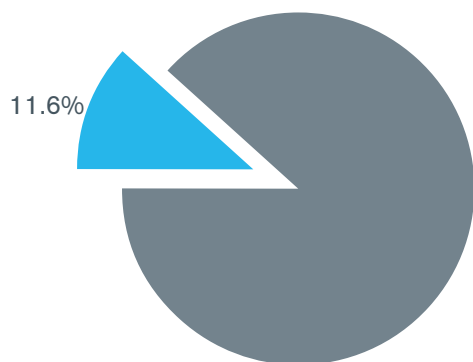
0.8%
Percent of Goodwill Impaired (GWI/GW ratio)

39.4%
Companies with Goodwill

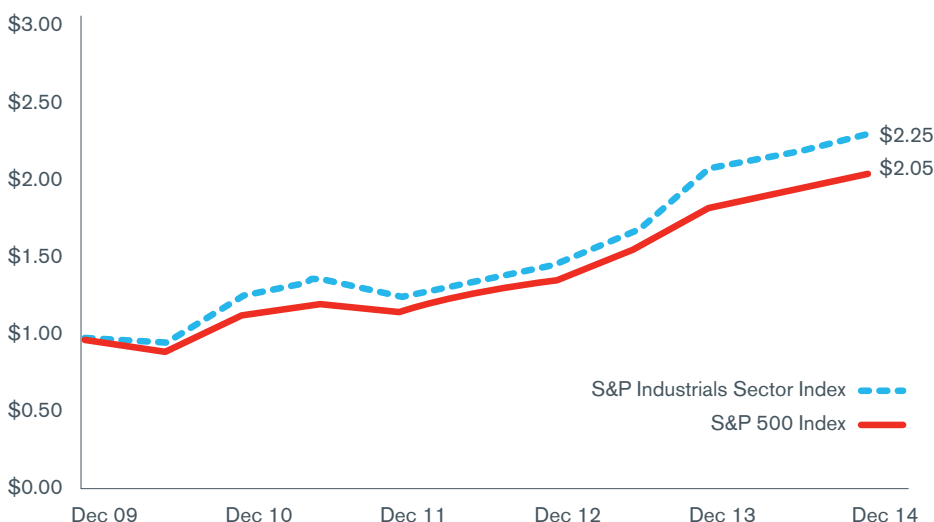
15.8%
Percent of Companies with Goodwill that Recorded a Goodwill Impairment in 2014

2.4
Market-to-Book Ratio (median)

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



Index (Year End 2009 = \$1)



Top 3 Industry Goodwill Impairments

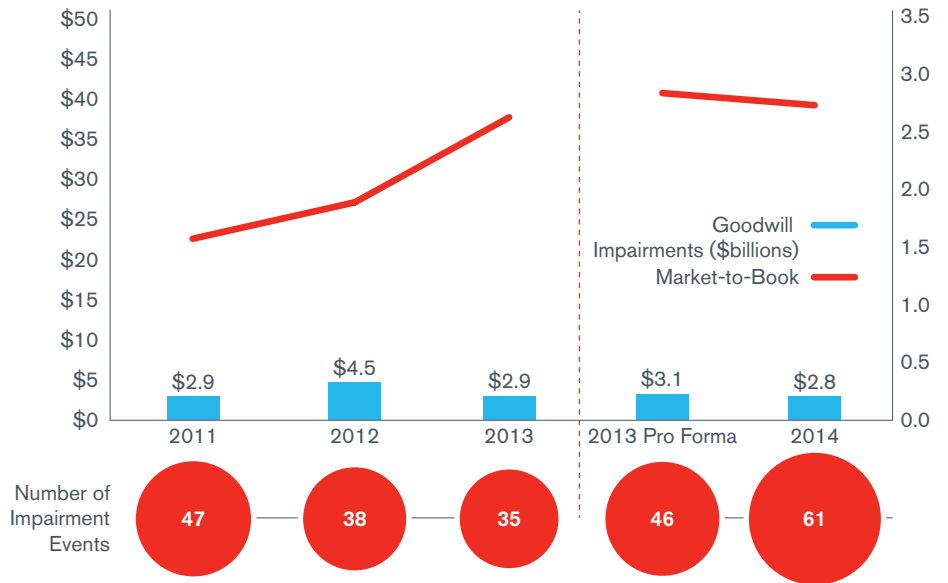
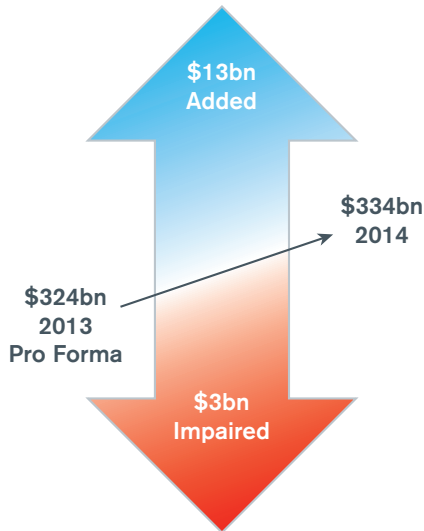
Emerson Electric Co.	\$508 million
KBR, Inc.	\$446 million
Kennametal Inc.	\$375 million

2014 Industry Spotlight

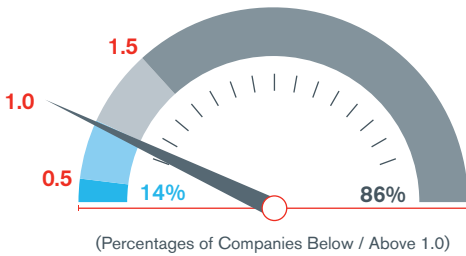
Consumer Discretionary

GICS Code 25

Goodwill Trends 2013 Pro Forma – 2014



Market-to-Book Ratio Distribution (Based on Number of Companies)



1,253
Companies

13.6%
Goodwill to Total Assets (GW/TA)

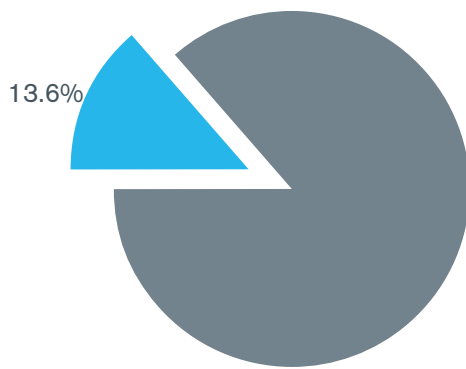
0.9%
Percent of Goodwill Impaired (GWI/GW ratio)

34.5%
Companies with Goodwill

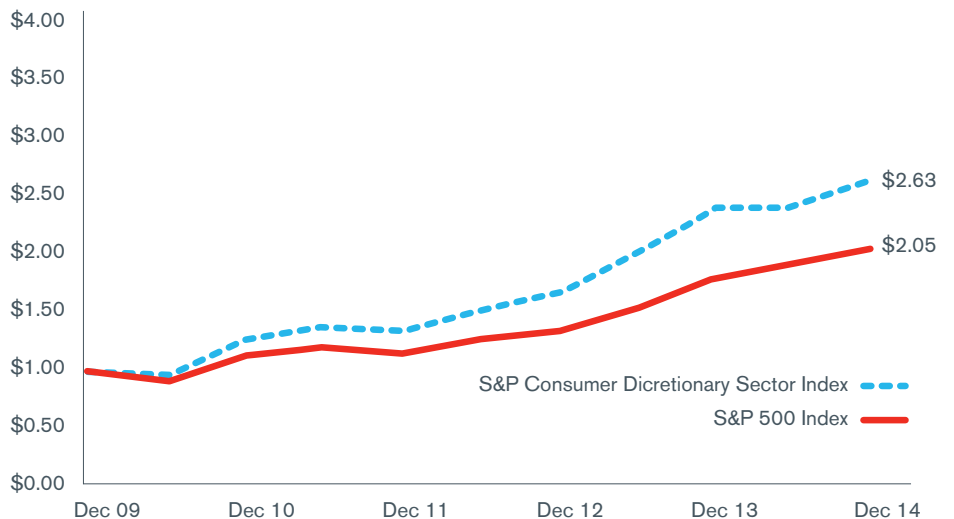
14.1%
Percent of Companies with Goodwill that Recorded a Goodwill Impairment in 2014

2.6
Market-to-Book Ratio (median)

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



Index (Year End 2009 = \$1)



