

December 2013

2013 Canadian Goodwill Impairment Study

Introduction

In February 2013, the Canadian Financial Executives Research Foundation (CFERF) and Duff & Phelps published the results of their first comprehensive Canadian study of goodwill impairments. The *2012 Goodwill Impairment Study: Canadian Edition* examined the impact of the 2011 transition from Pre-changeover Generally Accepted Accounting Principles (Pre-changeover GAAP) to International Financial Reporting Standards (IFRS),¹ one of several issues affecting Canadian financial executives.

The 2012 Study also examined goodwill impairment patterns, in aggregate and by

industry, over a five-year period. This period included two significant events, the 2008 financial crisis and the 2011 transition to IFRS. Finally, the 2012 Study included a survey of members of Financial Executives International (FEI) Canada regarding goodwill impairments, their impairment testing process and the associated impact, if any, of IFRS adoption.

Now in its second year of publication, the *2013 Canadian Goodwill Impairment Study* (the “2013 Study”) continues to examine general goodwill impairment trends and trends within different industries in Canada

through December 2012. In addition, through its annual survey of FEI Canada members, the 2013 Study once again incorporates the perspectives of senior Canadian financial executives. We have introduced a comparison to survey findings documented in our sister publications covering goodwill impairment trends in the European and the U.S. markets. Finally, Industry Spotlights are newly featured in this edition, allowing readers to focus on relevant metrics and statistics for the particular industry of their interest.

1. For a background on the IFRS adoption decision refer to <http://www.frascanada.ca/accounting-standards-board/what-we-do/strategic-plan/item62118.pdf>

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Introduction

Purpose of the 2013 Study

- To report and examine the general and industry trends of goodwill and goodwill impairment of Canadian publicly-traded companies.
- To report the 2013 results of the annual goodwill impairment survey of FEI Canada members (the “2013 Survey”).

Scope of the 2013 Study

Similar to the previous edition, the 2013 Study focuses on goodwill impairments recorded by Canadian-based companies traded on the Toronto Stock Exchange (TSX), reporting under IFRS.

The procedures described in Appendix 1 *2013 Study: Company Base Set Selection* were undertaken to arrive at the final data set, which was used to calculate all ratios and summary statistics throughout the 2013 Study.

Non-IFRS Adopters

While Canadian accounting rules allow certain entity types to defer IFRS adoption or to report under U.S. GAAP,² the reality is there are relatively few Canadian publicly-traded companies that are non-IFRS adopters. As displayed in Figure 1, of the

Figure 1: Accounting Standards Used by Canadian Companies Over Time

	2008	2009	2010	2011	2012
U.S. GAAP	16	19 ▲	22 ▲	36 ▲	54 ▲
IFRS	0	4 ▲	15 ▲	621 ▲	616 ▼
Pre-changeover GAAP	657	650 ▼	636 ▼	16 ▼	0 ▼
Total	673	673	673	673	670

Figure 2: Non-IFRS Adopters' Goodwill Impairment (GWI) as a Percentage of Total Goodwill Impairment

	2008	2009	2010	2011	2012
(Non-IFRS Adopters' GWI)/ (Non-IFRS Adopters' GWI + IFRS Adopters' GWI) x100%	7.2%	7.4%	0.3%	3.2%	8.4%

2012 universe of **670** Canadian-based publicly-traded companies meeting the 2013 Study criteria, there were **616** reporting under IFRS.

Notwithstanding the focus of the 2013 Study on IFRS adopters, goodwill impairment amounts reported by all 670 companies (including the non-IFRS adopters) were also examined in aggregate. The magnitude of goodwill impairments recognized by non-IFRS adopters relative to the overall amount reported by the 670 companies is summarized in Figure 2.

Goodwill impairments recorded by non-IFRS adopters were relatively small, with the exception of Research in Motion Limited (RIM), which reports under U.S. GAAP. RIM, which recently changed its name to Blackberry Limited, impaired all of its goodwill in calendar-year 2012 in the amount of \$681 million (US\$690 million).³ Absent this loss, the proportion of non-IFRS adopters' goodwill impairment would have been a negligible 0.6% to total 2012 impairments.

The remainder of this report will focus exclusively on IFRS adopters.

2. For a description of which entities are required to adopt IFRS, refer to Appendix 1.

3. Figures in this report are stated in Canadian dollars. The symbols '\$' and 'CAD' are used interchangeably. To the extent amounts are shown in U.S. dollars, the symbol 'US\$' is used.

Goodwill Landscape

Highlights of the 2013 Study

The \$7.9 billion of goodwill impaired by Canadian companies reporting under IFRS in calendar year 2012 was a significant (28%) decrease from the 2011 amount of \$11.0 billion. Approximately 76% (\$6 billion of the \$7.9 billion) of the total goodwill impairment (GWI) was accounted for by the top three impairment events. The dominance of a few large impairment events is consistent with what was observed in the 2012 Study, when three impairment events accounted for 81% of the total impairments recognized during 2011.

As such, the Canadian goodwill impairment landscape for the past two years has told a story of a few large-cap companies dominating the aggregate universe of annual impairments. Notably, absent the top three events, total GWIs would have been similar in magnitude, with \$1.9 billion and \$2.1 billion recognized in calendar years 2012 and 2011, respectively. These would also be more in line with the \$2.9 billion GWI reported in 2010, as restated under IFRS.

For a better understanding of the impact of IFRS adoption on 2010 reported GWIs, refer to Appendix 2 *Quantifying the Impact of IFRS Adoption – Flashback*.

Interestingly, the frequency of impairment events increased from 36 events in 2011 to 52 events in 2012, indicating that the average amount of individual impairments has decreased year over year.

Approximately 82% of the total goodwill impairment recorded in 2012 was concentrated in the Consumer Discretionary and Materials industries. While the total GWI amount in the Consumer Discretionary industry decreased by \$3.0 billion, it remains the industry with the highest annual GWIs at \$3.3 billion. The Materials industry impaired the second highest amount of goodwill at \$3.2 billion, a standing which also remained unchanged from the prior year.

Certain other industries displayed a notable upward trend from 2011 to 2012 in the proportion of companies with goodwill recognizing a GWI. For instance, between

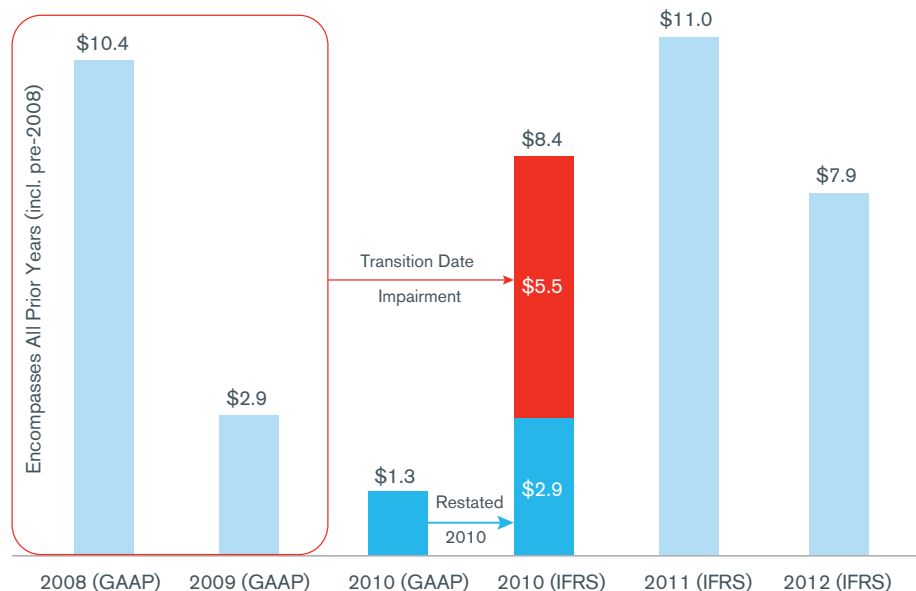
2011 and 2012 this ratio increased from 3% to 16% for Information Technology, from 33% to 50% for Healthcare and from 15% to 18% for Energy.

Highlights of the 2013 Survey

The 2013 Survey captured FEI Canada members' responses to an online survey conducted in the Fall of 2013. The survey focused on top-of-mind issues for Canadian financial executives regarding impairments and the impairment testing process under IFRS:

- A sizeable portion of survey respondents (38% of public company and 54% of private company respondents) indicated that developing cash flow projections was one of their most significant challenges.
- Two-thirds of the public companies surveyed that believed their shares were underpriced, also found developing pre-tax discount rates for value in use to be the top challenge when applying IFRS goodwill impairment guidance.
- Surprisingly, a majority of the private company respondents applied the same discount rate to all cash-generating units (CGUs) without adjustments for risks specific to the respective CGUs.

Goodwill Impairments, Canadian Companies (in CAD \$billions)



Definitions: GAAP = reported under Pre-changeover GAAP; IFRS = reported under IFRS

Quick Accounting Reference Guide

Overview of IAS 36 Requirements

Recognizing Goodwill

Goodwill is defined in IFRS 3 *Business Combinations* as “an asset representing the future economic benefits arising from other assets acquired in a business combination that are not individually identified and separately recognized.” Internally generated goodwill cannot be recognized. In a business combination, goodwill is measured as follows:⁴

Purchase price for acquired equity interest	
+	
Amount of any non-controlling interest in the acquiree	
+	
Fair value of any previously held equity interest in the acquiree	
–	
Fair value of the acquiree's identifiable net assets acquired	
=	
Goodwill	

Allocating Goodwill to Cash-Generating Units

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

Recognizing a Goodwill Impairment Loss

According to IAS 36 *Impairment of Assets*, goodwill is impaired if the recoverable amount of a cash-generating unit is less than its carrying amount. The recoverable amount of a cash-generating unit is the higher of its: (i) fair value less costs of disposal (previously referred to as “fair value less costs to sell”) and (ii) value in use.⁵ IFRS 13 *Fair Value Measurement* provides guidance for measuring fair value and IAS 36 provides guidance for measuring value in use.

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

Timing of Goodwill Impairment Tests

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

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

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



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

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

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

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

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

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

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

Recognizing the lack of guidance and diversity in practice, The Appraisal Practices Board (APB)⁶ in the United States assembled a working group to develop best practices for the application of control premiums in the context of financial reporting, and published a discussion draft of a Valuation Advisory in April 2013. The ultimate objective of the Valuation Advisory, once it is finalized, is to create greater commonality among valuation best practices. Although the discussion draft is focused on U.S. GAAP valuations, its conclusions are relevant to valuation more generally and might be useful to those applying IFRSs, particularly in the light of the IASB's recent discussions on unit of account.

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

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

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

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

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



17% of survey respondents used a control premium derived from general market studies and 65% relied on a combination of analytical methods in conjunction with general market-based studies.

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

Survey Results

Introduction

During the summer of 2013, an electronic survey on goodwill impairments was conducted using a sample of FEI Canada members representing both public and private companies. This survey provides insight into the reasons for goodwill impairments and the valuation techniques used in the impairment analysis.

Calendar-year 2012 was the second annual period that Canadian companies have been using IFRS. The 2013 Survey therefore captures Canadian executives' cumulative experience and greater familiarity in applying IAS 36.

Percentages in these graphs reflect the percentages of total responses to the respective questions.⁷

Top Challenges in Goodwill Impairment

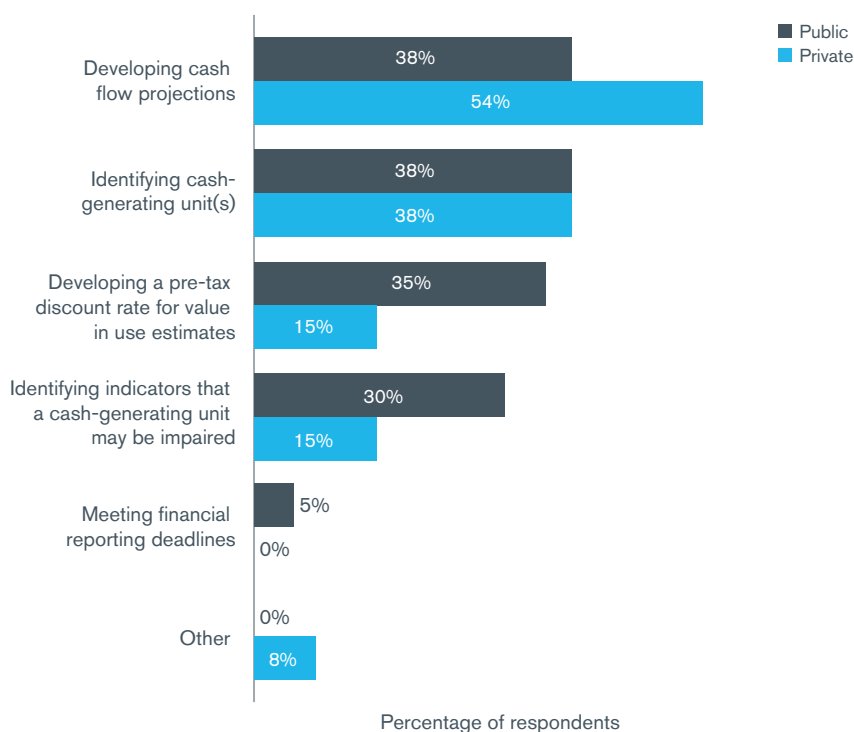
Public company survey respondents were almost evenly distributed among the top four challenges when performing a goodwill impairment test under IFRS. In contrast, the majority of private companies (54%) were most concerned with developing cash flow projections. Identifying cash-generating unit(s) was the second most cited challenge (38%) for private companies.

Through an analysis of survey responses based on job function, we found that CFOs cited the challenges of developing cash flow projections and of identifying CGU impairment indicators twice as often as all other respondents (e.g. Controllers, Chief Accountants, etc.). Company size is also a factor in this response, as 69% of the CFOs of companies with less than \$500 million of revenue versus 33% of the larger company CFOs cited developing projections as the most significant challenge.

Non-CFOs mentioned the challenges of identifying CGUs and developing pre-tax discount rates twice as often as CFOs.

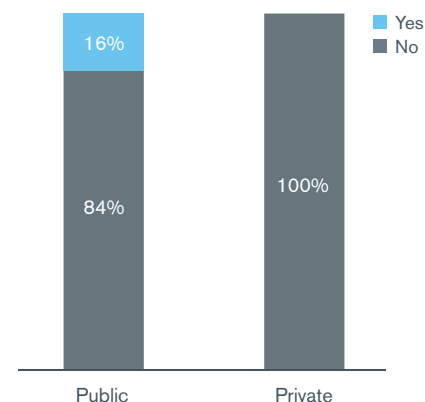
Question 1: In general, what is your most significant challenge related to goodwill impairment testing?

N=50



Question 2: Did your company recognize an impairment of goodwill in 2012?

