



2012 Goodwill Impairment Study Canadian Edition

Introduction

Financial reporting in Canada has been undergoing remarkable changes during the transition from Pre-changeover Generally Accepted Accounting Principles ("Prechangeover GAAP") to International Financial Reporting Standards (IFRS).1 While the conceptual framework and many of the general principles are similar between IFRS and Pre-changeover GAAP, certain aspects of IFRS can differ significantly. Goodwill impairment rules are one of these differences.

This inaugural edition of the 2012 Goodwill Impairment study: Canadian Edition (the "2012 study", or simply the "study") attempts to answer questions relating to goodwill impairment that are top of mind for Canadian financial executives. The study, conducted by the Canadian Financial Executives Research Foundation (CFERF) and Duff & Phelps,

examines goodwill impairment patterns, in aggregate and by industry, from 2007-2011. This period includes two significant events, the 2008 financial crisis and the transition to IFRS in 2011.2

The 2011 adoption of IFRS was of concern to Canadian companies, with many speculating that the transition to alternative goodwill impairment testing rules would trigger another wave of impairment events. The transition from Pre-changeover GAAP to IFRS and its effect on goodwill impairment is of special focus in the 2012 study, which includes a detailed analysis of Canadian company disclosures regarding the impact of IFRS adoption on their goodwill balances and recognized impairments.

The study also includes a "returns-based" analysis that examines the relative performance of companies that recorded goodwill impairment vis-à-vis (i) companies that did not record goodwill impairment; and (ii) the performance of the Canadian market as a whole.3 In addition, we report the findings of our U.S. counterpart study as it relates to the relative performance of U.S. companies to the U.S. market over the 12-month periods before and after the recognition of a goodwill impairment charge.4

Finally, we include a survey section, which goes beyond an accumulation of raw data. It integrates a survey of senior Canadian financial executives regarding impairments and the impairment process, with the views of Canadian financial executives who participated in a research forum examining the results of the 2012 study and survey.

Inside

Description of the Study

CFERF Survey Results and Forum Commentary

Overview of Goodwill and Goodwill Impairment

Appendix A: Demographics from **CFERF Survey**

Goodwill Impairment Study

Appendix B: CFERF Forum **Participants**

Summary Statistics by Industry

Appendix C: Common Goodwill Impairment Questions

Goodwill impairment and Market-to-Book Value

Appendix D: Quick Accounting Reference Guide -

Returns-Based Analysis

Appendix E: Goodwill Impairments by Industry Group

¹ Both Canadian publicly accountable enterprises and government business enterprises (GBEs) are mandated to adopt IFRS. In addition, private enterprises and private sector not-for-profit organizations (NPOs) have the option (but not the obligation) to adopt IFRS. For a more detailed definition of each type of entity and the available financial reporting options, refer to the Chartered Accountants of Canada (CICA) website at: http://www.cica.ca/applying-the-standards/index.aspx

2 buff & Phelps and the Financial Executives Research Foundation (the U.S. equivalent to the CFERF) have published the U.S. Goodwill Impairment study annually since 2009. For a free download of the U.S. study, visit http://www.duffandphelps.com/Pages/default.aspx and go to Expertises/Publications/View all Reports.

3 Performance is measured relative to the market. "Companies that recorded goodwill impairment" and "companies that did not record goodwill impairment" were identified based upon the goodwill impairments originally reported, across all years. The Canadian market is defined throughout the 2012 study as the S&P/TSX Composite Index. The S&P/TSX Composite Index is the broadest in the S&P/TSX index family, and is the headline index for the Canadian equity market.

ed as the S&P 500 Index

Introduction

Purpose of the 2012 Study

- Analyze the impact that the transition from Pre-changeover GAAP to IFRS (and the associated changes in goodwill impairment testing) had on goodwill impairments recorded by Canadian companies.
- Examine the general and specific industry trends of goodwill and goodwill impairments of Canadian publicly-traded companies and to assess whether new trends are developing.⁵
- Analyze the relative performance of companies that recorded goodwill impairment vis-à-vis (i) companies that did not record goodwill impairment; and (ii) the performance of the Canadian market as a whole. We also report the findings of our U.S. counterpart as it relates to the relative performance of U.S. companies to the U.S. market over the 12-month periods before and after a goodwill impairment charge occurred.
- Report the results of the survey and in-depth research forum of Canadian financial executives. Forum participants examined the survey results, discussed key factors driving impairments in 2011, and addressed the most significant issues facing the participating financial executives as revealed in the survey.

Study Highlights

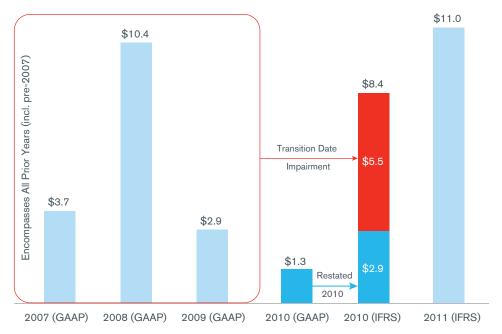
- The aggregate amount of goodwill impaired in calendar year 2011 by Canadian publicly traded companies was \$11.0 billion, \$8.9 billion (or 81%) of which was recognized by three major companies.
- An aggregate \$10.4 billion of goodwill was impaired in 2008 during the financial crisis.
- Over 90% of total impairments in 2011 were recognized in the Consumer Discretionary, Materials, and Financials industries.