Top 3 Industry Goodwill Impairments

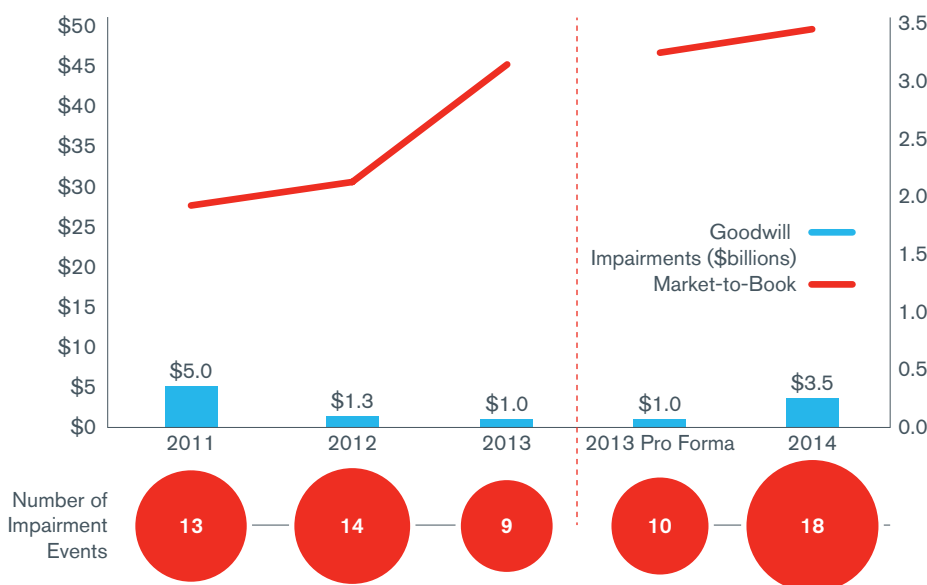
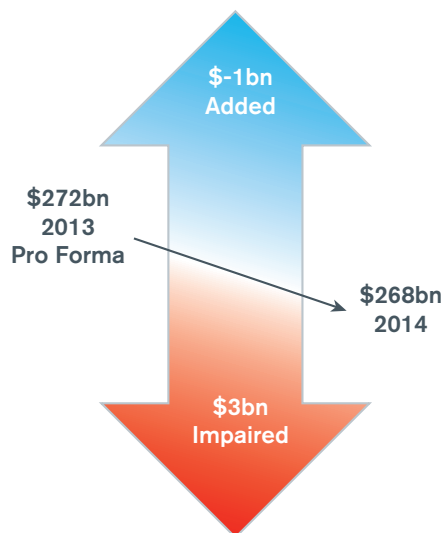
- Caesars Entertainment Corp\$710 million
- Penn National Gaming Inc.\$212 million
- Quiksilver Inc.\$193 million

2014 Industry Spotlight

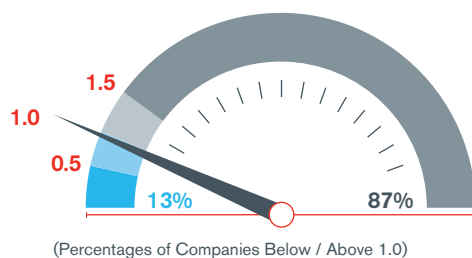
Consumer Staples

GICS Code 30

Goodwill Trends 2013 Pro Forma – 2014*



Market-to-Book Ratio Distribution (Based on Number of Companies)



467
Companies

20.0%
Goodwill to Total Assets (GW/TA)

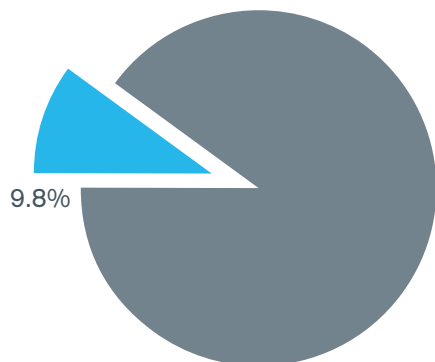
1.3%
Percent of Goodwill Impaired (GWI/GW ratio)

26.3%
Companies with Goodwill

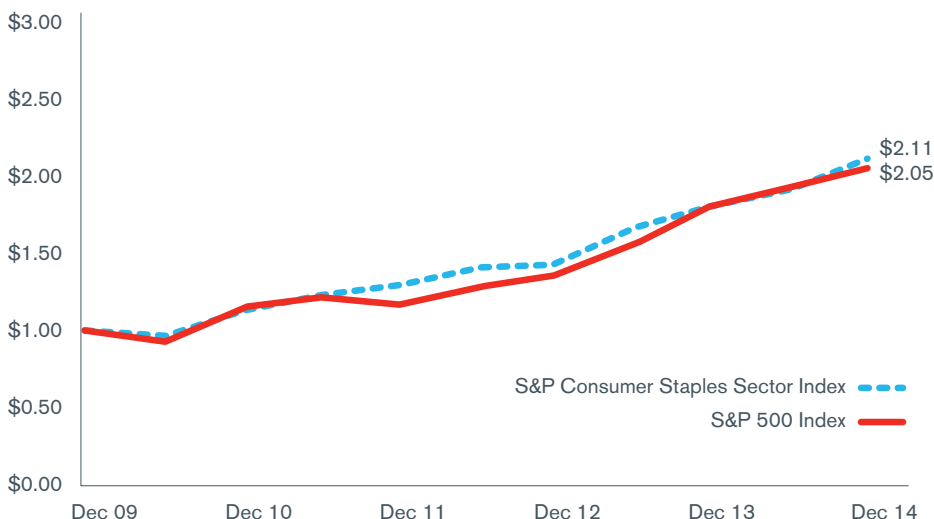
14.6%
Percent of Companies with Goodwill that Recorded a Goodwill Impairment in 2014

3.4
Market-to-Book Ratio (median)

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



Index (Year End 2009 = \$1)



Top 3 Industry Goodwill Impairments

The Procter & Gamble Co.	\$1,603 million
ConAgra Foods, Inc.	\$836 million
Roundy's, Inc.	\$280 million

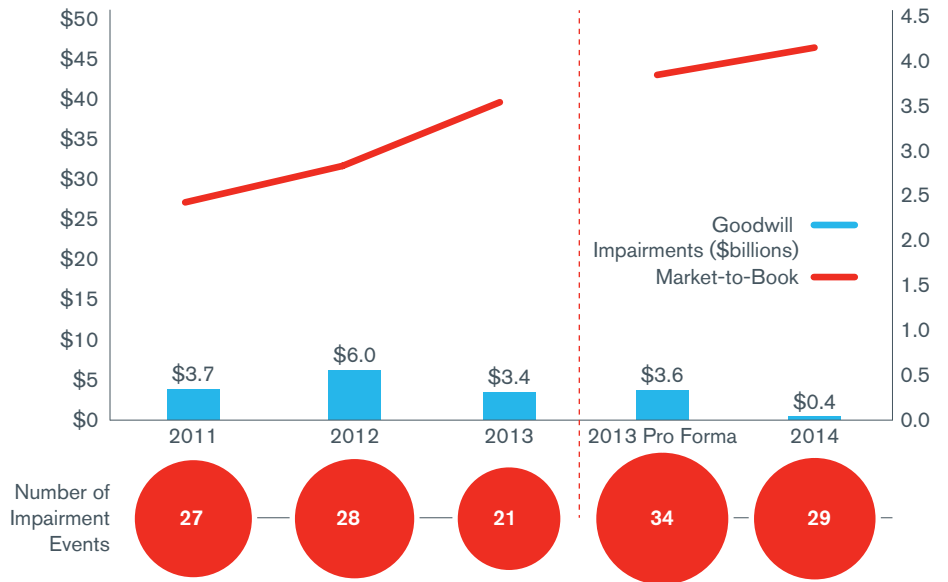
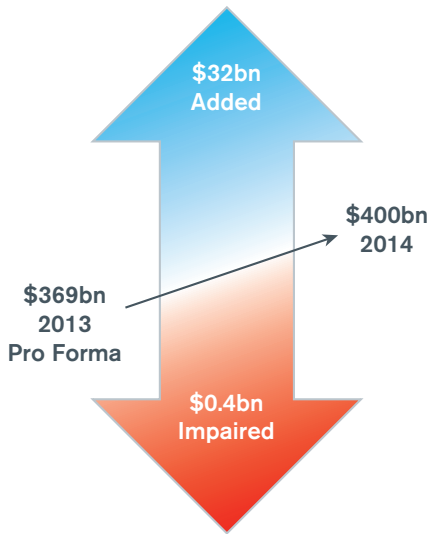
*The decrease in the amount of goodwill added is due to a combination of economic and industry factors (primarily due to the strength of the U.S. dollar in 2014 and industry divestitures).