N=50



Recent Goodwill Impairments

Only 16% of public company respondents recognized an impairment of goodwill in 2012. This is consistent with expectations from our 2012 Survey whereby 19% of public companies had anticipated a goodwill or other asset impairment in the near future. Similarly, 18% of private companies in last year's survey also anticipated an imminent goodwill or asset impairment; however, no goodwill impairment was recognized by the universe of private companies in the 2013 Survey.

7. Some totals in the survey graphs for which respondents were asked to select only one response may not add to 100% due to rounding.

Survey Results

Number of Cash-Generating Units

The majority of both public (41%) and private (46%) companies have 2 to 5 cash-generating units.

The distribution of the number of CGUs is shown for public vs. private companies, consistent with how the 2013 Survey questions were analyzed. However, if the distribution of the number of CGUs was presented based on company size, the graph would look very similar.

Specifically, the public company distribution shown in Question 3 mirrors that for companies with revenue in excess of \$500 million and the private company distribution reflects that of companies with revenue less than \$500 million. Not surprisingly, 62% of the companies that have 10 or more CGUs have revenue in excess of \$1 billion.

Determination of Recoverable Amount

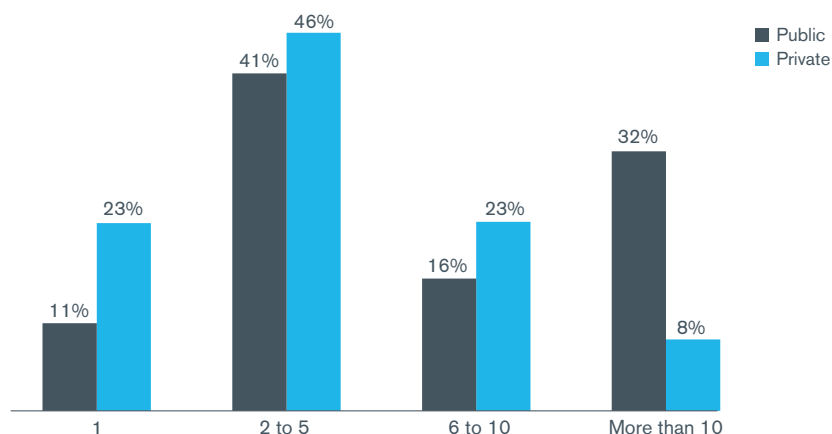
Although IAS 36 defines a cash-generating unit's recoverable amount as the higher of its fair value less costs of disposal and its value in use, it does not require an entity to calculate both amounts as long as one of them is higher than the cash-generating unit's carrying amount.

Public companies were almost twice as likely as private companies to evaluate both value in use and fair value less cost to sell (costs of disposal) to determine a CGU's recoverable amounts (41% versus 23%).

The majority (46%) of the private company respondents to the survey indicate that the most common method for determining the recoverable amount of a cash-generating unit was to look at its value in use.

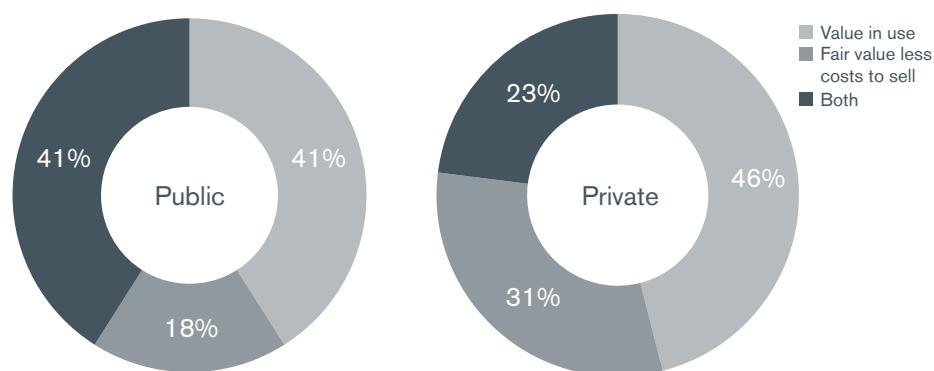
Question 3: How many cash-generating units do you have as of the most recent reporting period?

N=50



Question 4: When determining the recoverable amount of a cash-generating unit, do you estimate:

N=50



Survey Results

Enterprise or Equity Comparison

When estimating the recoverable amount of CGUs, public companies generally favored an enterprise value analysis (46%), but a significant proportion still relied exclusively on equity value (38%).

Private companies were much more likely to determine the recoverable amount based on an enterprise level analysis (69%) rather than an equity level analysis (15%).

A nearly equal number of public and private company respondents based their analysis on both an enterprise and equity level calculation (16% and 15%, respectively).

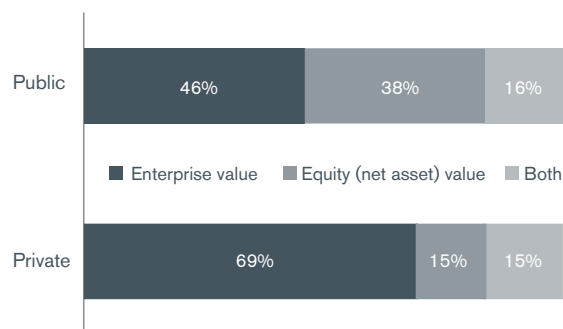
Why was Value in Use Higher?

About 35% of public company respondents relied on value in use to determine a CGU's recoverable amount, because they believed the market was underpricing their company. These companies came from a wide range of industries. Therefore, this was an opinion shared across the board by this subset of respondents, and was not driven by trends in a specific industry.

Approximately 38% of public company respondents used value in use, because they expect to achieve synergies which are not available to market participants. These company specific synergies would generally be incorporated into the projections of the company in a value in use analysis, but would never be part of the calculation of fair value less costs to sell (now "costs of disposal").

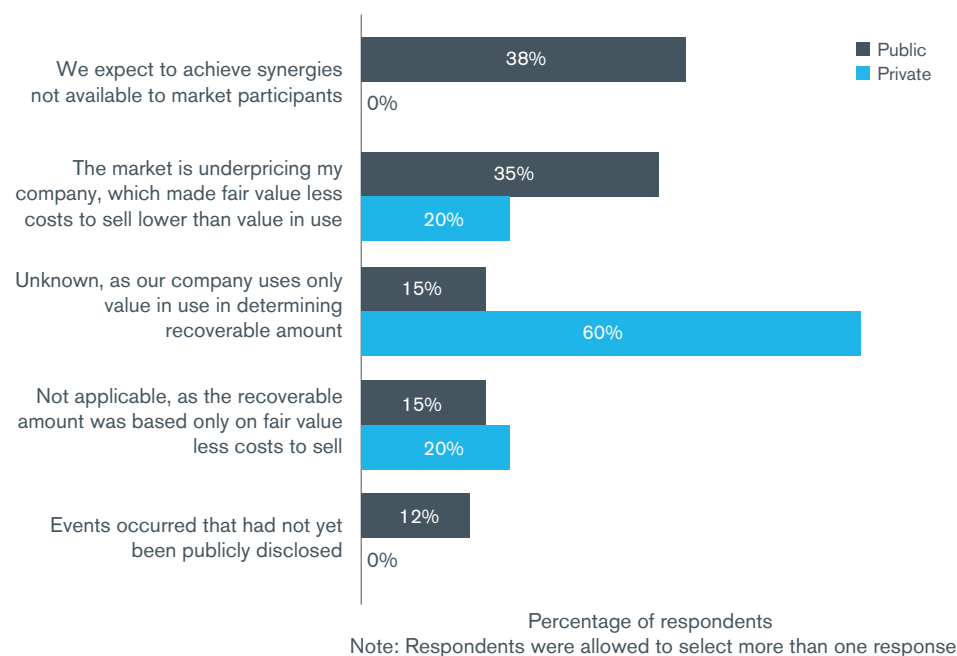
Question 5: In your latest analysis, did you determine the recoverable amount of your cash-generating unit(s) on an enterprise value or equity (net asset) value basis?

N=50



Question 6: If in your latest analysis the recoverable amount of a cash-generating unit was based on value in use, which factor(s) led to value in use being higher than fair value less costs to sell?

N=37



Two-thirds of the public companies that believed their company was underpriced also found developing pre-tax discount rates to be the most challenging.

Survey Results

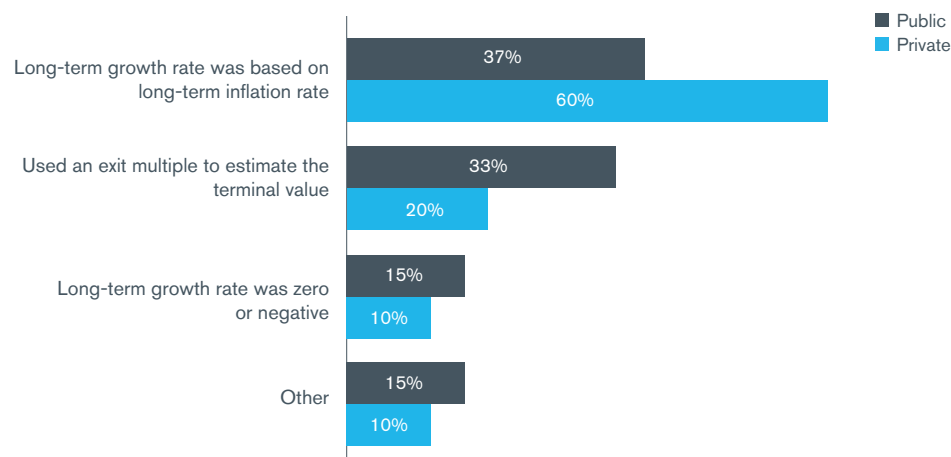
Terminal Year Growth for Value in Use

The majority of public (37%) and private (60%) respondents who estimated value in use indicate that in their latest analysis they based the terminal year growth rate on the long-term inflation rate. A substantial 33% of public companies used an exit multiple to estimate the terminal value.

Based on the above, respondents were generally consistent with IAS 36's value in use requirement that the growth rate should not exceed the long-term average growth rate for the products, industries, or countries in which the entity operates, or for the market in which the asset is used, unless a higher rate can be justified.

Question 7: If you estimated value in use in your latest analysis, what was your terminal year growth assumption?

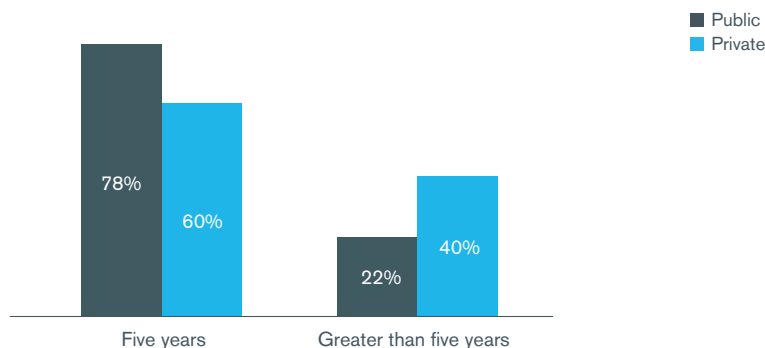
N=37



Exit multiples and terminal year growth rates are linked. A robust exit multiple analysis would include a calculation of the implied growth rate to assess whether such rate can be justified.

Question 8: If you estimated value in use in your latest analysis, what was the length of your projection period?

N=37



Value in Use Projection Period

The majority of respondents (78% public and 60% private) used a five-year projection period in their latest value in use analysis.

Approximately 40% of the private company respondents used projections greater than five years. IAS 36 requires that value in use projections cover a maximum period of five years, unless a longer period can be justified. This is another nuance of the IAS 36 impairment test that companies should be aware of.

Survey Results

Pre-tax or Post-tax Analysis

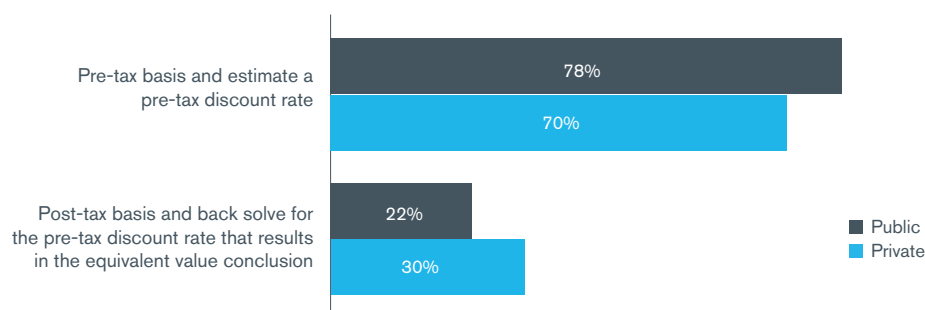
Approximately 76% of all survey respondents that estimated value in use did so by estimating a pre-tax discount rate and applying it to pre-tax projections (78% of public and 70% of private companies). In the basis for conclusions, IAS 36 states that both a pre-tax and post-tax analysis should give the same result. IAS 36 provides an example of an iterative computation that begins with a post-tax analysis and then solves for the pre-tax rate that provides the same outcome.

In contrast, the prevalent approach observed in the 2013 Survey is likely the result of the recent transition to IFRS and the adoption of a new impairment model.

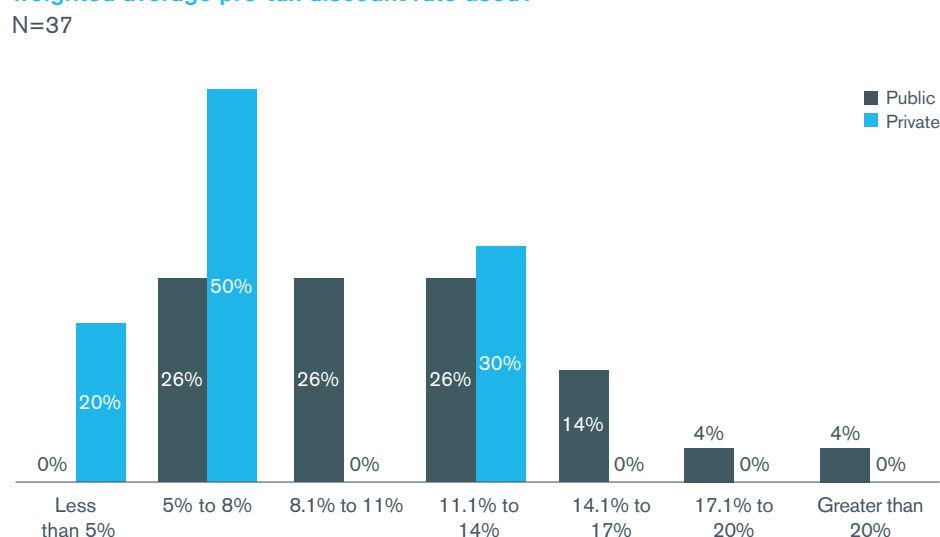


Three-quarters of respondents estimate a pre-tax discount rate for value in use, however IAS 36 provides an example of an iterative computation that begins with post-tax cash flows and a post-tax discount rate.

Question 9: When estimating value in use, do you perform the analysis on a: N=37



Question 10: If you estimated value in use in your latest analysis, what was the weighted average pre-tax discount rate used? N=37



70% of private company respondents applied a pre-tax discount rate of 8% or less, with 20% using a pre-tax rate lower than 5%.

Value in Use Pre-Tax Discount Rate

Public company respondents exhibited a wide distribution of discount rates when estimating value in use. In contrast, the majority (70%) of private companies applied a pre-tax discount rate of 8% or less.

Pre-tax discount rates are derived from post-tax analyses, per IAS 36. In that the iterative process should result in similar outcomes for pre-tax and post-tax analyses, pre-tax discount rates should be greater than a CGU's after-tax weighted average cost of capital.

In this context, the majority of the private companies in the survey may be understating the discount rate applied to estimate value in use and thereby increasing the recoverable amount conclusion, which has a direct impact on their goodwill impairment testing result. Note that these observations assume that the analyses have been conducted using nominal (rather than real) interest rates.

Survey Results



Approximately half of public companies made adjustments to the discount rate for the specific characteristics of the respective CGUs.

Discount Rates

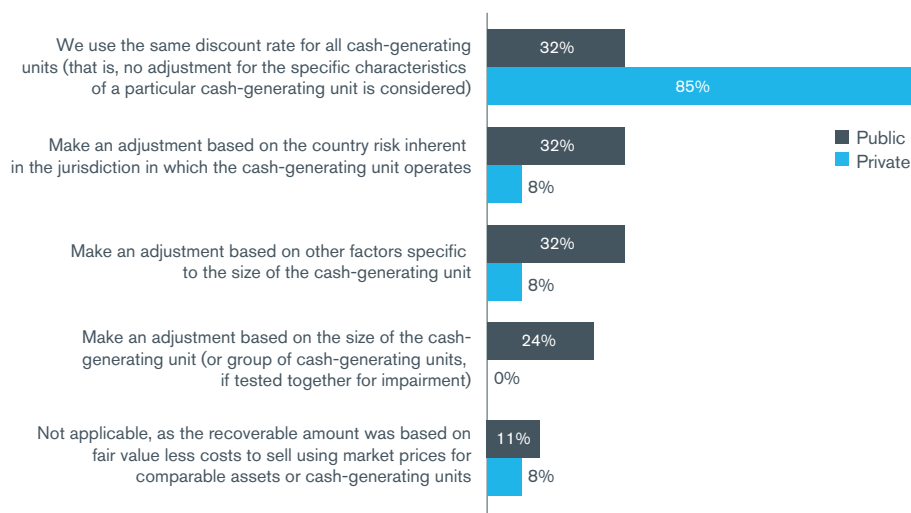
Public companies considered a wider array of attributes in their determination of the discount rates applied in a Discounted Cash Flow method.

Unlike public companies, private companies did not consider developing discount rates to be a significant challenge (see Question 1). In addition, as shown on this page, 85% of private companies indicated that a single discount rate was used, irrespective of the specific risk profile of each cash-generating unit. Although it is possible that those respondents incorporate risk factors directly into the cash flow projections, in our experience that is not the approach most commonly used.

Approximately half of public company respondents make some sort of an adjustment to the discount rate for specific characteristics of a cash-generating unit, which gives recognition to the fact that the subject of impairment testing (the unit of account in IAS 36) is the cash-generating unit and not the entity in the aggregate.

Question 11: How do you incorporate the specific characteristics of a cash-generating unit when determining the discount rate to apply in the Discounted Cash Flow method?

N=50



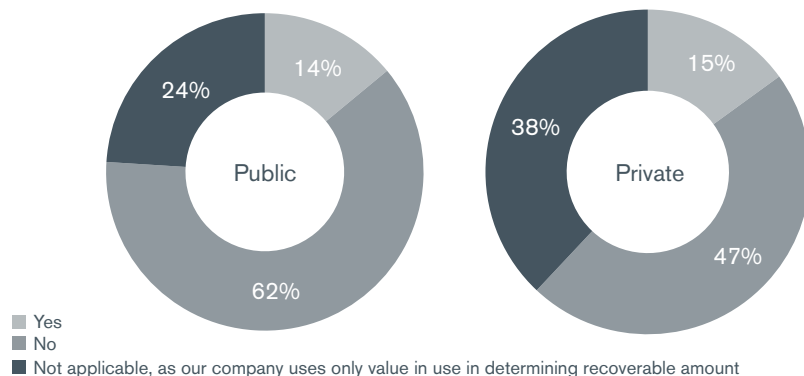
Percentage of respondents

Note: Respondents were allowed to select more than one response

IFRS 13 (Appendix B) provides guidance on the application of present value techniques, which would include the Discounted Cash Flow method. Present value techniques differ in how they adjust for risk and the types of cash flows they use. Using a very low discount rate, all else equal, implies that risk has been directly reflected in the cash flows.

Question 12: If you estimate fair value less costs to sell, do you expect your impairment testing process to change as a result of the new guidance in IFRS 13 for measuring fair value?

N=50



IFRS 13 and Other IASB Guidance

The majority of respondents (62% of public and 47% of private) that use fair value less cost of disposal do not expect the recently effective fair value guidance under IFRS 13 to change their testing process.

Survey Results

Current IFRS13 Practices are Expected to Continue Unchanged

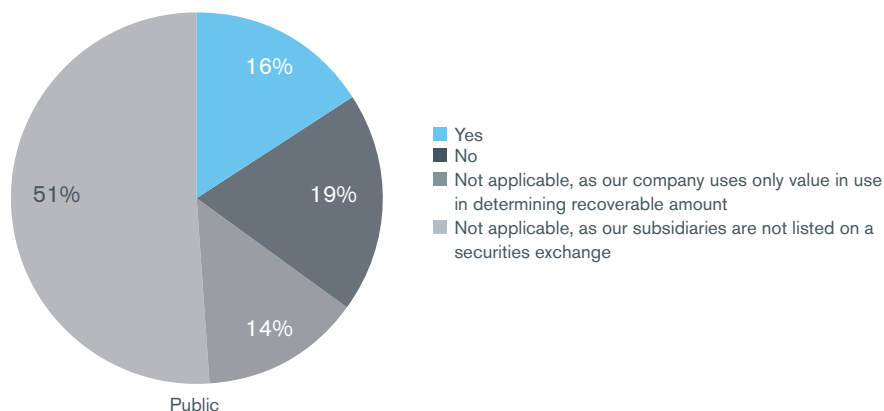
A very small percentage of respondents (16%) believe that the IASB “unit of account” proposal will result in a change in practice in measuring fair value less costs of disposal.



One would not expect a company to recognize a goodwill impairment simply because its market-to-book ratio is less than 1.0, but it would be difficult to justify not doing so if that situation remained prolonged and is deemed to be an indication of systemic issues at the company.

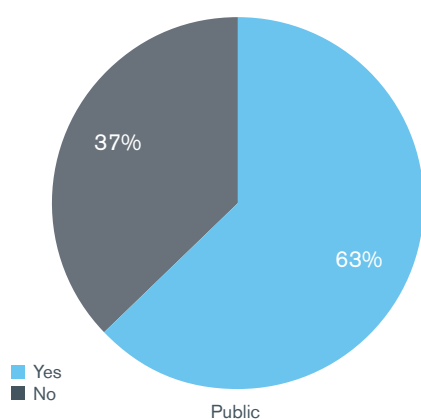
Question 13: The IASB recently decided (subject to a public consultation) that if a subsidiary is listed and its shares are actively traded, the fair value less costs to sell of its cash-generating units would be determined using the product of the quoted share price times the number of shares held by the parent (PxQ). Do you expect this to affect how you measure fair value less costs to sell when testing for goodwill impairment?

N=37



Question 14: When testing goodwill for impairment do you compare or reconcile the aggregate recoverable amount (on a net asset basis) with the market capitalization as a check for reasonableness?

N=35



Comparisons to Market Capitalization

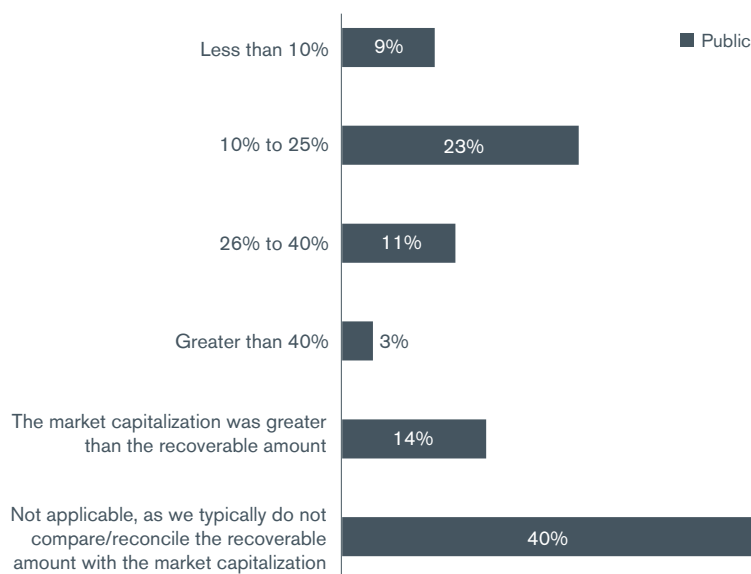
The majority of the public company respondents (63%) did reconcile the aggregate recoverable amount with their market capitalization. This is consistent with guidance on this subject recently issued in the U.S.

The American Institute of Certified Public Accountants (AICPA) recently published an Accounting and Valuation Guide: *Testing Goodwill for Impairment*. While the guide is non-authoritative and developed for U.S. GAAP impairment testing purposes, it does contain practical guidance that may be relevant to impairment testing under IAS 36. It addresses issues such as shared assets (such as corporate assets) and market participant assumptions as well as comparisons to market capitalization, all of which may need to be considered in a goodwill impairment test. The guidance promotes the view that it is a best practice to make a comparison to market capitalization and explain the reason(s) for any differences rather than just observe that a difference exists. Copies of the guide are available and can be obtained at www.cpa2biz.com.

Survey Results

Question 15: If you compared or reconciled the aggregate recoverable amount (on a net asset basis) with the market capitalization in your latest analysis, what was the implied difference (e.g. implied control premium) between the aggregate recoverable amount and your company's market capitalization?

N=35

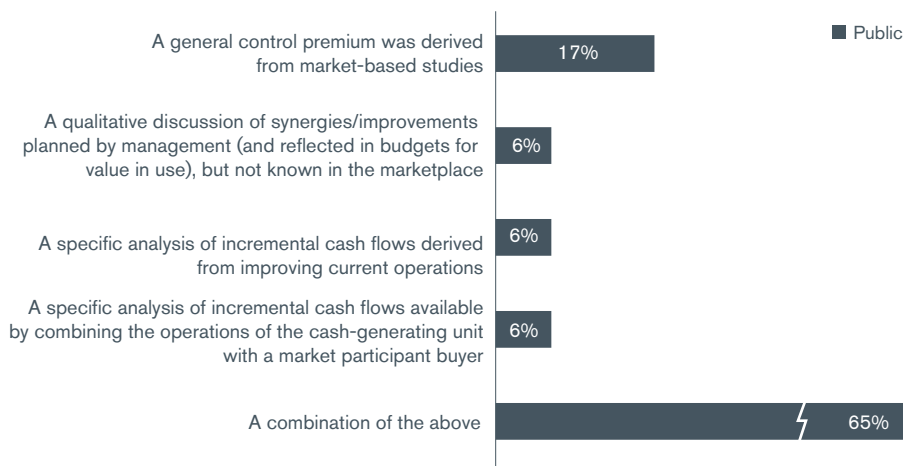


Recoverable Amount and Market Capitalization

Over one-third of public company respondents (23% + 11% + 3%) report a 10% or greater difference between recoverable amount and the company's market capitalization. Of note, 14% (11% + 3%) of respondents indicated an implied control premium in excess of 26%.

Question 16: Which approach was used to support that difference?

N=18



Supporting a Difference between Recoverable Amount and Market Capitalization

Of the public company respondents making a comparison to market capitalization, almost two-thirds (65%) indicated they used a combination of factors and information to support the difference between the aggregate recoverable amount of CGUs and their company's market capitalization.

One of the highlights of the previously mentioned Valuation Advisory Discussion Draft – *The Measurement and Application of Market Participant Acquisition Premiums* is that exclusive reliance on benchmark control premium data to derive a MPAP is not consistent with best practices.

Supporting a difference between the recoverable amount and market capitalization seems to be common practice amongst the respondents.

Survey Results

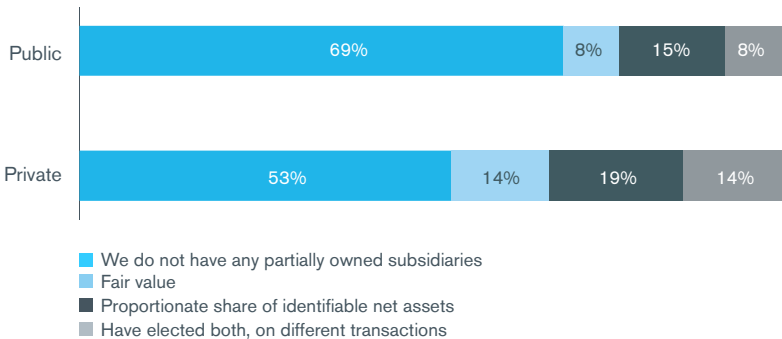
Measuring non-controlling interests in a business combination

Of the 31% of public company respondents that have partially owned subsidiaries (8% + 15% + 8%) approximately half (15% of 31%) utilized the proportionate share of identifiable net assets when measuring non-controlling interests.

Private companies were evenly split between using fair value and alternating between fair value and the proportionate share method to account for non-controlling interests.

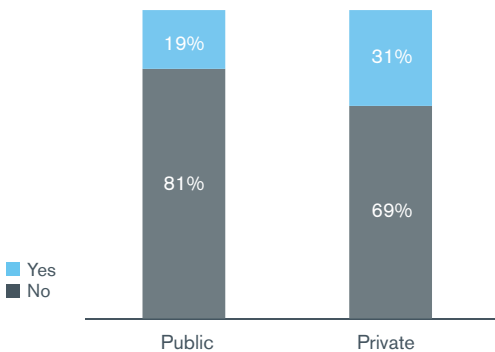
Question 17: How do you measure non-controlling interests in a business combination?

N=50



Question 18: Do you use a valuation consultant when performing goodwill impairment tests?