2014 Industry Spotlight

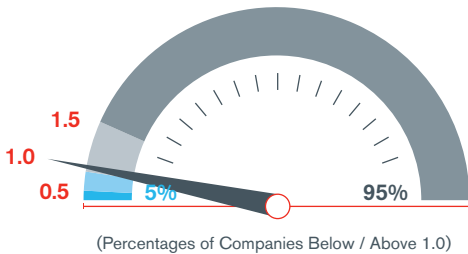
Healthcare

GICS Code 35

Goodwill Trends 2013 Pro Forma – 2014



Market-to-Book Ratio Distribution (Based on Number of Companies)



1,243
Companies

23.0%
Goodwill to Total Assets (GW/TA)

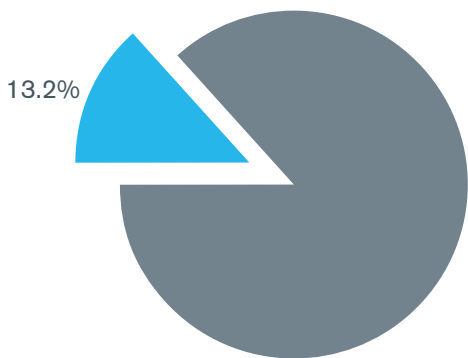
0.1%
Percent of Goodwill Impaired (GWI/GW ratio)

27.6%
Companies with Goodwill

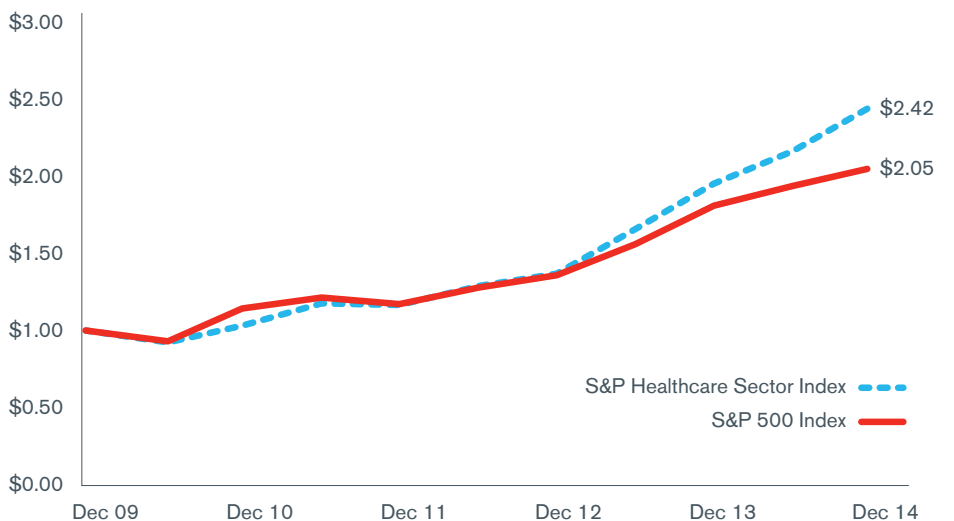
8.5%
Percent of Companies with Goodwill that Recorded a Goodwill Impairment in 2014

4.1
Market-to-Book Ratio (median)

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



Index (Year End 2009 = \$1)



Top 3 Industry Goodwill Impairments

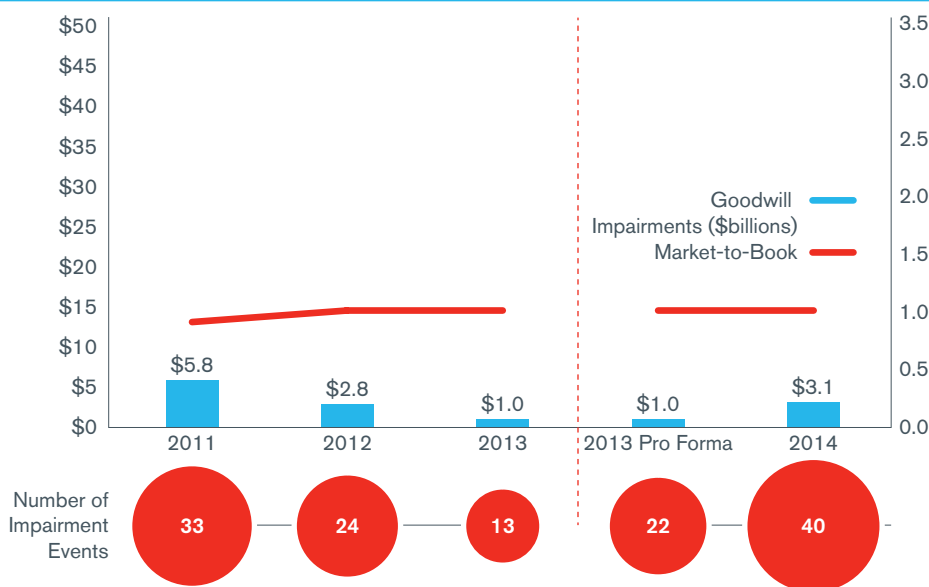
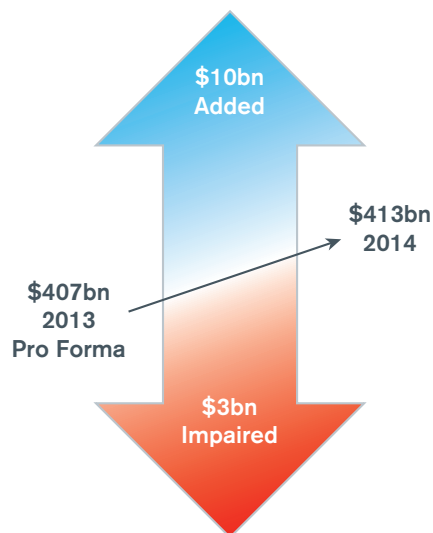
Merck & Co. Inc.	\$93 million
Symmetry Surgical Inc.	\$56 million
MedAssets, Inc.	\$53 million

2014 Industry Spotlight

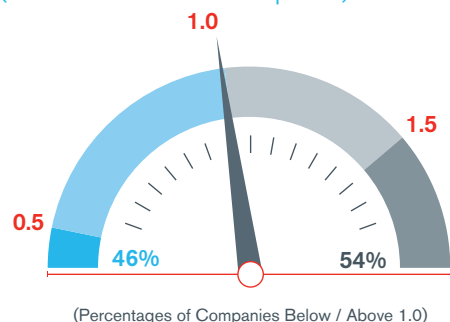
Financials

GICS Code 40

Goodwill Trends 2013 Pro Forma – 2014



Market-to-Book Ratio Distribution (Based on Number of Companies)



1,475
Companies

1.5%
Goodwill to Total Assets (GW/TA)

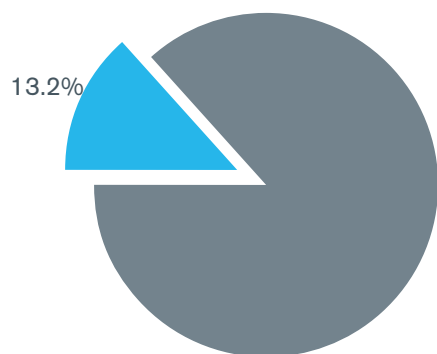
0.8%
Percent of Goodwill Impaired (GWI/GW ratio)

35.1%
Companies with Goodwill

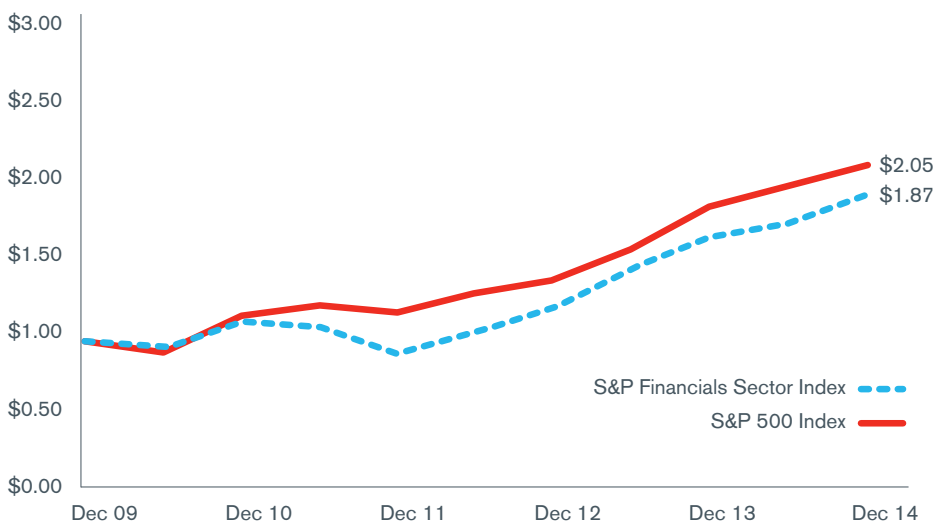
7.7%
Percent of Companies with Goodwill that Recorded a Goodwill Impairment in 2014

1.0
Market-to-Book Ratio (median)

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



Index (Year End 2009 = \$1)