N=50



Valuation Consultant

The majority of respondents to the 2013 Survey (81% of public and 69% of private companies) perform their goodwill impairment testing in-house.

Survey Results

Question 19: What is your company's industry?

N=49

Public

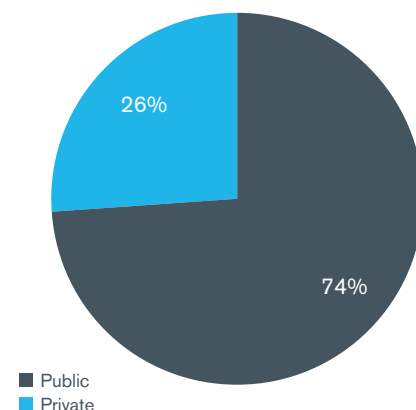
Energy/Utilities/Oil & Gas	17%
Banking/Financial Services	14%
Minerals/Mining	11%
Manufacturing	8%
Aerospace/Defense	6%
Construction/Engineering	6%
Healthcare Services	6%
Retail	6%
Telecommunications	6%
Agriculture/Forestry/Fishing/Hunting	3%
Arts/Entertainment/Media	3%
Capital Products (Equipment)	3%
Chemicals/Plastics	3%
Electronic	3%
Insurance	3%
Medical/Pharmaceutical	3%
Transportation	3%

Private

Energy/Utilities/Oil & Gas	31%
Banking/Financial Services	15%
Healthcare Services	8%
High-Tech or Software	8%
Retail	8%
Technology	8%
Telecommunications	8%
Venture Capital	8%
Wholesale	8%

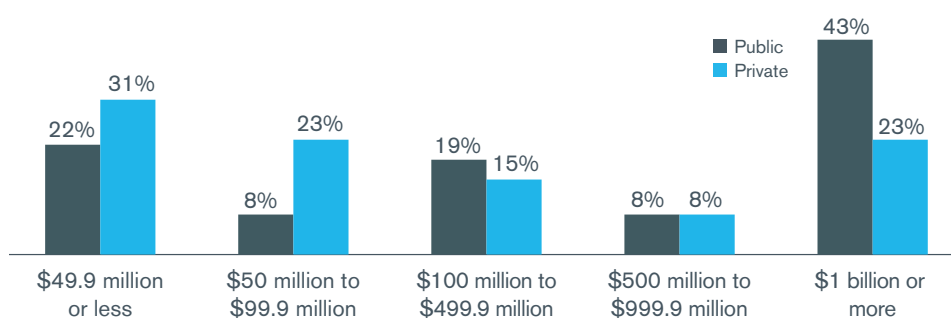
Question 21: Corporate Structure

N=50



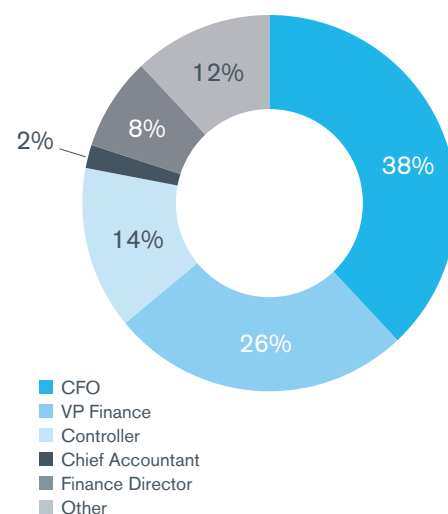
Question 20: What is the revenue for your company?

N=50



Question 22: Which best describes your title or function?

N=50



International Survey Insights

In reviewing and interpreting the results of the 2013 Canadian Survey, it is informative to consider the experience of European companies, as they have been applying IFRS for a longer period of time. Below we present a few “compare and contrast” observations between our 2013 Canadian Survey and our 2013 survey of European executives, which is part of our *2013 European Goodwill Impairment Study*.

Further, while U.S. companies report under U.S. GAAP rather than IFRS, there are a few relevant areas that lend themselves to a meaningful comparison between Canada and the U.S. Accordingly, we have also included a few “compare and contrast” observations from our 2013 survey of U.S. executives, which is part of our *2013 U.S. Goodwill Impairment Study*.

Note that (in most cases) the Canadian observations made in this section combine the responses from both public and private companies. Accordingly, most statistics presented herein will differ from those cited in the preceding Canadian Survey section.

Question 1: In general, what is your most significant challenge related to goodwill impairment testing?^{8,9}

In our 2013 European Survey we found that the most significant challenge related to goodwill impairment testing was identifying the factors that indicate that a cash-generating unit may be impaired; this was cited by two-thirds of the European respondents compared to just 26% of the Canadian survey respondents overall.

Slightly fewer European respondents cited meeting financial reporting deadlines (55%) and developing cash flow projections (54%) as key challenges; this compared to only 4% and 42% of Canadian survey respondents, respectively. Identifying cash-generating unit(s) is a less frequently cited challenge by executives in the European Survey (19%), compared to 38% in the Canadian Survey. This may be partially because European companies have been applying IAS 36 for a number of years and therefore have more experience in identifying cash-generating units.

Question 4: When determining the recoverable amount of a cash-generating unit, do you estimate value in use, fair value less costs to sell or both?

Our 2013 European Survey found that approximately 58% of survey respondents only compute fair value less costs to sell (costs of disposal) and nearly 19% more respondents do this in addition to value in use. This brings the total performing a fair value calculation as part of their impairment test to 77%.

This compares to an overall total of 58% of respondents that performed a fair value calculation as part of their impairment test in our Canadian Survey (22% relied exclusively on a fair value indication, whereas 36% calculated both value in use and fair value less costs to sell (costs of disposal).

Question 6: If in your latest analysis the recoverable amount of a cash-generating unit was based on value in use, which factor(s) led to value in use being higher than fair value less costs to sell?

Of the 2013 European Survey respondents that relied on value in use to determine recoverable amount, 69% believed that the market was underpricing their company. In contrast, only 35% of Canadian public company respondents thought that their shares were being underpriced. The second most frequently cited factor for the European Survey (48%) and the most cited for public Canadian respondents (38%) was the expectation for achieving synergies not available to market participants.

Question 7: If you estimated value in use in your latest analysis, what was your terminal year growth assumption?

The majority of respondents to our 2013 European Survey, consistent with respondents to our Canadian Survey, used a long-term growth rate based on the long-term inflation rate (48% and 43%, respectively). Likewise, a similar percentage of respondents used an exit multiple: 29% in Europe and 30% of respondents in Canada overall.

Question 9: When estimating value in use, do you perform the analysis on a pre-tax or post-tax basis?

According to our 2013 Canadian Survey, 76% of respondents overall perform the analysis on a pre-tax basis and estimate a pre-tax rate. In our 2013 European Survey, we found the inverse where the majority of respondents (71%) perform the analysis on a post-tax basis and back solve for the pre-tax discount rate.

8. These questions cross-reference to the respective questions in our 2013 Canadian Survey (refer to section entitled “Survey Results” in this document).

9. Note that respondents were allowed to select more than one response on this and certain other questions, as indicated in the detailed 2013 Canadian Survey pages.

International Survey Insights

Question 10: If you estimated value in use in your latest analysis, what was the weighted average pre-tax discount rate used?

Approximately 42% of our 2013 European Survey respondents computing value in use applied a discount rate between 11.1% and 14%, which compares to 27% of Canadian survey respondents overall.

Notably, 32% of Canadian respondents overall applied pre-tax discount rates ranging from 5% and 8%; meanwhile no European respondents applied pre-tax rates below 8.1%.

Question 15: If you compared or reconciled the aggregate recoverable amount (on a net asset basis) with the market capitalization in your latest analysis, what was the implied difference (e.g., implied control premium) between the aggregate recoverable amount and your company's market capitalization?

Only 60% of our 2013 Canadian Survey public company respondents reconcile the aggregate recoverable amount (on a net asset basis) to market capitalization, compared to 79% of respondents to our 2013 European Survey.

Another notable difference is that the vast majority of European respondents tend to have lower implied control premiums compared to those in the Canadian Survey. Specifically, 30% of European respondents reported a difference to market capitalization of less than 10%, with another 33% reporting an implied control premium between 10% and 25%; this compares to 9% and 23% of Canadian respondents, respectively.

The overall takeaway seems to be that European respondents' recoverable amounts more closely track market capitalization.

Question 16: Which approach was used to support that difference [between the aggregate recoverable amount on a net asset basis and the market capitalization]?

European Experience: Nearly twice as many Canadian Survey respondents (17%) relied on general market-based studies to support the implied control premium compared to European Survey respondents (9%). However, the majority of Canadian survey respondents (65%) used a combination of analytical methods in conjunction with general market-based studies compared to only 22% of European respondents. The European Survey respondents tended to rely more on specific analysis of incremental cash flows alone (43% in aggregate).

U.S. Experience: While a comparison to market capitalization is not required, in the U.S. this has long been considered to be a best practice. Interestingly, as our 2013 U.S. Survey revealed, 51% of U.S. public company respondents relied on general market-based studies to support the implied control premium, while 21% used a combination of analytical methods (cash flow analysis) in conjunction with general market-based studies; this contrasts with respectively 17% and 65% in our Canadian Survey. As noted in the MPAP discussion, relying *solely* on market-based studies to support an implied premium may no longer be considered a best practice, and therefore we expect the observed trends in the U.S. to change.

Question 17: How do you measure non-controlling interests in a business combination?

If we exclude those who did not have any partially-owned subsidiaries, a similar share of respondents to our 2013 European Survey and our 2013 Canadian Survey measure non-controlling interests at the proportionate share of identifiable net assets (40% and 42%, respectively).

European respondents tend to use both fair value and the proportionate share method more often than Canadian respondents (respectively 37% and 29%, excluding respondents without partially-owned subsidiaries).

The remainder of the survey respondents with partially-owned subsidiaries relied exclusively on fair value (23% in Europe and 29% in Canada).

Question 18: Do you use a valuation consultant when performing goodwill impairment tests?

More than twice as many 2013 U.S. Survey respondents from public companies used a valuation consultant when performing goodwill impairment tests compared to our 2013 Canadian Survey respondents (46% and 19%, respectively).

In contrast, this ratio was similar for private companies, whereby 27% of U.S. respondents and 31% of Canadian respondents used a valuation consultant.

Summary Statistics by Industry

(Table 1)

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

Industries are listed in descending order of their total GWI amounts for 2012. For example Consumer Discretionary tops the list with its \$3.3 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:



71% of Consumer Discretionary companies carried goodwill in 2012

71% 29%

29% of those companies recorded an impairment.

Goodwill Impairments

The first row of Table 1 data for each industry presents the annual dollar amounts of GWI (in millions), immediately followed by the number of impairment events (shown in parentheses). The statistics presented are based on financial statements filed under Pre-changeover GAAP for 2008 and 2009, and under IFRS for 2010 through 2012.

For presentation purposes, we have combined both the actual 2010 GWI restated under IFRS (\$2.9 billion) and the IFRS transition date GWI (\$5.5 billion), for

a total 2010 GWI of \$8.4 billion. For a description of how these figures were derived, refer to Appendix 2.

Due to the cumulative effects of IFRS transition, 2010 saw a \$5.4 billion increase in aggregate GWI, with the largest increase (\$5.1 billion) observed in Financials, reaching \$6.2 billion.

In 2011, Consumer Discretionary and Materials combined had the largest aggregate amount of GWI, at \$9.3 billion out of \$11.0 billion in total goodwill impaired.

Consumer Discretionary remained the top industry for GWIs in 2012, recognizing \$3.3 billion of GWI (41% of the total) over 12 impairment events. The largest impairment event of the year (\$3.0 billion) also took place in the Consumer Discretionary segment.

In 2012, 8 out of 10 industries showed an increase in the number of GWI events, which contributed to an overall increase in events from 36 to 52. Interestingly, the total dollar value of impairments decreased, resulting in a decline in the average impairment amount.

Percent of Companies that Recorded a GWI

The second row in Table 1 indicates the portion of all companies within each industry that recorded a GWI. In 2012, Consumer Discretionary had the largest percentage of companies that impaired goodwill (20.7%)



Consumer Discretionary and Materials more than quadrupled the number of companies actually recording a GWI from 2010 to 2012 (from 4 events up to 17 events from 2010 to 2012).

followed by Telecommunication Services (14.3%) and Healthcare (13.5%). The average percentage across all industries increased from 5.8% to 8.4% in 2012.

Percent of Companies with Goodwill

Obviously, companies that do not carry goodwill on their books are not susceptible to a GWI; therefore, for perspective, the third row in Table 1 provides the proportion of companies with goodwill within each industry. Over the 2008-2012 time period, Telecommunications Services had the highest percent of companies with goodwill in any given year (100% each year); while Materials had the lowest proportion (13.8% on average). Overall, approximately 45% of the companies carried some amount of goodwill on their 2012 balance sheets; this metric has remained relatively stable over the past 5 years.

Percent with Goodwill Recording a GWI

The final row indicates the percentage of the companies with goodwill that recorded a GWI. This differs from the second row where the percentages are based on all companies and is not limited to those with goodwill.

Consumer Discretionary and Materials continued with a notable upward trend from 2010 in the proportion of companies recognizing a GWI, reversing annual declines from 2008 to 2010. Healthcare has also shown a dramatic increase from 2010 to 2012.

Overall, industry average impairment percentages ranged from 11.9% to 28.9% of companies with goodwill during the 5-year period.