Top 3 Industry Goodwill Impairments

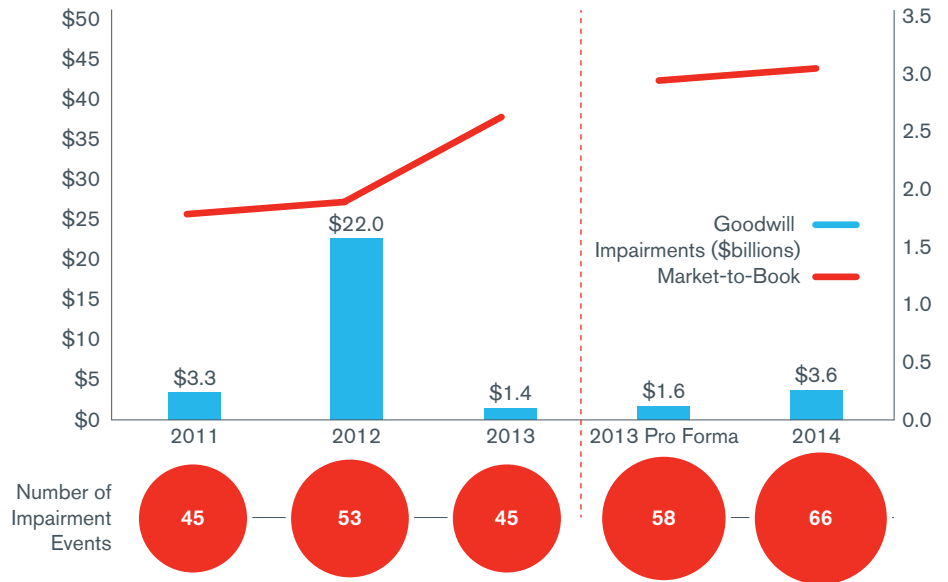
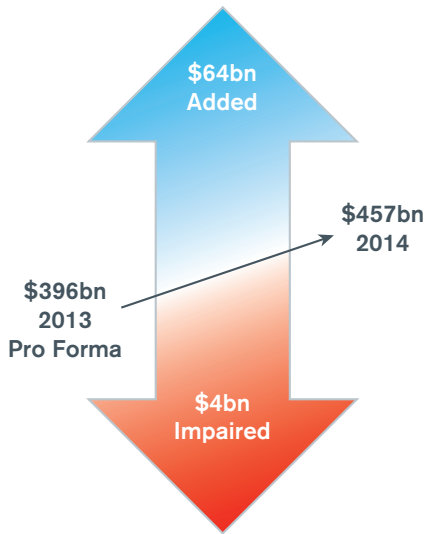
First Niagara Financial Group Inc.	\$1,100 million
Genworth Financial, Inc.	\$849 million
Ocwen Financial Corp.	\$420 million

2014 Industry Spotlight

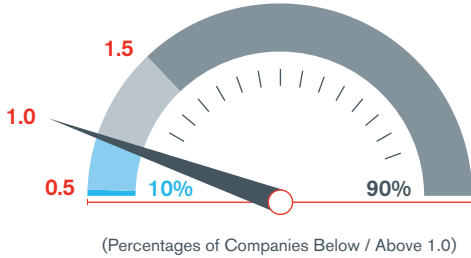
Information Technology

GICS Code 45

Goodwill Trends 2013 Pro Forma – 2014



Market-to-Book Ratio Distribution (Based on Number of Companies)



1,535
Companies

19.3%
Goodwill to Total Assets (GW/TA)

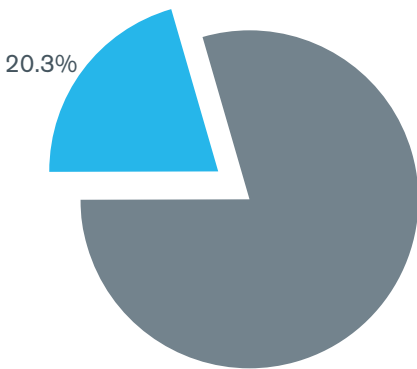
0.9%
Percent of Goodwill Impaired (GWI/GW ratio)

36.2%
Companies with Goodwill

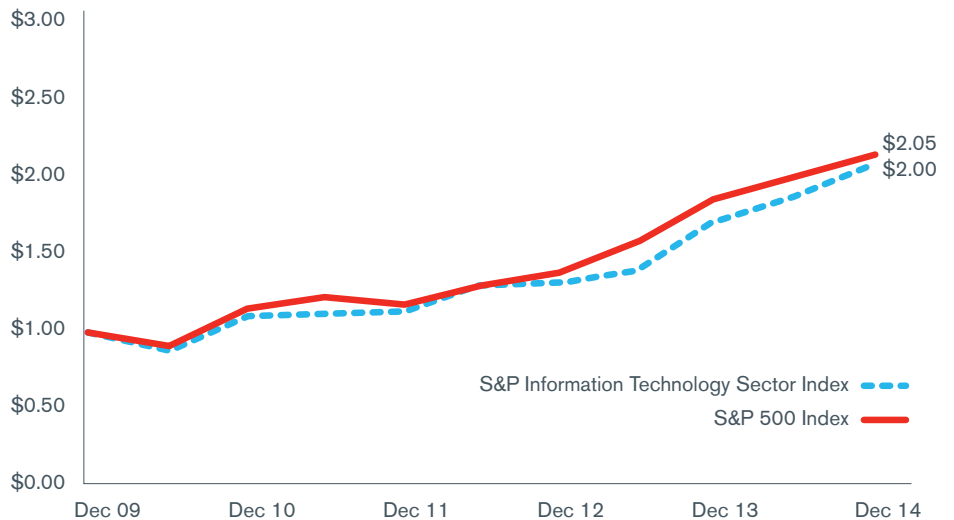
11.9%
Percent of Companies with Goodwill that Recorded a Goodwill Impairment in 2014

2.9
Market-to-Book Ratio (median)

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



Index (Year End 2009 = \$1)



Top 3 Industry Goodwill Impairments

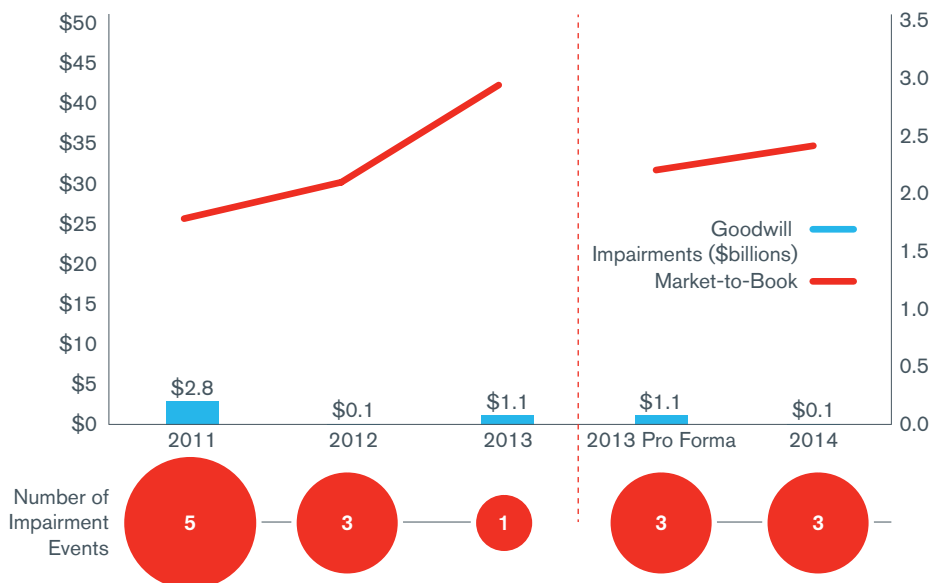
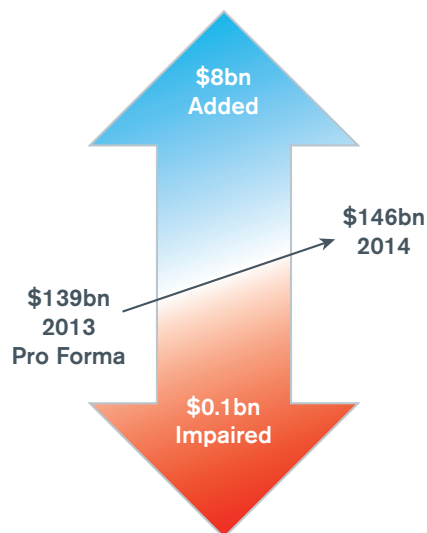
Juniper Networks, Inc.	\$850 million
Leidos Holdings, Inc.	\$486 million
Monster Worldwide, Inc.	\$326 million

2014 Industry Spotlight

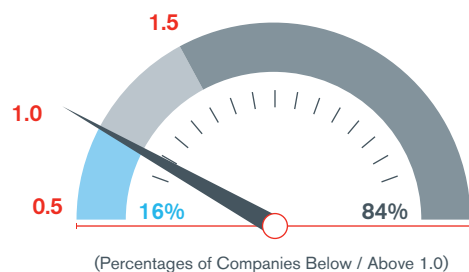
Telecommunication Services

GICS Code 50

Goodwill Trends 2013 Pro Forma – 2014



Market-to-Book Ratio Distribution
(Based on Number of Companies)



110
Companies

17.9%
Goodwill to Total Assets
(GW/TA)

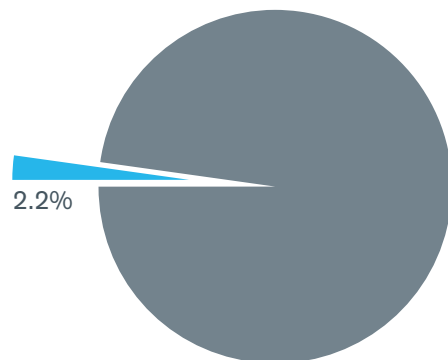
0.1%
Percent of Goodwill
Impaired (GWI/GW ratio)

31.8%
Companies with
Goodwill

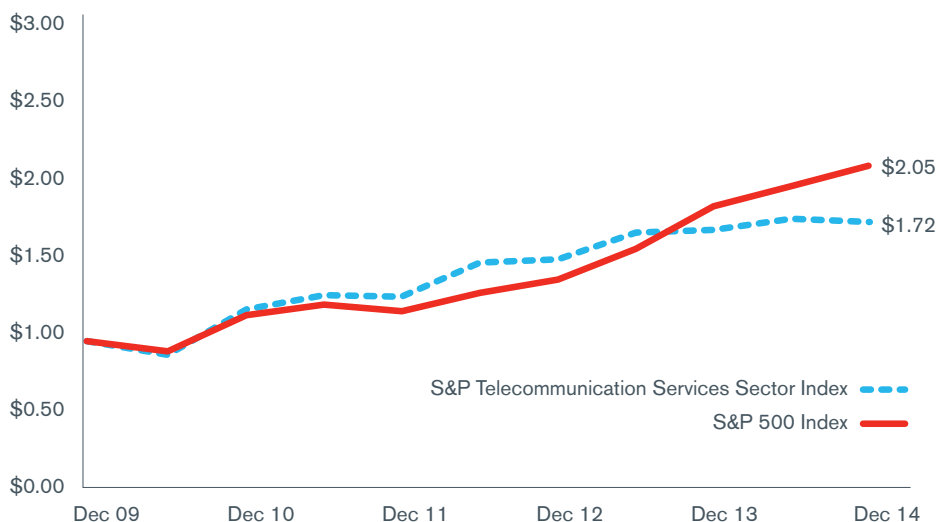
8.6%
Percent of Companies
with Goodwill that
Recorded a Goodwill
Impairment in 2014

2.3
Market-to-Book Ratio
(median)

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



Index (Year End 2009 = \$1)



Top 3 Industry Goodwill Impairments

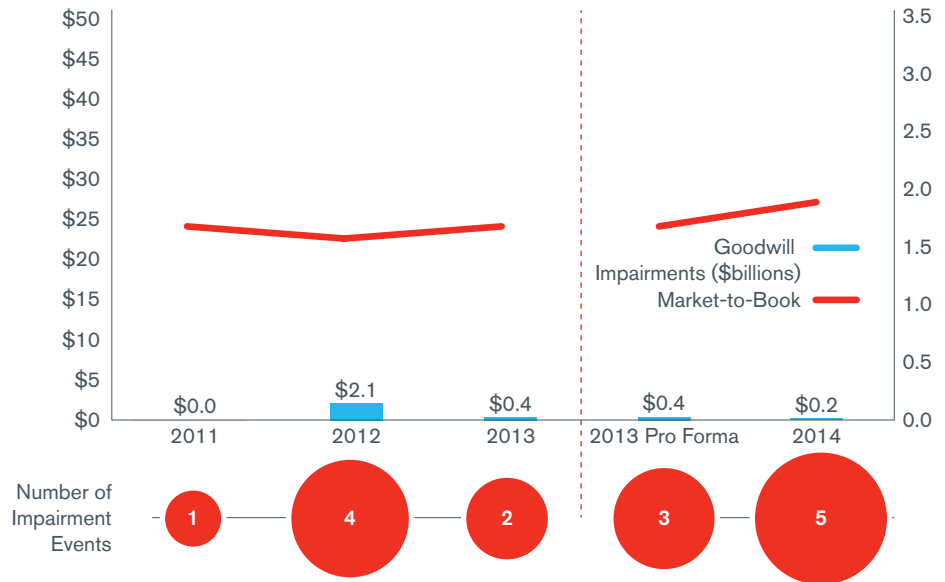
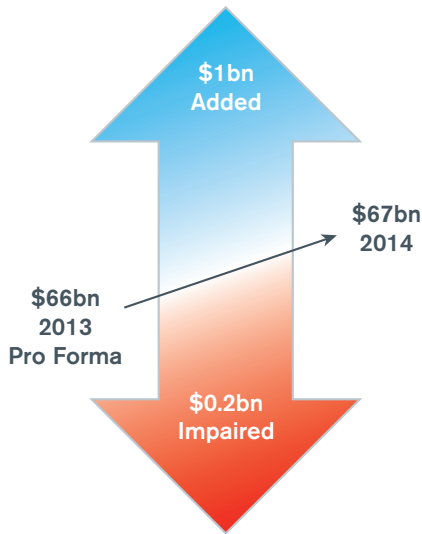
Telephone & Data Systems Inc.	\$88 million
Unified Signal, Inc.	\$8 million
Alaska Communications	
Systems Group Inc.	\$6 million

2014 Industry Spotlight

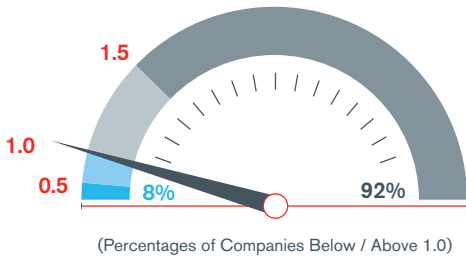
Utilities

GICS Code 55

Goodwill Trends 2013 Pro Forma – 2014



Market-to-Book Ratio Distribution (Based on Number of Companies)



161
Companies

4.5%
Goodwill to Total Assets
(GW/TA)

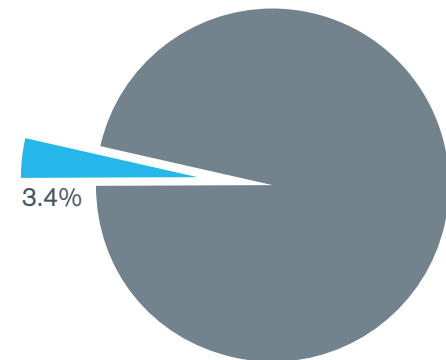
0.3%
Percent of Goodwill
Impaired (GWI/GW ratio)

39.1%
Companies with
Goodwill

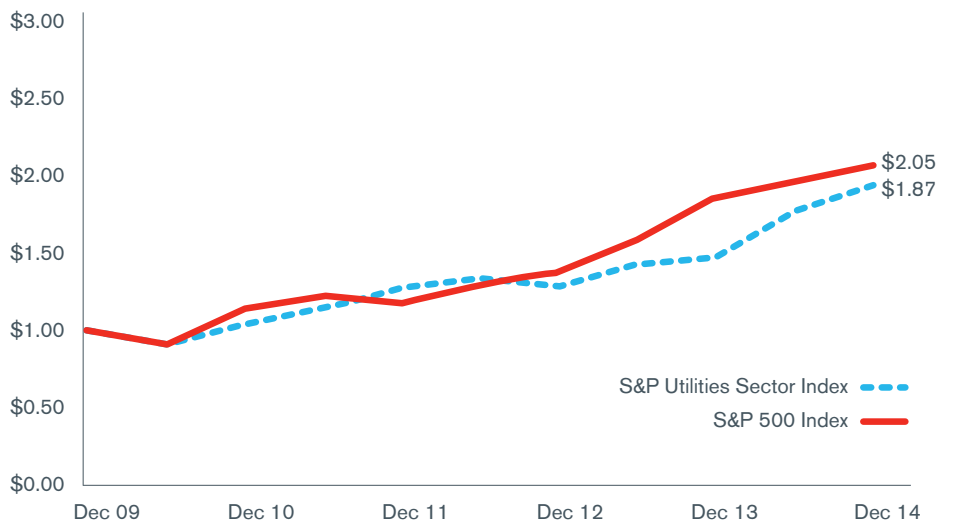
7.9%
Percent of Companies
with Goodwill that
Recorded a Goodwill
Impairment in 2014