2012 Goodwill Impairment

(Table 1)

	2008 (GAAP)	2009 (GAAP)	2010 (IFRS)	2011 (IFRS)	2012 (IFRS)	
Goodwill Impairments: \$ millions (number of events) Percent of Total Companies That Recorded GWI Percent of Companies with Goodwill Percent of Companies with Goodwill that Recorded a GWI						Companies with GW Percent Recording GWI
Consumer Discretionary (58)	2,582.4 (12) 18.2% 65.2% 27.9%	1,293.3 (7) 10.6% 65.2% 16.3%	27.4 (3) 4.5% 68.2% 6.7%	6,257.8 (9) 13.6% 65.2% 20.9%	3,272.8 (12) 20.7% 70.7% 29.3%	71% 29%
Materials (204)	3,343.0 (14) 7.1% 13.7% 51.9%	52.6 (3) 1.5% 13.2% 11.5%	3.4 (1) 0.5% 13.2% 3.8%	3,022.7 (3) 1.5% 13.7% 11.1%	3,214.0 (5) 2.5% 15.2% 16.1%	15% 16%
Energy (117)	973.8 (20) 16.9% 42.4% 40.0%	95.1 (5) 4.2% 39.0% 10.9%	1,870.0 (16) 13.6% 41.5% 32.7%	121.8 (7) 5.9% 40.7% 14.6%	474.4 (8) 6.8% 38.5% 17.8%	38% 18%
Industrials (74)	1,048.6 (18) 25.7% 68.6% 37.5%	311.0 (7) 10.0% 70.0% 14.3%	85.1 (5) 7.1% 68.6% 10.4%	554.0 (6) 8.6% 71.4% 12.0%	356.9 (7) 9.5% 71.6% 13.2%	72% 13%
Financials (44)	1,118.1 (2) 3.9% 54.9% 7.1%	1,077.3 (2) 3.9% 54.9% 7.1%	6,187.0 (5) 9.8% 54.9% 17.9%	972.0 (2) 3.9% 56.9% 6.9%	243.5 (5) 11.4% 56.8% 20.0%	57% 20%
Consumer Staples (26)	20.3 (1) 3.4% 86.2% 4.0%	85.1 (4) 13.8% 86.2% 16.0%	135.8 (3) 10.3% 82.8% 12.5%	8.6 (2) 6.9% 86.2% 8.0%	170.9 (3) 11.5% 84.6% 13.6%	85% 14%
Telecomm. Services (7)	154.0 (1) 14.3% 100.0% 14.3%	0.0 (0) 0.0% 100.0% 0.0%	14.1 (1) 14.3% 100.0% 14.3%	36.0 (2) 28.6% 100.0% 28.6%	67.0 (1) 14.3% 100.0% 14.3%	100% 14%
Healthcare (37)	9.9 (2) 5.7% 28.6% 20.0%	53.6 (2) 5.7% 25.7% 22.2%	34.1 (2) 5.7% 28.6% 20.0%	55.6 (3) 8.6% 25.7% 33.3%	45.1 (5) 13.5% 27.0% 50.0%	27% 50%
Information Technology (39)	1,135.5 (7) 18.4% 73.7% 25.0%	25.5 (2) 5.3% 76.3% 6.9%	1.6 (1) 2.6% 78.9% 3.3%	4.6 (1) 2.6% 78.9% 3.3%	40.0 (5) 12.8% 82.1% 15.6%	82% 16%
Utilities (10)	43.3 (1) 10.0% 40.0% 25.0%	0.0 (0) 0.0% 60.0% 0.0%	58.3 (2) 20.0% 70.0% 28.6%	7.7 (1) 10.0% 80.0% 12.5%	19.3 (1) 10.0% 90.0% 11.1%	90% 11%
Total* (616)	10,428.9 (78) 12.6% 43.5% 28.9%	2,993.4 (32) 5.2% 43.2% 11.9%	8,416.8 (39) 6.3% 44.1% 14.2%	11,040.8 (36) 5.8% 44.4% 13.0%	7,903.9 (52) 8.4% 44.6% 18.9%	45% 19%
Average (Median) Impairment	134 (27)	94 (21)	216 (14)	307 (23)	152 (15)	

*Amounts shown are aggregates. Differences due to rounding.

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).

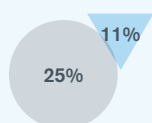
Goodwill intensity, defined here as goodwill as a percentage of total assets (GW/TA), measures the proportion of an industry's total assets represented by goodwill. Since goodwill arises as a result of a business combination, goodwill intensity is greater in industry sectors with significant M&A activity.

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.

Goodwill impairments to total assets (GWI/TA), the second loss intensity measure, quantifies the percent of an industry's total asset base that was impaired.



Goodwill of Consumer Discretionary companies represents 25% of total assets.



Goodwill impairments in 2012 made up 11% of the goodwill carrying amount.

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

Goodwill Intensity

Goodwill to Total Assets (GW/TA) is illustrated in the first row of Table 2 for each industry over time, with 2012 also being highlighted in the gray circle to the right. Aggregate goodwill as a percentage of total assets for Canadian companies (across all industries) was approximately 3% to 4% over the years. However, this ratio can vary significantly, for example in 2010 it ranged from 1.1% for Financials to 36.9% for Information Technology companies. Information Technology and Consumer Discretionary industries continued to exhibit the highest goodwill intensity during the 5-year period.

Although goodwill intensity has been fairly stable, certain industries have shown a recent upward trend. Information Technology, Utilities and, more recently, Consumer Staples have notable increases. The rest of the industries have remained somewhat constant, with Consumer Discretionary, Materials and Healthcare showing some decline.

Goodwill Impairment to Goodwill

The second row of Table 2 presents the first measure of loss intensity (GWI/GW) recognized for each industry over the 5-year period, with 2012 metrics highlighted in the triangle portion of the graphic to the right.

Removing the effect of the global financial crisis in 2008, goodwill impairments by Canadian companies have represented a relatively small proportion of the overall goodwill carried on the books. In 2012, Materials showed the highest GWI/GW loss measure at 14.3%, followed by Consumer Discretionary at 10.9%.

Goodwill Impairments to Total Assets

The second measure of loss intensity is presented in the third row of Table 2 for each industry. Notably, goodwill impairment charges have a relatively small impact on a company's total asset base, although companies with higher goodwill intensity may show a more significant effect.

2012 Goodwill Impairment (Table 2)

	2008 (GAAP)	2009 (GAAP)	2010 (IFRS)	2011 (IFRS)	2012 (IFRS)	
	Goodwill Intensity (GW/TA) Loss Intensity (1) (GWI/GW) Loss Intensity (2) (GWI/TA)					
(Companies)						
Consumer Discretionary (58)	34.0% 10.1% 2.6%	31.1% 3.2% 1.1%	30.4% 0.1% 0.0%	26.2% 17.8% 5.4%	24.6% 10.9% 2.9%	
Materials (204)	8.1% 27.9% 2.5%	7.2% 0.4% 0.0%	8.6% 0.0% 0.0%	8.4% 16.5% 1.4%	6.7% 14.3% 1.2%	
Energy (117)	4.6% 8.6% 0.4%	4.6% 0.7% 0.0%	4.6% 14.9% 0.7%	3.6% 0.9% 0.0%	3.4% 4.5% 0.2%	
Industrials (74)	9.4% 13.5% 1.2%	9.5% 4.1% 0.4%	10.0% 1.1% 0.1%	9.5% 6.7% 0.7%	9.8% 4.7% 0.4%	
Financials (44)	1.9% 2.3% 0.0%	1.9% 1.7% 0.0%	1.7% 9.8% 0.2%	1.4% 1.6% 0.0%	1.1% 0.5% 0.0%	
Consumer Staples (26)	14.8% 0.2% 0.0%	15.4% 0.8% 0.1%	15.3% 1.2% 0.2%	14.5% 0.1% 0.0%	16.0% 1.5% 0.3%	
Telecomm. Services (7)	16.8% 1.0% 0.2%	17.3% 0.0% 0.0%	17.3% 0.1% 0.0%	19.1% 0.2% 0.0%	18.4% 0.4% 0.1%	
Healthcare (37)	16.8% 2.7% 0.4%	13.8% 10.7% 1.8%	13.9% 8.4% 1.2%	12.7% 13.4% 1.9%	8.8% 9.5% 0.9%	
Information Technology (39)	20.6% 32.9% 9.2%	22.9% 0.9% 0.2%	23.9% 0.1% 0.0%	24.9% 0.1% 0.0%	36.9% 1.1% 0.3%	
Utilities (10)	1.3% 12.4% 0.2%	2.2% 0.0% 0.0%	2.7% 7.7% 0.2%	2.8% 0.8% 0.0%	4.1% 0.4% 0.1%	
Total* (616)	3.9% 7.7% 0.3%	3.8% 1.8% 0.1%	3.7% 5.2% 0.2%	3.1% 6.6% 0.2%	2.7% 5.1% 0.2%	

*Amounts shown are aggregates. Differences due to rounding.

Industry Spotlights

In contrast to Tables 1 and 2, the Industry Spotlights provide a summary of the 2012 statistics for the respective industries.

We selected 5 Industry Spotlights for the 2013 Study: i) Energy, ii) Materials, iii) Financials, iv) Consumer Discretionary and v) Information Technology. We also present a 2012 Composite Industry Spotlight for all the companies included in the Study. 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

The three largest impairment events of the year were in the Consumer Discretionary and Materials industries. Absent those two events, GWI would have been of relatively similar magnitude for 2011 and 2012.

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 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 a goodwill impairment. Cash-generating unit structures, their respective performance, and where the goodwill resides are a few of the critical factors that must be considered in the impairment testing process.

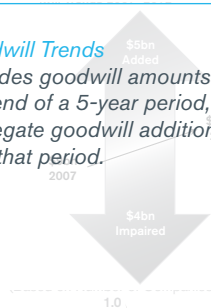
Nevertheless, companies with a low market-to-book ratio would be at a greater risk of impairment. Overall, approximately one-third of Canadian companies had a market-to-book ratio lower than 1.0 in 2012. (See Composite Industry Spotlight).

Guide

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

Goodwill Trends

Provides goodwill amounts at the beginning and end of a 5-year period, as well as the aggregate goodwill additions and impairments over that period.



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 on its own, companies with a low market-to-book ratio may be at a greater risk of impairment.

Size of Industry

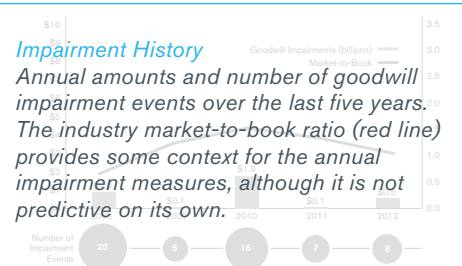
Represents the size of the industry relative to the combined size of all the companies included in the Study sample, measured in terms of market capitalization.

Top 3 Industry Goodwill Impairments

Highlights the concentration of the top 3 impairments recorded in the industry in 2012.

Impairment History

Annual amounts and number of goodwill impairment events over the last five years. The industry market-to-book ratio (red line) provides some context for the annual impairment measures, although it is not predictive on its own.

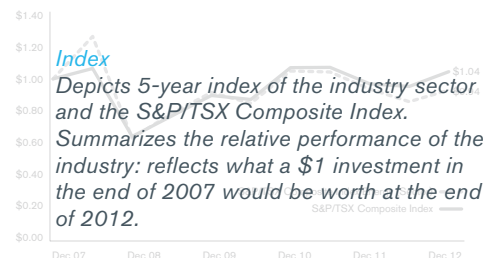


Summary Statistics

2012 Goodwill Intensity (GWI/TA): 3.4%, Goodwill Impairment to Goodwill (GWI/GW): 4.5%, Companies with Goodwill, and Percent of Companies with Goodwill that recorded a Goodwill Impairment are depicted here and also in Table 2 elsewhere in the Study.

Index

Depicts 5-year index of the industry sector and the S&P/TSX Composite Index. Summarizes the relative performance of the industry: reflects what a \$1 investment in the end of 2007 would be worth at the end of 2012.

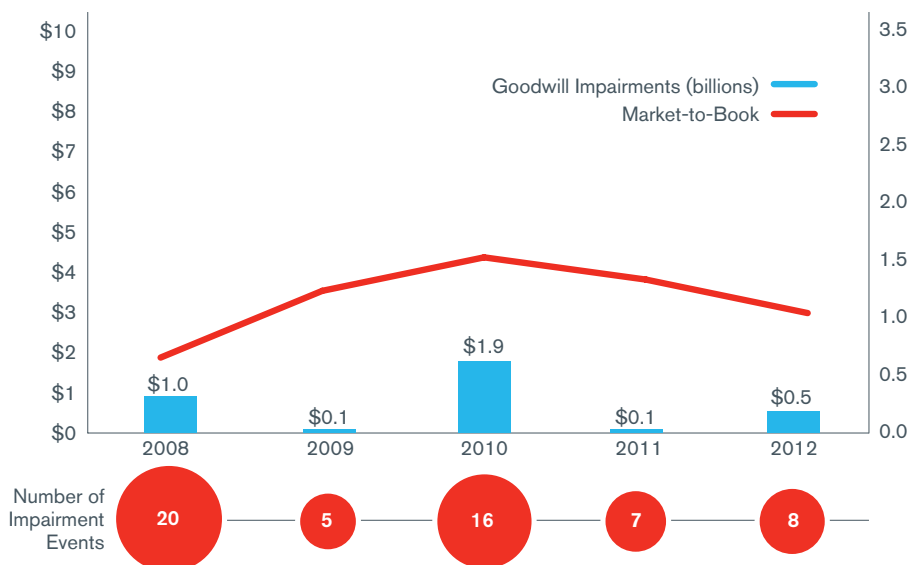
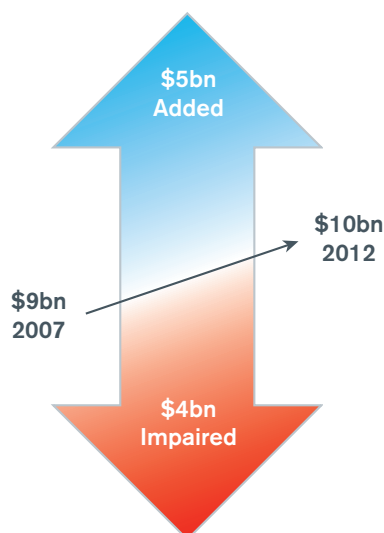


2012 Industry Spotlight

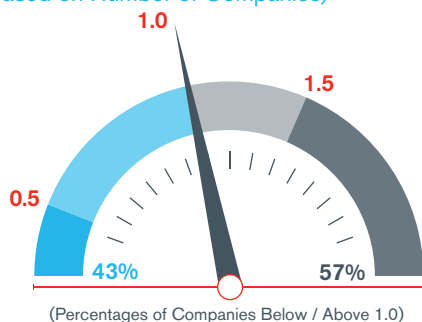
Energy

GICS Code 10

Goodwill Trends 2007–2012



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



117
Companies

3.4%
Goodwill to Total Assets
(GW/TA)

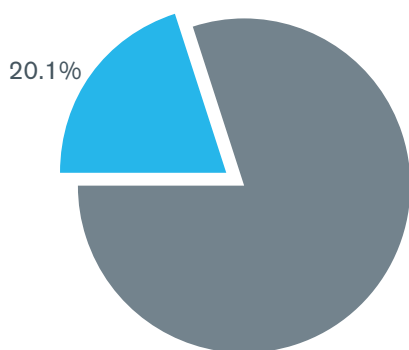
4.5%
Percent of Goodwill
Impaired (GWI/GW ratio)