1.8
Market-to-Book Ratio
(median)

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



Index (Year End 2009 = \$1)

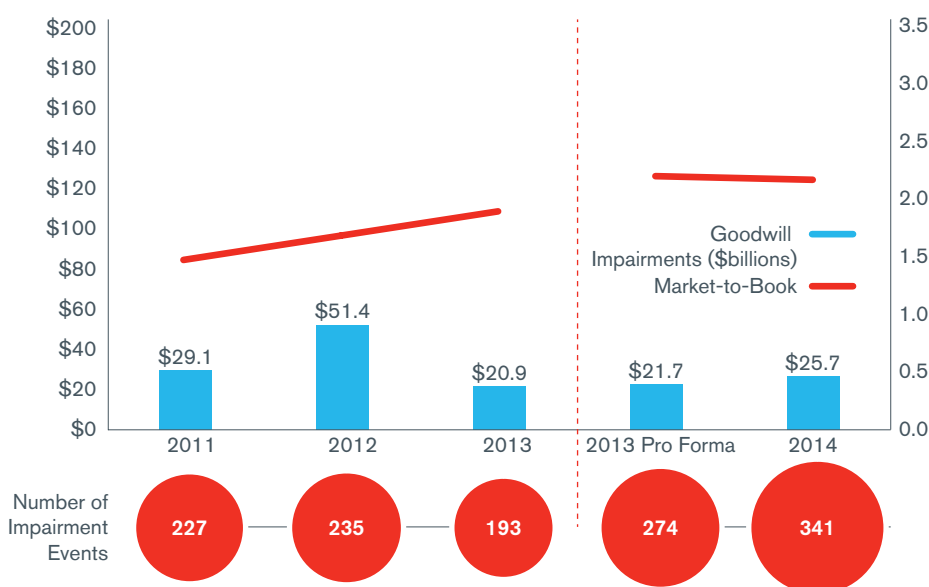
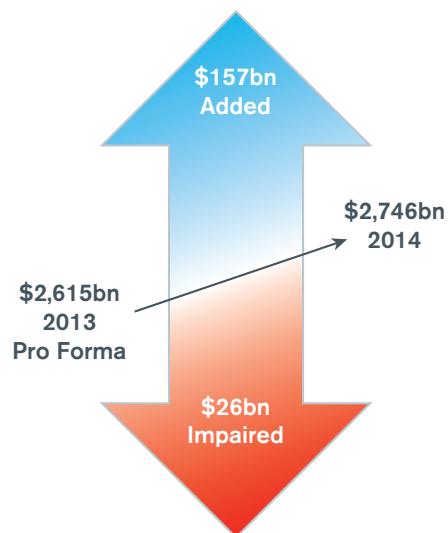


Top 3 Industry Goodwill Impairments

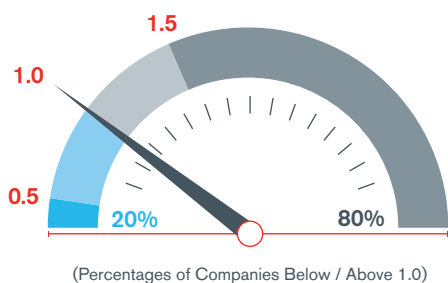
The AES Corporation.....	\$164 million
Dominion Resources, Inc.	\$34 million
Genie Energy Ltd.	\$4 million

2014 Composite Industry Spotlight

Goodwill Trends 2013 Pro Forma – 2014



Market-to-Book Ratio Distribution (Based on Number of Companies)



8,705
Companies

6.4%
Goodwill to Total Assets (GW/TA)

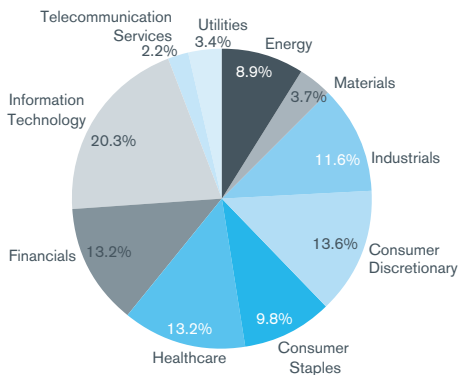
1.0%
Percent of Goodwill Impaired (GWI/GW ratio)

31.9%
Companies with Goodwill

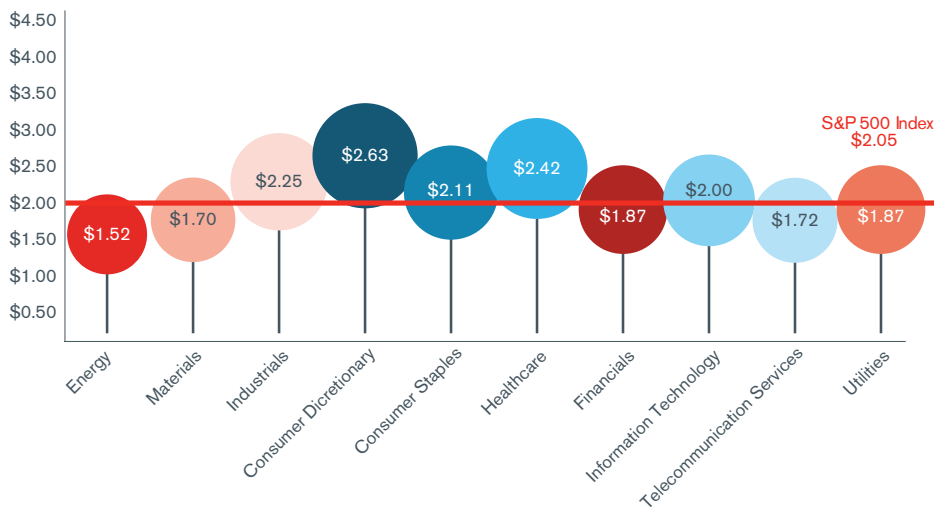
12.3%
Percent of Companies with Goodwill that Recorded a Goodwill Impairment in 2014

2.1
Market-to-Book Ratio (median)

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



Cumulative 5-year Total Return by Industry from 2010 to 2014 Index (Year End 2009 = \$1)



Top 3 Industry Goodwill Impairments

- Devon Energy Corporation\$1,941 million
- Freeport-McMoRan Inc.\$1,717 million
- The Procter & Gamble Company\$1,603 million

Goodwill Impairments by Sub-Industry

Calendar Year 2014

Goodwill Intensity:

- Goodwill to Total Assets (GW/TA)

Loss Intensity:

- Goodwill Impairment to Goodwill (GWI/GW)

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

GICS Code	GICS Sub-Industry Name	Number Co.'s	% of Co.'s with GW	GW/TA	GWI/GW	% of Co's with GW that Recorded GWI	Goodwill Impairment (in \$millions)	Market-to-Book Ratio
Energy							\$5,793 (industry total)	
10101010	Oil and Gas Drilling	12	17%	0.8%	4.8%	50.0%	\$11	0.7
10101020	Oil and Gas Equipment and Services	98	46%	14.5%	3.0%	24.4%	\$849	1.4
10102010	Integrated Oil and Gas	7	29%	0.7%	–	–	–	1.6
10102020	Oil and Gas Exploration and Production	399	6%	2.3%	19.6%	45.8%	\$3,752	1.1
10102030	Oil and Gas Refining and Marketing	69	30%	6.5%	0.4%	9.5%	\$43	1.3
10102040	Oil and Gas Storage and Transportation	65	63%	11.6%	1.5%	14.6%	\$830	2.3
10102050	Coal and Consumable Fuels	46	9%	0.4%	87.7%	25.0%	\$309	1.5
Materials							\$2,716 (industry total)	
15101010	Commodity Chemicals	56	21%	12.4%	0.2%	8.3%	\$4	2.2
15101020	Diversified Chemicals	9	56%	15.1%	0.2%	20.0%	\$50	2.6
15101030	Fertilizers and Agricultural Chemicals	30	23%	14.0%	0.3%	28.6%	\$28	3.0
15101040	Industrial Gases	5	60%	13.0%	5.0%	33.3%	\$305	4.1
15101050	Specialty Chemicals	85	44%	20.2%	0.7%	5.4%	\$175	3.0
15102010	Construction Materials	23	30%	28.5%	–	–	–	2.3
15103010	Metal and Glass Containers	13	62%	25.8%	0.5%	12.5%	\$50	3.9
15103020	Paper Packaging	18	61%	20.0%	–	–	–	3.0
15104010	Aluminum	10	40%	12.8%	0.0%	25.0%	\$0	1.4
15104020	Diversified Metals and Mining	163	5%	0.6%	74.5%	62.5%	\$1,850	2.5
15104030	Gold	108	1%	0.4%	–	–	–	2.6
15104040	Precious Metals and Minerals	53	–	–	–	–	–	5.2
15104045	Silver	9	–	–	–	–	–	0.9
15104050	Steel	44	41%	7.6%	2.4%	16.7%	\$153	1.3
15105010	Forest Products	14	14%	0.7%	–	–	–	3.0
15105020	Paper Products	17	41%	10.6%	1.9%	14.3%	\$100	2.6
Industrials							\$3,512 (industry total)	
20101010	Aerospace and Defense	102	48%	26.9%	0.2%	12.2%	\$256	2.5
20102010	Building Products	40	65%	18.0%	1.4%	11.5%	\$109	3.7
20103010	Construction and Engineering	57	46%	23.1%	4.7%	19.2%	\$517	1.8
20104010	Electrical Components and Equipment	124	25%	23.9%	5.2%	25.8%	\$869	2.4
20104020	Heavy Electrical Equipment	36	14%	19.8%	0.4%	40.0%	\$2	2.6
20105010	Industrial Conglomerates	14	50%	10.9%	0.1%	14.3%	\$103	2.6
20106010	Construction Machinery and Heavy Trucks	41	63%	9.8%	0.8%	7.7%	\$142	2.3
20106015	Agricultural and Farm Machinery	12	42%	3.1%	1.7%	20.0%	\$37	3.3
20106020	Industrial Machinery	171	42%	26.7%	1.0%	9.9%	\$425	2.4
20107010	Trading Companies and Distributors	67	42%	15.3%	1.3%	10.7%	\$154	1.9