38.5%
Companies with
Goodwill

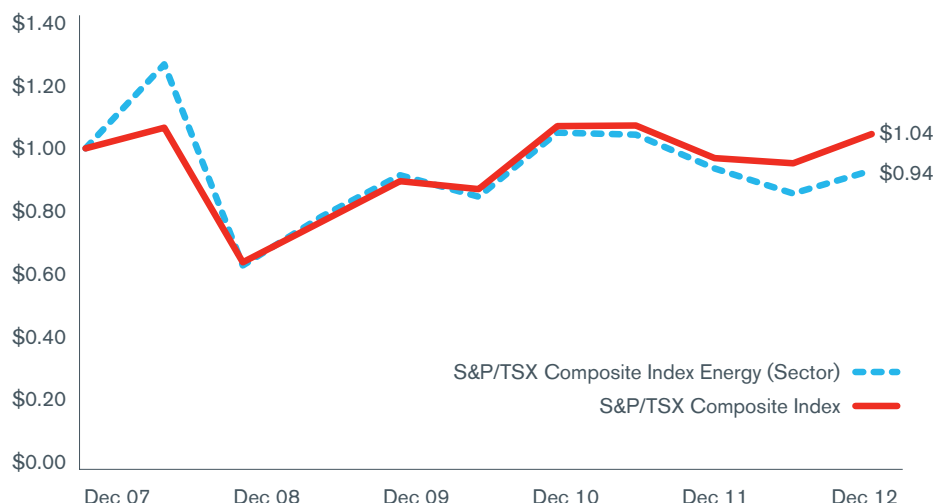
17.8%
Percent of Companies
with Goodwill that
Recorded a Goodwill
Impairment in 2012

1.1
Market-to-Book Ratio
(median)

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



Index (Year End 2007 = \$1)



Top 3 Industry Goodwill Impairments (in millions)

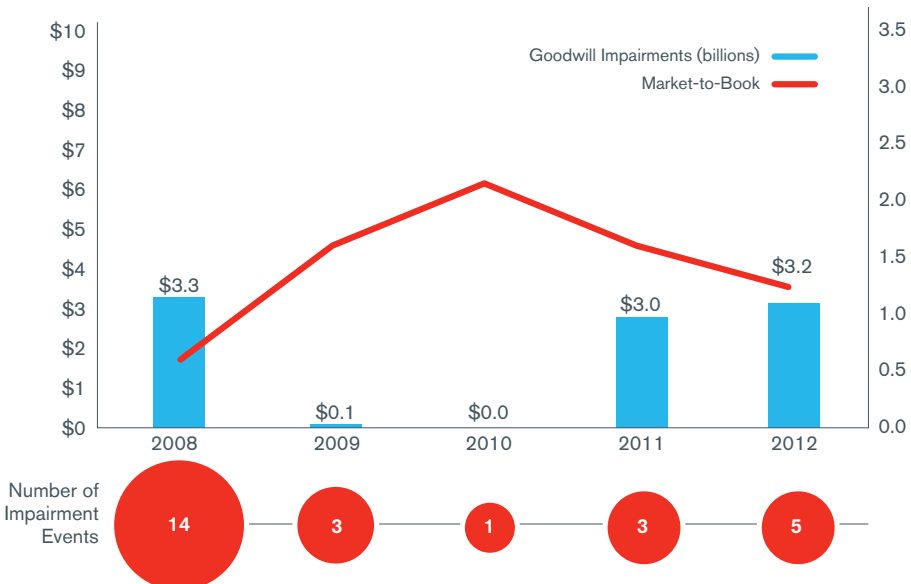
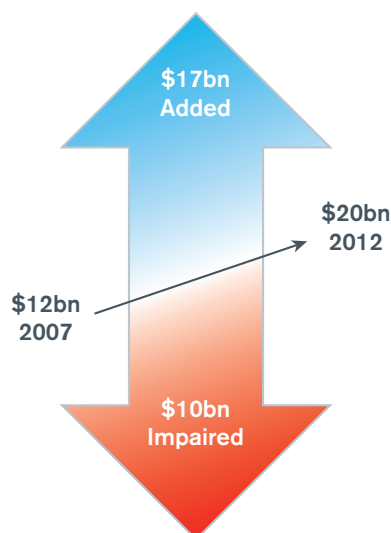
Cenovus Energy Inc.	\$393
Precision Drilling Corporation	\$53
ProSep Inc.	\$13

2012 Industry Spotlight

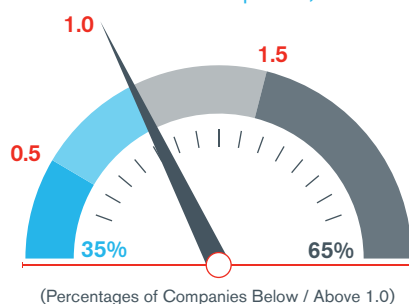
Materials

GICS Code 15

Goodwill Trends 2007–2012



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



204
Companies

6.7%
Goodwill to Total Assets
(GW/TA)

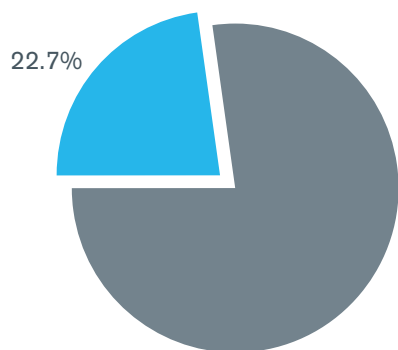
14.3%
Percent of Goodwill
Impaired (GWI/GW ratio)

15.2%
Companies with
Goodwill

16.1%
Percent of Companies
with Goodwill that
Recorded a Goodwill
Impairment in 2012

1.3
Market-to-Book Ratio
(median)

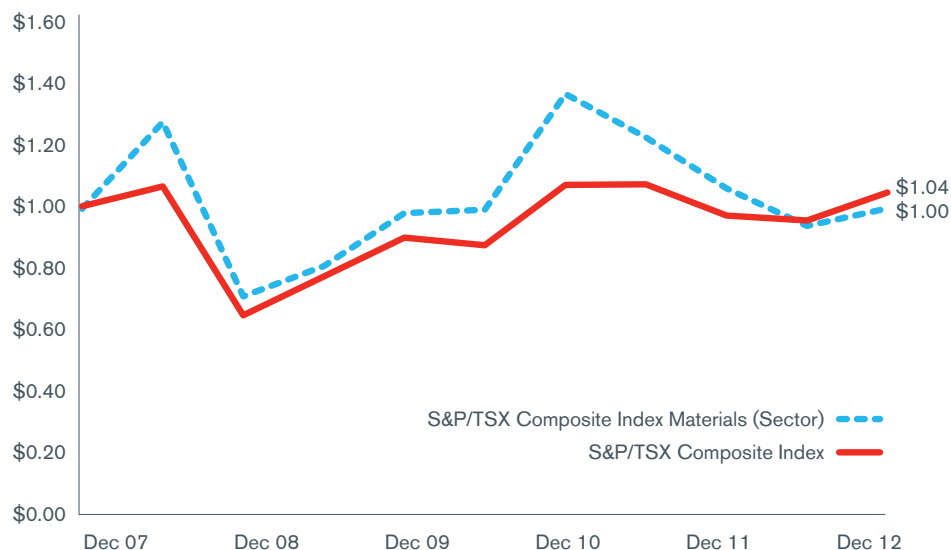
Size of Industry (Relative to Study's Total Market Cap)



Top 3 Industry Goodwill Impairments (in millions)

Kinross Gold Corporation	\$2,242
Barrick Gold Corporation	\$796
AuRico Gold Inc.	\$127

Index (Year End 2007 = \$1)

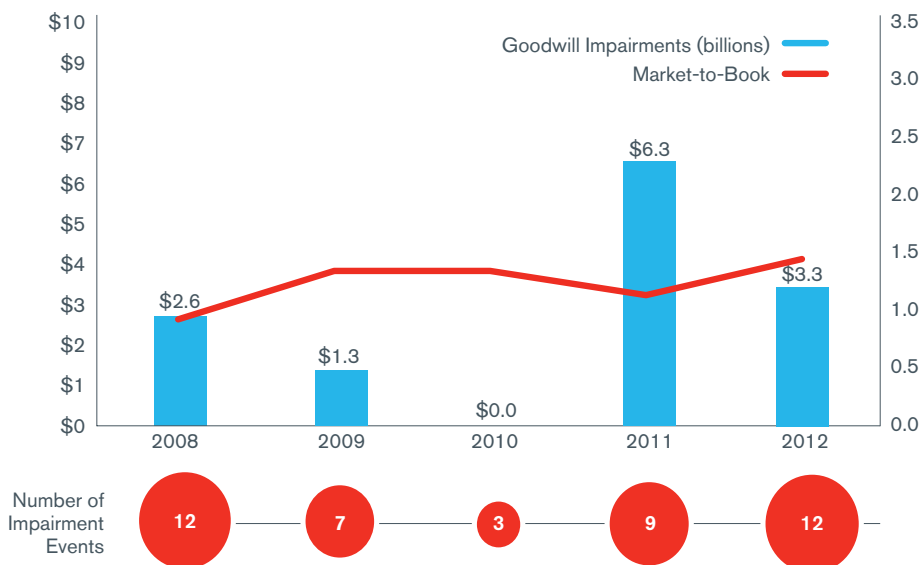
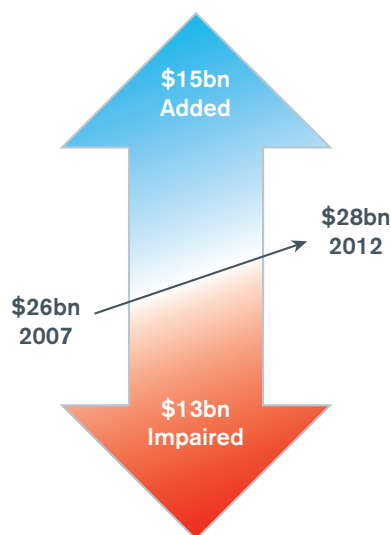
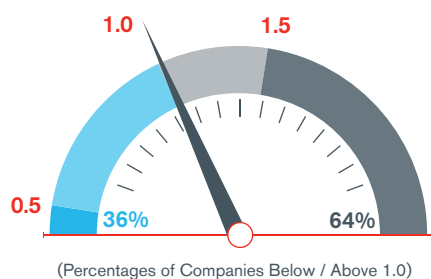
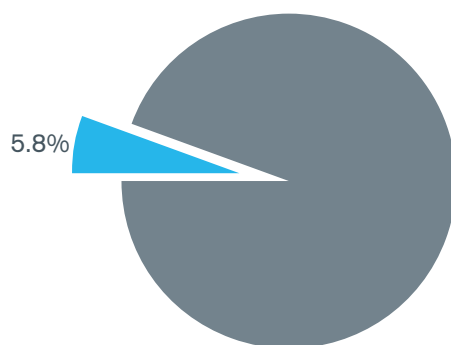


2012 Industry Spotlight

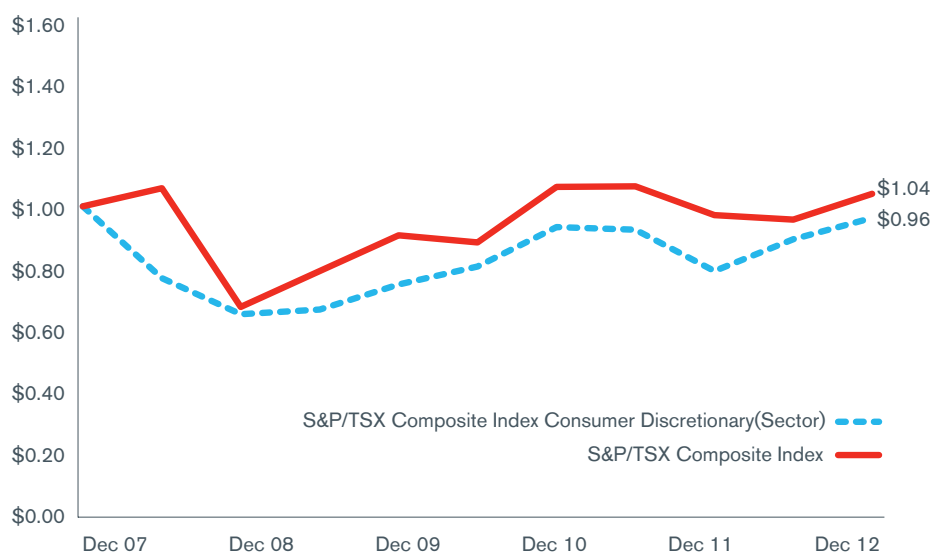
Consumer Discretionary

GICS Code 25

Goodwill Trends 2007–2012

Market-to-Book Ratio Distribution
(Based on Number of Companies)58
Companies24.6%
Goodwill to Total Assets
(GW/TA)10.9%
Percent of Goodwill
Impaired (GWI/GW ratio)70.7%
Companies with
Goodwill29.3%
Percent of Companies
with Goodwill that
Recorded a Goodwill
Impairment in 20121.4
Market-to-Book Ratio
(median)Size of Industry
(Relative to Study's Total Market Cap)

Index (Year End 2007 = \$1)



Top 3 Industry Goodwill Impairments (in millions)

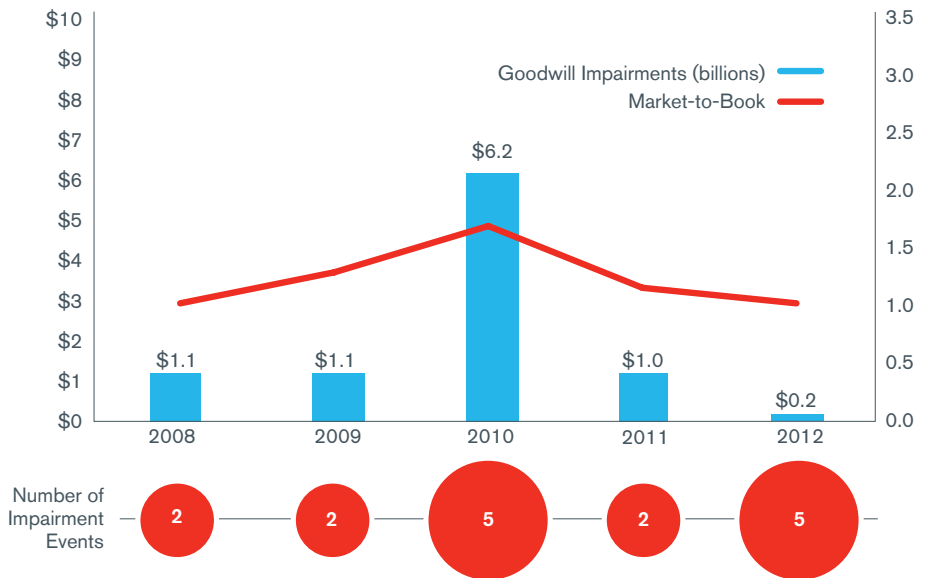
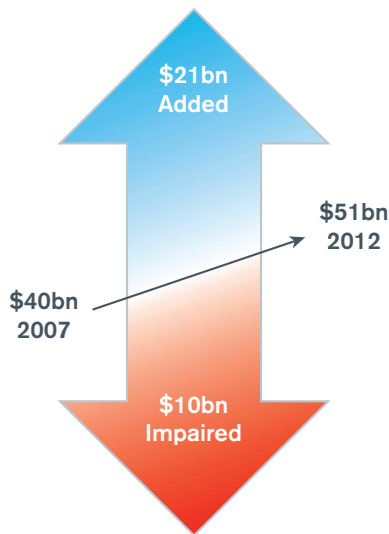
Yellow Media Limited	\$2,968
Quebecor Inc.	\$172
Zongshen PEM Power Systems Inc.	\$43