Goodwill Impairments by Sub-Industry

Calendar Year 2014

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

GICS Code	GICS Sub-Industry Name	Number Co.'s	% of Co.'s with GW	GW/TA	GW/GW	% of Co.'s with GW that Recorded GWI	Goodwill Impairment (in \$millions)	Market-to-Book Ratio
Industrials (continued)								
20201010	Commercial Printing	17	59%	26.3%	6.2%	50.0%	\$291	1.4
20201050	Environmental and Facilities Services	130	22%	35.3%	0.8%	34.5%	\$190	2.2
20201060	Office Services and Supplies	32	44%	25.2%	0.2%	7.1%	\$14	3.3
20201070	Diversified Support Services	42	40%	24.8%	3.9%	17.6%	\$229	2.2
20201080	Security and Alarm Services	12	17%	30.6%	–	–	–	2.5
20202010	Human Resource and Employment Services	43	56%	20.8%	0.3%	16.7%	\$18	2.6
20202020	Research and Consulting Services	67	39%	44.3%	1.3%	23.1%	\$156	2.5
20301010	Air Freight and Logistics	23	48%	8.5%	–	–	–	3.2
20302010	Airlines	19	26%	10.6%	–	–	–	4.1
20303010	Marine	6	67%	9.8%	–	–	–	1.5
20304010	Railroads	10	30%	0.5%	0.1%	33.3%	\$1	3.0
20304020	Trucking	31	45%	5.0%	–	–	–	2.9
20305010	Airport Services	5	60%	31.5%	0.1%	33.3%	\$1	1.4
20305020	Highways and Railtracks	3	–	–	–	–	–	–
20305030	Marine Ports and Services	4	–	–	–	–	–	1.5
Consumer Discretionary							\$2,826 (industry total)	
25101010	Auto Parts and Equipment	81	32%	13.7%	0.9%	23.1%	\$112	2.5
25101020	Tires and Rubber	3	67%	3.0%	–	–	–	1.8
25102010	Automobile Manufacturers	17	18%	0.1%	30.5%	33.3%	\$120	3.0
25102020	Motorcycle Manufacturers	9	22%	0.3%	–	–	–	4.0
25201010	Consumer Electronics	36	14%	10.6%	–	–	–	2.5
25201020	Home Furnishings	17	35%	19.1%	3.5%	50.0%	\$120	1.5
25201030	Homebuilding	37	35%	0.8%	–	–	–	1.5
25201040	Household Appliances	18	22%	13.5%	–	–	–	2.3
25201050	Housewares and Specialties	15	67%	27.1%	0.0%	10.0%	\$0	2.8
25202010	Leisure Products	55	29%	15.1%	3.0%	18.8%	\$69	3.0
25203010	Apparel, Accessories and Luxury Goods	74	34%	14.9%	4.0%	12.0%	\$359	2.9
25203020	Footwear	12	50%	3.2%	–	–	–	3.1
25203030	Textiles	6	67%	1.6%	–	–	–	2.2
25301010	Casinos and Gaming	54	31%	11.2%	10.7%	29.4%	\$1,059	1.4
25301020	Hotels, Resorts and Cruise Lines	42	36%	14.5%	–	–	–	2.8
25301030	Leisure Facilities	33	36%	11.8%	0.0%	8.3%	\$0	2.2
25301040	Restaurants	94	51%	14.0%	1.2%	14.6%	\$183	4.2
25302010	Education Services	52	37%	22.5%	1.4%	15.8%	\$69	1.9
25302020	Specialized Consumer Services	37	35%	17.9%	0.0%	15.4%	\$1	4.4
25401010	Advertising	71	18%	32.1%	0.8%	30.8%	\$110	1.8
25401020	Broadcasting	36	69%	35.5%	0.3%	20.0%	\$128	1.9
25401025	Cable and Satellite	18	56%	12.5%	0.1%	10.0%	\$18	5.3
25401030	Movies and Entertainment	116	16%	36.6%	0.2%	15.8%	\$136	3.0
25401040	Publishing	39	36%	30.4%	0.6%	21.4%	\$40	2.7
25501010	Distributors	41	20%	20.4%	1.9%	12.5%	\$58	2.5
25502010	Catalog Retail	13	31%	26.5%	0.1%	50.0%	\$7	6.6
25502020	Internet Retail	56	32%	16.3%	0.0%	5.6%	\$1	4.3
25503010	Department Stores	8	38%	5.8%	–	–	–	2.1

Goodwill Impairments by Sub-Industry

Calendar Year 2014

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

GICS Code	GICS Sub-Industry Name	Number Co.'s	% of Co.'s with GW	GW/TA	GW/GW	% of Co's with GW that Recorded GWI	Goodwill Impairment (in \$millions)	Market-to-Book Ratio
Consumer Discretionary (continued)								
25503020	General Merchandise Stores	13	31%	7.1%	–	–	–	3.6
25504010	Apparel Retail	50	36%	6.1%	0.8%	5.6%	\$26	2.3
25504020	Computer and Electronics Retail	10	40%	12.3%	–	–	–	1.4
25504030	Home Improvement Retail	7	29%	1.9%	11.4%	50.0%	\$167	5.4
25504040	Specialty Stores	41	51%	13.2%	–	–	–	2.2
25504050	Automotive Retail	31	55%	9.5%	0.8%	23.5%	\$43	2.6
25504060	Home Furnishing Retail	11	55%	11.5%	–	–	–	4.5
Consumer Staples							\$3,465 (industry total)	
30101010	Drug Retail	11	36%	23.5%	–	–	–	3.2
30101020	Food Distributors	17	35%	10.7%	–	–	–	3.0
30101030	Food Retail	23	52%	8.0%	5.1%	8.3%	\$280	2.2
30101040	Hypermarkets and Super Centers	3	67%	7.6%	–	–	–	4.9
30201010	Brewers	7	43%	14.9%	–	–	–	5.0
30201020	Distillers and Vintners	20	25%	34.5%	0.0%	20.0%	\$3	3.0
30201030	Soft Drinks	49	18%	16.5%	–	–	–	6.1
30202010	Agricultural Products	37	16%	6.6%	1.8%	16.7%	\$33	1.7
30202030	Packaged Foods and Meats	124	33%	32.1%	1.5%	17.1%	\$1,173	3.1
30203010	Tobacco	25	28%	23.2%	0.4%	28.6%	\$100	–
30301010	Household Products	27	48%	27.5%	2.4%	7.7%	\$1,603	3.2
30302010	Personal Products	124	12%	13.7%	5.6%	33.3%	\$273	3.2
Healthcare							\$381 (industry total)	
35101010	Healthcare Equipment	227	28%	21.7%	0.1%	6.3%	\$59	3.6
35101020	Healthcare Supplies	62	47%	35.8%	–	–	–	3.6
35102010	Healthcare Distributors	26	35%	17.7%	–	–	–	4.3
35102015	Healthcare Services	109	39%	51.8%	0.1%	11.6%	\$72	3.0
35102020	Healthcare Facilities	45	49%	26.2%	0.0%	4.5%	\$9	2.8
35102030	Managed Healthcare	25	52%	23.7%	0.0%	15.4%	\$9	2.4
35103010	Health Care Technology	80	35%	32.9%	0.8%	14.3%	\$61	5.2
35201010	Biotechnology	419	17%	12.5%	0.2%	8.3%	\$48	5.1
35202010	Pharmaceuticals	195	17%	17.9%	0.1%	8.8%	\$100	4.8
35203010	Life Sciences Tools and Services	55	53%	35.0%	0.1%	13.8%	\$21	3.2
Financials							\$3,080 (industry total)	
40101010	Diversified Banks	12	67%	2.0%	–	–	–	0.9
40101015	Regional Banks	717	42%	2.4%	1.9%	7.0%	\$1,398	1.0
40102010	Thriffs and Mortgage Finance	209	33%	0.1%	9.5%	10.1%	\$513	1.0
40201020	Other Diversified Financial Services	7	14%	0.0%	–	–	–	0.6
40201030	Multi-Sector Holdings	20	10%	3.2%	2.2%	50.0%	\$41	0.8
40201040	Specialized Finance	40	28%	14.7%	–	–	–	1.8
40202010	Consumer Finance	43	42%	2.2%	0.1%	5.6%	\$27	1.7
40203010	Asset Management and Custody Banks	90	9%	2.6%	0.0%	25.0%	\$3	4.6
40203020	Investment Banking and Brokerage	51	47%	1.1%	0.7%	8.3%	\$144	1.6
40203030	Diversified Capital Markets	2	50%	0.2%	–	–	–	3.9
40301010	Insurance Brokers	13	62%	39.5%	0.0%	12.5%	\$1	2.9