2012 Industry Spotlight

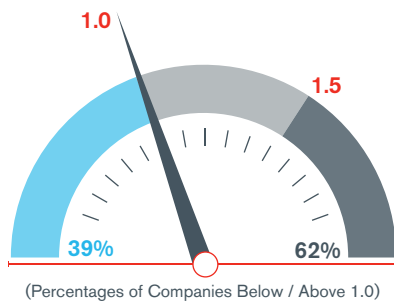
Financials

GICS Code 40

Goodwill Trends 2007–2012



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



44
Companies

1.1%
Goodwill to Total Assets
(GW/TA)

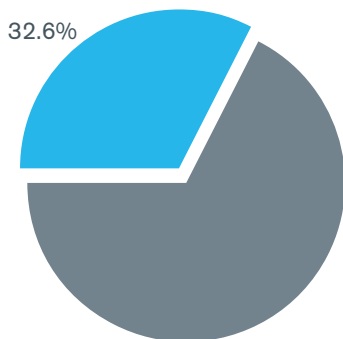
0.5%
Percent of Goodwill
Impaired (GWI/GW ratio)

56.8%
Companies with
Goodwill

20.0%
Percent of Companies
with Goodwill that
Recorded a Goodwill
Impairment in 2012

1.1
Market-to-Book Ratio
(median)

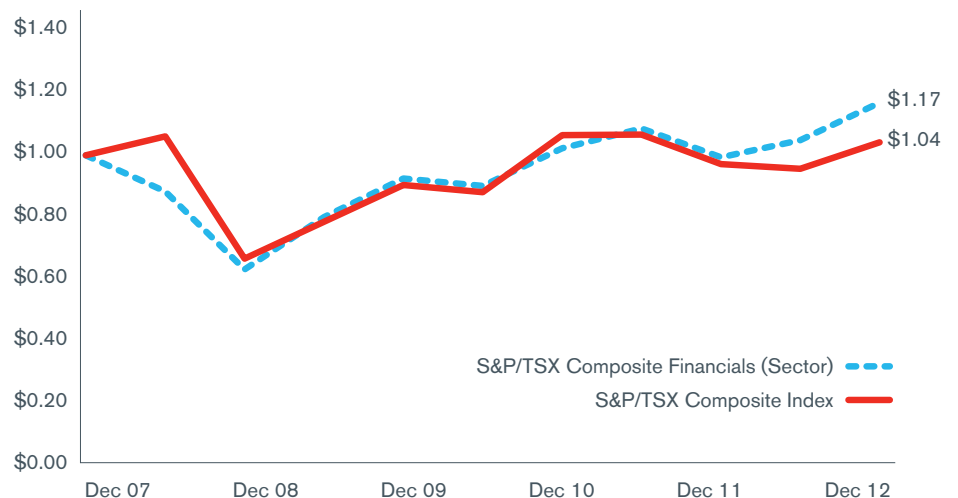
Size of Industry (Relative to Study's Total Market Cap)



Top 3 Industry Goodwill Impairments (in millions)

Manulife Financial Corporation	\$200
Altus Group Limited	\$22
Industrial Alliance, Inc.	\$10

Index (Year End 2007 = \$1)

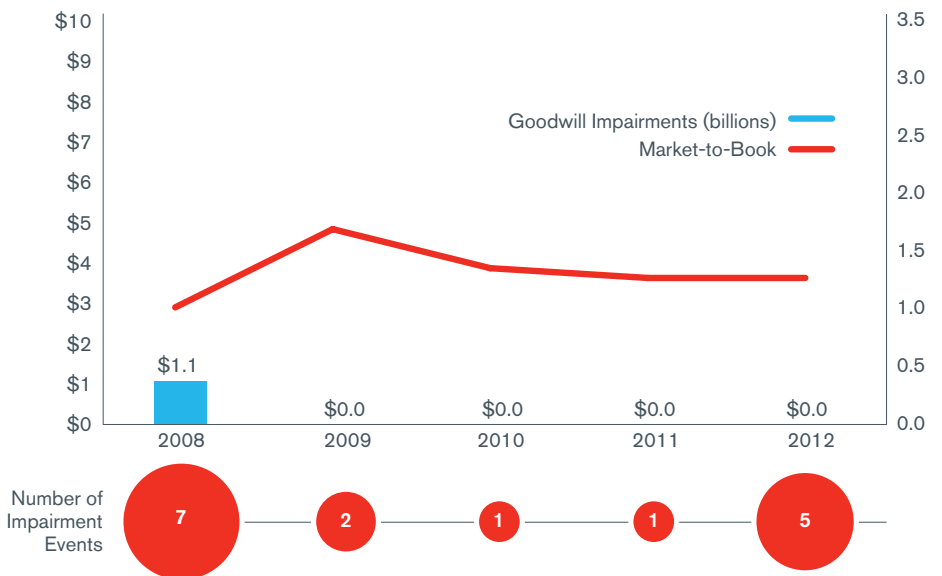
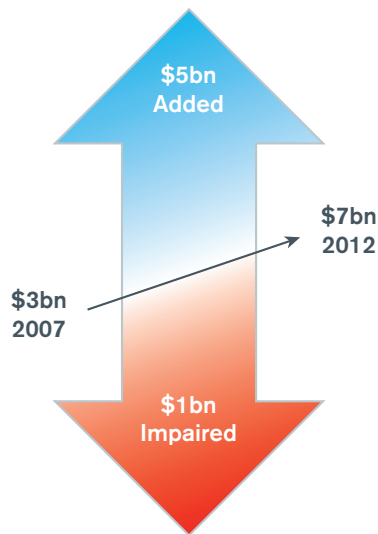


2012 Industry Spotlight

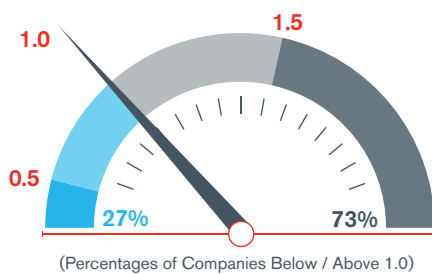
Information Technology

GICS Code 45

Goodwill Trends 2007–2012



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



39
Companies

36.9%
Goodwill to Total Assets
(GW/TA)

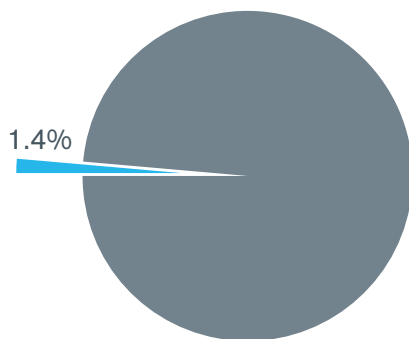
1.1%
Percent of Goodwill
Impaired (GWI/GW ratio)

82.1%
Companies with
Goodwill

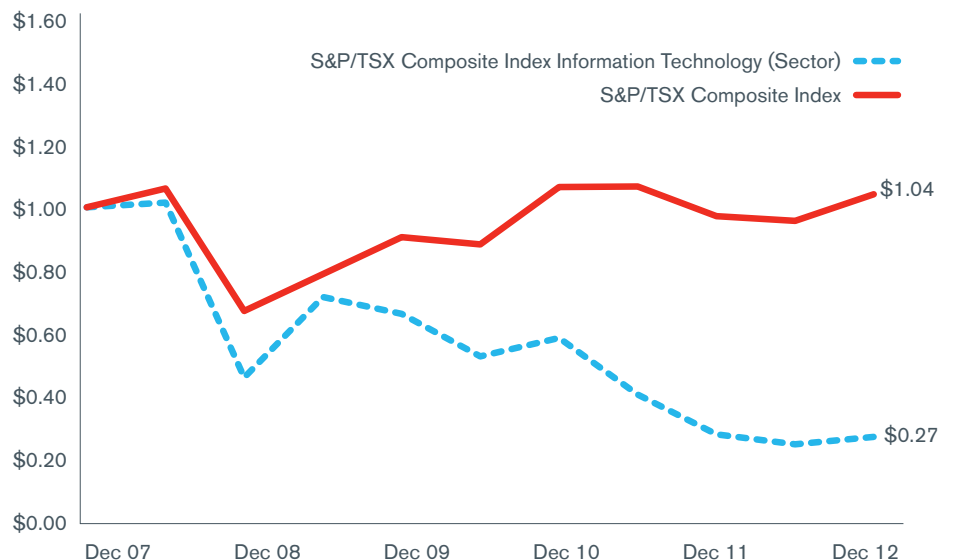
15.6%
Percent of Companies
with Goodwill that
Recorded a Goodwill
Impairment in 2012

1.4
Market-to-Book Ratio
(median)

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



Index (Year End 2007 = \$1)

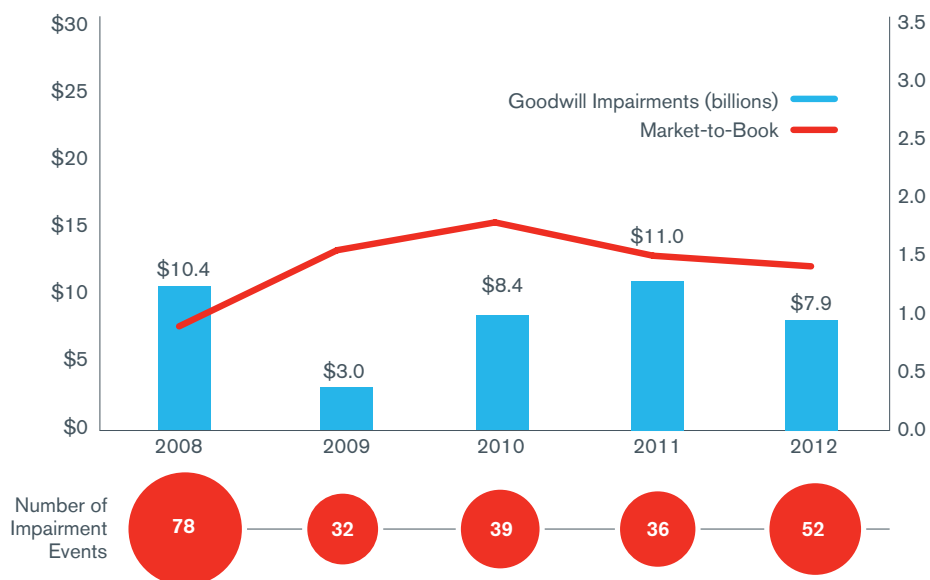
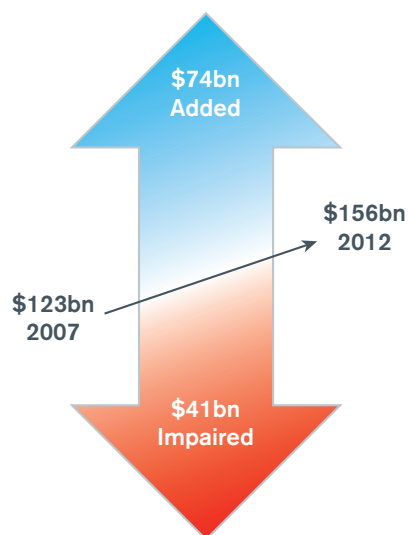


Top 3 Industry Goodwill Impairments (in millions)

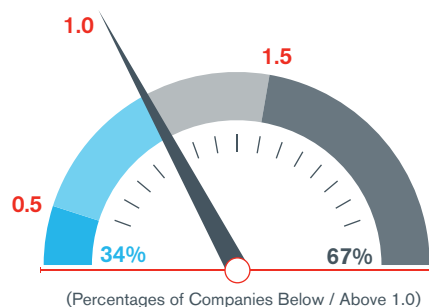
AgJunction Inc.	\$21
Celestica Inc.	\$15
Posera-HDX Limited	\$2

2012 Composite Industry Spotlight

Goodwill Trends 2007–2012



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



616
Companies

2.7%
Goodwill to Total Assets
(GW/TA)

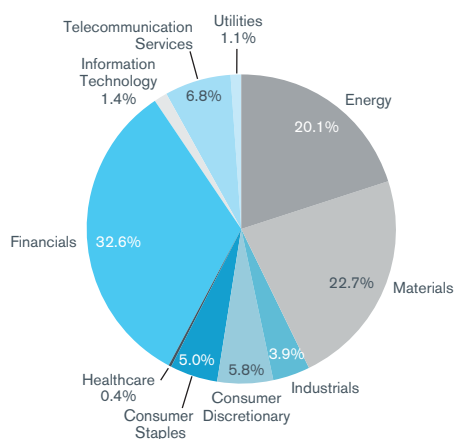
5.1%
Percent of Goodwill
Impaired (GWI/GW ratio)

44.6%
Companies with
Goodwill

18.9%
Percent of Companies
with Goodwill that
Recorded a Goodwill
Impairment in 2012

1.4
Market-to-Book Ratio
(median)

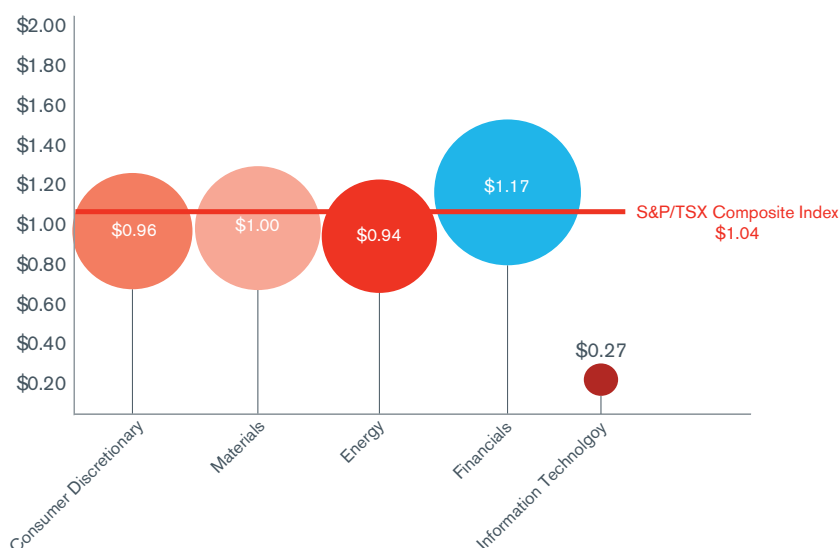
Size of Sectors (Relative to Study's Total Market Cap)



Top 3 Industry Goodwill Impairments (in millions)

Yellow Media Limited	\$2,968
Kinross Gold Corporation.....	\$2,242
Barrick Gold Corporation	\$796