Goodwill Impairments by Sub-Industry

Calendar Year 2014

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

GICS Code	GICS Sub-Industry Name	Number Co.'s	% of Co.'s with GW	GW/TA	GW/GW	% of Co's with GW that Recorded GWI	Goodwill Impairment (in \$millions)	Market-to-Book Ratio
Financials (continued)								
40301020	Life and Health Insurance	25	40%	0.6%	–	–	–	1.0
40301030	Multi-line Insurance	15	60%	0.3%	21.5%	22.2%	\$865	0.9
40301040	Property and Casualty Insurance	52	48%	2.6%	0.7%	8.0%	\$77	1.3
40301050	Reinsurance	5	40%	0.2%	–	–	–	1.0
40402010	Diversified REITs	–	–	–	–	–	–	–
40402020	Industrial REITs	–	–	–	–	–	–	–
40402030	Mortgage REITs	45	11%	0.1%	–	–	–	0.8
40402035	Hotel and Resort REITs	1	100%	1.4%	–	–	–	–
40402040	Office REITs	–	–	–	–	–	–	–
40402045	Healthcare REITs	–	–	–	–	–	–	–
40402050	Residential REITs	3	–	–	–	–	–	0.6
40402060	Retail REITs	–	–	–	–	–	–	–
40402070	Specialized REITs	6	50%	39.3%	–	–	–	1.8
40403010	Diversified Real Estate Activities	17	6%	2.2%	–	–	–	1.8
40403020	Real Estate Operating Companies	52	6%	0.0%	240.8%	33.3%	\$12	1.8
40403030	Real Estate Development	34	9%	0.8%	–	–	–	1.1
40403040	Real Estate Services	16	31%	26.1%	–	–	–	7.5
Information Technology							\$3,601 (industry total)	
45101010	Internet Software and Services	402	30%	19.0%	2.3%	14.0%	\$962	3.2
45102010	IT Consulting and Other Services	94	34%	27.3%	1.3%	18.8%	\$544	3.1
45102020	Data Processing and Outsourced Services	78	62%	26.6%	0.0%	6.3%	\$23	3.8
45103010	Application Software	238	35%	35.0%	0.4%	10.7%	\$109	3.7
45103020	Systems Software	78	37%	22.5%	0.0%	6.9%	\$21	3.7
45103030	Home Entertainment Software	27	19%	37.7%	0.2%	20.0%	\$20	2.8
45201020	Communications Equipment	133	35%	18.5%	3.0%	12.8%	\$1,306	1.8
45202030	Technology Hardware, Storage and Peripherals	77	29%	13.0%	0.1%	4.5%	\$35	2.3
45203010	Electronic Equipment and Instruments	141	29%	21.1%	1.4%	14.6%	\$41	2.1
45203015	Electronic Components	36	44%	12.8%	0.0%	6.3%	\$0	1.7
45203020	Electronic Manufacturing Services	40	48%	10.7%	–	–	–	1.6
45203030	Technology Distributors	44	36%	11.9%	0.0%	6.3%	\$2	1.3
45301010	Semiconductor Equipment	52	44%	12.0%	2.4%	30.4%	\$151	1.7
45301020	Semiconductors	95	55%	12.5%	1.5%	11.5%	\$387	2.5
Telecommunications Services							\$102 (industry total)	
50101010	Alternative Carriers	53	26%	27.4%	–	–	–	2.9
50101020	Integrated Telecommunication Services	33	45%	20.7%	0.0%	6.7%	\$6	1.7
50102010	Wireless Telecommunication Services	24	25%	5.5%	1.0%	33.3%	\$96	1.4
Utilities							\$205 (industry total)	
55101010	Electric Utilities	35	51%	4.6%	0.0%	5.6%	\$4	1.7
55102010	Gas Utilities	24	63%	11.1%	0.0%	6.7%	\$0	2.0
55103010	Multi-Utilities	20	85%	3.3%	0.2%	5.9%	\$34	1.8
55104010	Water Utilities	23	30%	4.5%	–	–	–	1.9
55105010	Independent Power Producers / Energy Traders	16	25%	3.5%	4.6%	50.0%	\$167	1.8
55105020	Renewable Electricity	43	5%	0.4%	–	–	–	1.6

Appendix

Company Base Set Selection and Methodology

The 2015 Study focused on financial data for U.S.-based publicly-traded companies filing under U.S. GAAP. The primary sources of data for the 2015 Study were the S&P Capital IQ® database and individual company annual and interim financial reports.³

The following procedures were used to arrive at the 2015 Study dataset, which was used to calculate all ratios and summary statistics throughout the 2015 Study:

- American Depositary Receipts (ADRs), exchange traded funds (ETFs), and Closed End Funds were excluded from the S&P Capital IQ® database leaving 8,790 U.S.-based, U.S.-traded companies as of April 4, 2015.
- From this set, further excluded were companies that were either identified as consolidated subsidiaries of other companies also within the dataset, or which were not deemed to be publicly traded U.S. firms in 2014, resulting in a base set of 8,705 companies.
- The primary difference in the current methodology compared to previous years is that the requirement that companies have stock returns data over the prior 5-year period was removed from the selection process. This selection criterion was deemed relevant to analyses included in previous studies performed shortly after the financial crisis of 2008-2009. To bridge methodologies and allow for year-to-year comparisons, we created a 2013 pro forma year using the new selection methodology. Specifically, starting with the 2014 dataset of companies, we recalculated the 2013 goodwill impairments and accompanying metrics for the same company set. Further adjustments were made as appropriate to arrive at the 2013 pro forma figures.⁴
- Financial data for all companies in the 2015 Study was adjusted, when applicable, to a calendar year end (rather than the most recent fiscal year end) to examine impairments over a specific period of time, regardless of company-specific choices of fiscal year.

3. S&P Capital IQ® is a division of McGraw Hill Financial.

4. For example, to the extent companies in the 2014 dataset acquired companies previously included in the 2013 dataset, the latter would not show in the 2014 screening process. We therefore included the goodwill impairments taken by the respective acquirees in 2013 under the prior methodology in the 2013 pro forma amounts (approximately \$600 million). In addition, Citizens Financial Group's (Citizens) 2013 impairment of \$4.4 billion was excluded from the 2013 pro forma total because the company was a subsidiary of Royal Bank of Scotland in 2013 and did not trade publicly in the U.S. until 2014; thus, while Citizens is part of the 2014 dataset, it was a non-U.S. company in 2013. Separately, General Motors' (GM) goodwill impairment of \$541 million taken in 2013 was also excluded from the statistics as it did not meet the study criteria. The purpose of the studies is to report impairments of goodwill with economic substance, resulting from deterioration in economic conditions and/or operating performance. The GM charge pertains to goodwill with no economic basis, created upon GM's emergence of bankruptcy, as stated in the company's 2010 10-K filing. Further, GM's impairment was strictly attributable to a reversal of a deferred tax asset valuation allowance related to this goodwill. The treatment of the 2013 GM impairment is also consistent with the treatment of GM impairments of the same nature in prior studies (e.g. \$27 billion in 2012). On a net basis, the various adjustments to 2013 resulted in adding \$800 million of goodwill impairment to the 2013 pro forma amounts compared to those reported for 2013 using the prior methodology.

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