Cumulative 5-year Terminal Index Value by Industry from 2008 to 2012 Index (Year End 2007 = \$1)



Goodwill Impairments by Industry Group

Calendar Year 2012

Goodwill Intensity:

- Goodwill to Total Assets (GW/TA)

Loss Intensity:

- Goodwill Impairment to Goodwill (GWI/GW)

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

GICS Code	GICS Industry Group	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
							\$ 474 (industry group total)	
1010	Energy	117	38%	3.4%	4.5%	17.8%	\$474	1.1
							\$ 3,214 (industry group total)	
1510	Materials	204	15%	6.7%	14.3%	16.1%	\$3,214	1.3
							\$ 357 (industry group total)	
2010	Capital Goods	46	63%	9.1%	2.0%	13.8%	\$88	1.4
2020	Commercial & Professional Services	16	81%	21.8%	12.8%	23.1%	\$268	1.7
2030	Transportation	12	92%	6.2%	–	–	–	1.8
							\$3,273 (industry group total)	
2510	Automobiles & Components	8	38%	1.4%	67.8%	66.7%	\$54	1.2
2520	Consumer Durables & Apparel	5	60%	16.7%	–	–	–	1.7
2530	Consumer Services	12	67%	6.1%	6.3%	25.0%	\$18	1.6
2540	Media	16	94%	34.1%	11.6%	40.0%	\$3,197	1.5
2550	Retailing	17	71%	5.2%	0.3%	16.7%	\$4	1.2
							\$171 (industry group total)	
3010	Food & Staples Retailing	10	100%	15.5%	–	–	–	2.0
3020	Food, Beverage & Tobacco	14	79%	16.3%	5.0%	18.2%	\$155	1.8
3030	Household & Personal Products	2	50%	38.2%	4.4%	100.0%	\$16	1.5
							\$41 (industry group total)	
3510	Health Care Equipment & Services	13	46%	11.0%	5.4%	50.0%	\$24	2.8
3520	Pharmaceuticals, Biotechnology & Life Sciences	24	17%	3.3%	64.3%	50.0%	\$21	4.3

Goodwill Impairments by Industry Group

Calendar Year 2012

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

GICS Code	GICS Industry Group	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
							\$244 (industry group total)	
Financials								
4010	Banks	15	67%	0.9%	–	–	–	1.8
4020	Diversified Financials	9	56%	9.1%	1.7%	20.0%	\$6	1.0
4030	Insurance	9	89%	1.6%	1.2%	37.5%	\$216	1.1
4040	Real Estate	11	18%	1.2%	9.1%	50.0%	\$22	0.8
							\$40 (industry group total)	
Information Technology								
4510	Software & Services	20	90%	49.4%	0.1%	16.7%	\$5	2.5
4520	Technology Hardware & Equipment	19	74%	4.5%	14.2%	14.3%	\$35	1.1
4530	Semiconductors & Semiconductor Equipment	0	–	–	–	–	–	–
							\$67 (industry group total)	
Telecommunications Services								
5010	Telecommunication Services	7	100%	18.4%	0.4%	14.3%	\$67	2.7
							\$19 (industry group total)	
Utilities								
5510	Utilities	10	90%	4.1%	1.4%	11.1%	\$19	1.4

U.S. Goodwill Impairment Study

(All currency amounts in U.S. Dollars)

Now in its fifth year of publication, the Duff & Phelps 2013 U.S. Goodwill Impairment Study continues to examine general U.S. goodwill impairment trends and trends within different U.S. industries.

The graphic below captures the evolution of U.S. goodwill from 2008 through 2012. 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 to acquire a controlling equity interest of 50% or more [see M&A Activity]. In 2012, while the deal volume declined, there was a 30% increase in deal value leading to \$211 billion in additional goodwill.

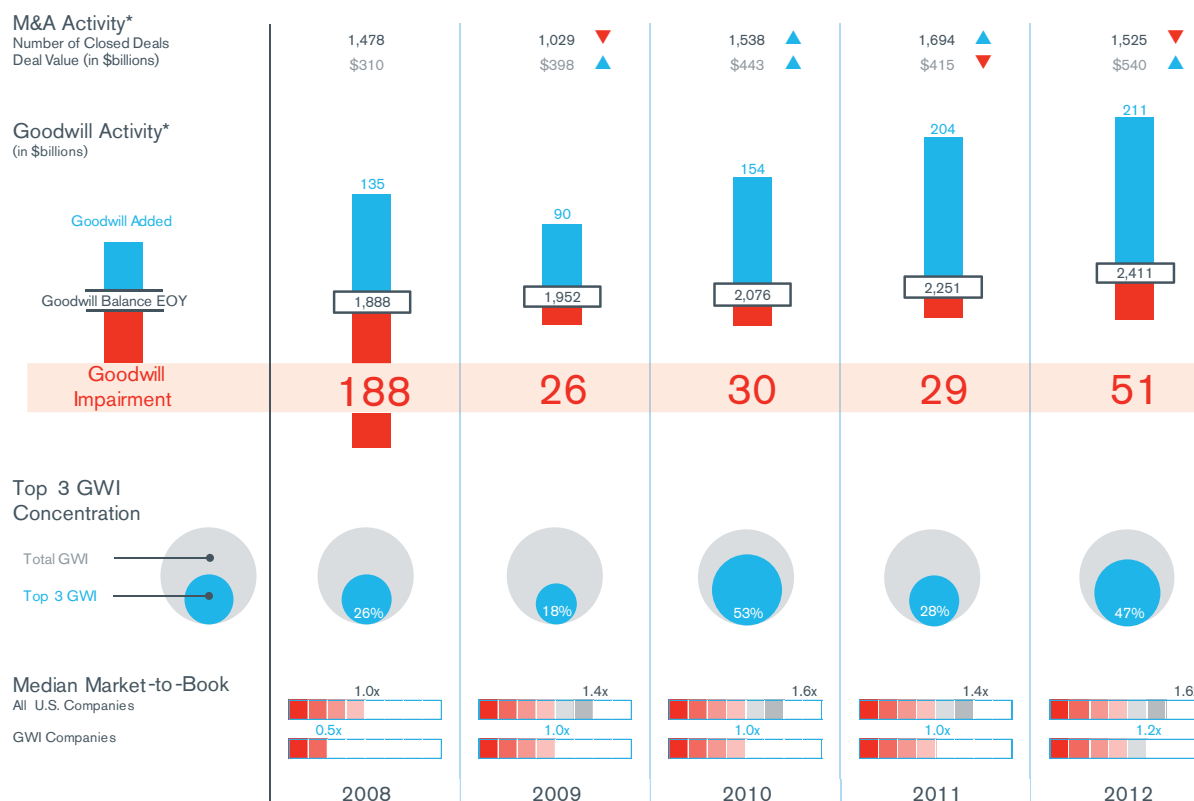
The Goodwill Activity bar chart shows the annual aggregate GWI (see amounts in the red font shaded area), as well as the amount of goodwill added annually (see amounts in blue font), with the end-of-year (EOY) aggregate goodwill balance sliding along the scale. For example, we can observe the increase in the goodwill impaired by U.S. companies from \$29 billion in calendar year 2011 to \$51 billion in 2012.¹⁰

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. For instance, the top 3 events accounted for 47% of the 2012 aggregate GWI amount, in contrast to 18% in 2009.

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 2013 U.S. Study as well as for those companies that recorded a GWI are also provided [see Median Market-to-Book].

The Duff & Phelps 2013 U.S. Goodwill Impairment Study and the inaugural 2013 European Goodwill Impairment Study are now available.

Visit www.duffandphelps.com to download these studies.



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

Appendix 1

2013 Study: Company Base Set Selection

In addition to company annual reports, the primary source of data for the 2013 Study was Standard & Poor's (S&P) Capital IQ © database 2013. This database was screened to isolate the companies that had characteristics consistent with the purpose of this study, as described below. Canadian-based companies that traded on the Toronto Stock Exchange (TSX) as of July 19, 2013 were the starting point for the data set.

The following additional procedures were applied to arrive at the data set:

- Exchange traded funds (ETFs) and income funds were excluded leaving 862 Canadian-based, Canadian-traded companies.
- From this subset, companies that did not have a Global Industry Classification Standard (GICS) designation, and companies that did not have returns data and market capitalization data over the 2008-2012 period were excluded.
- The data set was then assessed to identify any company with a controlling interest in any other company within the data set, because in such cases the controlling investor (the parent) would have consolidated the underlying entity's (the subsidiary's) financial results. To avoid double-counting the parent's and the subsidiary's reported financial information, we excluded the financial

results of any subsidiary companies that met this criterion.

- These initial screens resulted in a universe of **670** Canadian-based publicly-traded companies. This universe included companies reporting under a mix of different accounting standards.
- The sample universe was further restricted to include only those companies that adopted IFRS as of the 2011 or 2012 calendar years, resulting in a base set of **616** companies (refer back to Figure 1).

IFRS Background & Impact on Data Set

In 2006, the Canadian Accounting Standards Board (AcSB) announced its intention to adopt IFRS for publicly accountable enterprises and in 2008 confirmed a January 1, 2011 mandatory adoption for these entities.

Certain entities were granted optional deferral periods, allowing them to adopt IFRS at a later date. Specifically:

Entities With Rate-Regulated Activities

In February 2013, the AcSB extended the existing deferral of the mandatory IFRS changeover date for entities with qualifying rate-regulated activities for an additional year. Such entities now have the option to defer their changeover to IFRS to January 1, 2015.¹¹

Investment Companies

The AcSB had previously provided investment companies and segregated accounts of life insurance enterprises the option to defer the IFRS changeover date, in order to allow the IASB to complete its project on consolidation requirements of qualifying investment entities.¹² In December 2012, the AcSB confirmed mandatory adoption is required for annual periods beginning on or after January 1, 2014.¹³

Furthermore, private enterprises can elect to apply IFRS. While private companies may generally prefer to adopt the less complex rules under Part II of the CPA Canada Handbook - Accounting, some of the Canadian private companies participating in the 2013 Survey have indeed adopted IFRS.

Finally, it is noted that in 2008, the Canadian Securities Administrators (CSA) issued a notice allowing Canadian issuers, who are also U.S. Securities and Exchange Commission (SEC) issuers, to continue to use the option to report under U.S. GAAP as permitted under National Instrument 52-107.

11. For additional details on this decision refer to: <http://www.frascanada.ca/accounting-standards-board/item64425.aspx>.

12. On October 31, 2012 the IASB published Investment Entities (Amendments to IFRS 10, IFRS 12 and IAS 27), providing an exception to the consolidation requirements in IFRS 10 for investment entities. Instead, the amendments require an investment entity to measure any investments in other entities it controls at fair value.

13. On October 3, 2013 the Canadian Securities Administrators (CSA) also published a final amendment requiring investment funds to adopt IFRS for financial years beginning on or after January 1, 2014.

Appendix 2

Quantifying the Impact of IFRS Adoption – Flashback

In February 2013, the Canadian Financial Executives Research Foundation (CFERF) and Duff & Phelps released its inaugural 2012 Study which undertook a detailed analysis of publicly-traded Canadian company disclosures regarding the transition from prior Canadian (or Pre-changeover) GAAP to IFRS and its effect on goodwill impairments. Mandatory IFRS adoption was required for fiscal years commencing on or after January 1, 2011 for most publicly accountable enterprises, or PAEs, with certain entities being granted optional deferrals.

IFRS Adoption Recap

IFRS 1 requires (a) first-time adopters to present full comparative financial information for the year preceding the adoption and an opening balance sheet at the date of transition to IFRS. This “transition date” was January 1, 2010 for Canadian calendar-year companies.

In general, IFRS 1 calls for full retrospective application of IFRS standards. In theory, this would mean that all past business combinations occurring prior to the transition date would have to be restated under IFRS.

However, IFRS offers an optional exemption to this requirement. If a company opts out, then goodwill balances must be tested for impairment at the transition date. In addition, in most cases the company must recognize any resulting transition-related impairment loss in retained earnings.

Highlights of the 2012 Study

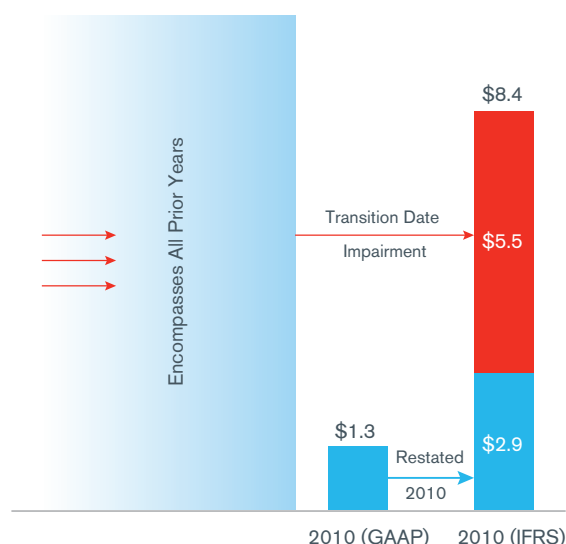
2010 provided a great opportunity to measure the impact of IFRS adoption on goodwill. For comparison purposes, goodwill impairment was presented under both sets of accounting rules for 2010: (i) as originally reported under Pre-changeover GAAP; and (ii) as restated under IFRS. As a result of IFRS adoption, calendar 2010 GWI

increased from \$1.3 billion as originally reported under Pre-changeover GAAP to \$2.9 billion as restated under IFRS (see graph below).

In addition, under the optional exemption related to IFRS adoption, an incremental \$5.5 billion of cumulative “transition date” goodwill impairment was recognized in the opening balance sheet. This amount approximates the cumulative impairment that would have been recognized under IFRS, had companies restated their prior business combinations.

Further information on the impact of IFRS adoption can be found in our 2012 Study available at www.duffandphelps.com.

Impact of IFRS Adoption on Goodwill of Canadian Public Companies (in CAD \$billions)



About Duff & Phelps

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Duff & Phelps Authors

James P. Harrington

Director
+1 312 697 4938
james.harrington@duffandphelps.com

Chris Jones

Vice President
+1 416 361 2589
christopher.jones@duffandphelps.com

Carla Nunes

Director
+1 215 430 6149
carla.nunes@duffandphelps.com

Niel Patel

Analyst
+1 312 697 4567
niel.patel@duffandphelps.com

Gary Roland

Managing Director
+1 215 430 6042
gary.roland@duffandphelps.com

Marianna Todorova

Director
+1 212 871 6239
marianna.todorova@duffandphelps.com

Jamie Warner

Senior Associate
+1 215 430 6132
jamie.warner@duffandphelps.com

Duff & Phelps Contributors

Hilary Eastman

Director
+44 20 7089 4808
hilary.eastman@duffandphelps.com

Andrew Harington

Managing Director
+1 416 364 9790
andrew.harington@duffandphelps.com

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