- In general, companies that did not recognize a goodwill impairment over the 2012 study's 2007–2011 time horizon outperformed those that have recorded a goodwill impairment as well as the S&P/ TSX Composite Index.
- Based on a study of U.S. companies, most of the underperformance of companies that recorded goodwill impairment occurs prior to the actual impairment charge, indicating that in general, investors are aware of the issues that may lead to a subsequent impairment long before the actual impairment is recognized.⁶

IFRS Adoption Highlights

 Canadian companies recognized an aggregate goodwill impairment of \$8.4 billion in 2010 as a result of IFRS adoption.

Graph 1: Goodwill Impairments, Canadian Companies (in CAD \$billions) 2007-2011



⁸The 2012 study examines goodwill impairment trends over the period 2007–2011.

⁶ This analysis is part of a shared-study between the Canadian and American offices of FEI and Duff & Phelps and is based on U.S. companies reporting under U.S. GAAP. There may be differences if a similar test were to be undertaken under IFRS, as the nature of the impairment test is different. In the future, as more impairment data under IFRS is accumulated within Canada we will consider updating this analysis solely for Canadian companies reporting under IFRS.

Introduction

- \$5.5 billion of the total impairment amount reflects the initial impact of goodwill impairment testing under IFRS as of the transition date (January 1, 2010 for calendar year-end companies). This was not recognized as a direct impairment through the income statement, but rather as an equity adjustment at the transition date.
- Restating the 2010 goodwill impairments previously recognized under Prechangeover GAAP into IFRS amplified the amount of write-downs from \$1.3 billion to \$2.9 billion, a net increase of \$1.6 billion.
- These Transitional impairments were concentrated in 39 companies, and had an average and median value of \$216 million and \$14 million, respectively.
- Energy and Financials were industries where goodwill impairment was most impacted by the adoption of IFRS.

Survey and Forum Highlights

- A sizeable portion of survey respondents (17% of public company respondents and 12% of private company respondents) indicated that the transition from Prechangeover GAAP to IFRS itself was the main cause of a goodwill write-down in 2011.
- Upon adoption of IFRS, the majority of those financial executives whose companies recognized goodwill impairments indicated the write-down was less than 20% of its total carrying amount.
- The most common reason for public companies recognizing goodwill impairment in their most recent test was the overall market downturn (22%), while 24% of private companies cited factors specific to the cash generating units (CGUs). These responses differed

- significantly from those of the U.S. respondents of a similar survey, where 51% of public and private companies indicated that goodwill impairments were primarily driven by factors specific to their reporting units rather than the continued overall market downturn.
- When asked if additional goodwill or other asset impairments during an upcoming interim or annual test were anticipated, the majority of Canadian respondents indicated they were not. Specifically 81% of public companies and 82% of private companies were not expecting impairments in the near future.

Description of the study

This 2012 study includes five areas of analysis:

Contributed by Duff & Phelps

- Goodwill Impairment and the Impact of IFRS Adoption
- Summary Statistics by Industry
- Market-to-Book Value Analysis
- 4. Returns-Based Analysis

Contributed by CFERF

2012 CFERF Survey Results and Forum Insights

Company Base Set Selection and Methodology

In addition to company annual reports, the primary source of data for this study⁷ was Standard & Poor's Capital IQ database ©2012.8 This database was screened to isolate the companies that had characteristics consistent with the purpose of this study. First, exchange traded funds (ETFs) were excluded leaving 905 Canadian-based, Canadian-traded companies as of September 15, 2012. 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 2007-2011 study period, were excluded. This ensures that the companies included in the study had financial data for the entire period from 2007 to 2011.

These initial screens resulted in a universe of 673 Canadian-based, Canadian-traded companies. This universe included companies reporting under a mixture of different accounting standards. There were still a number of companies reporting under either U.S. GAAP or Pre-changeover GAAP in 2011.9

Because one of the objectives of the study is to examine the significance of the adoption of IFRS on goodwill impairments, the sample universe was further restricted to include only those companies that adopted IFRS as of the 2011 calendar year. This resulted in a base set of 621 companies ("All Canadian Companies"), which was then used to calculate all ratios, summary statistics, and portfolio returns throughout the study.

⁷ This does not apply to the survey or forum.

⁸ Standard & Poor's is a division of the McGraw-Hill Companies.

⁹ For purposes of this study, we refer to these companies collectively as "non-IFRS adopters". It is noted, however, that some of these companies may still transition to IFRS in a subsequent calendar year. See Table 1 for the distribution of companies allocated by accounting reporting standards over the 2012 study period.

Overview of Goodwill and Goodwill Impairment

Contributed by Duff & Phelps

Financial reporting in Canada has been undergoing significant changes, as most publicly accountable enterprises (and other types of entities)¹⁰ transition from Prechangeover GAAP to IFRS.¹¹

Until recently, Canadian standards for financial reporting by public companies were developed by the Canadian Accounting Standards Board (AcSB). In 2006, AcSB announced its intention to adopt IFRS for publicly accountable enterprises and in 2008 confirmed a January 1, 2011 mandatory adoption date for these entities. Since the adoption of IFRS, AcSB has been active in monitoring the timing of standards implementation by Canadian public companies that are required to report under IFRS.

In general, a publicly accountable enterprise is an entity that either:

- Has issued, or is in the process of issuing, debt or equity instruments that are, or will be, outstanding and traded in a public market (a domestic or foreign stock exchange or an over-the-counter market, including local and regional markets); or
- Holds assets in a fiduciary capacity for a broad group of outsiders as one of its primary businesses. Banks, credit unions, insurance companies, securities brokers/ dealers, mutual funds and investment banks typically meet the second of these criteria.¹²

AcSB outlined a new framework in its 2006–2011 strategic plan whereupon different reporting strategies for each major category of reporting entity would be pursued. As a result, the CICA Handbook – Accounting has been restructured to move away from a single financial reporting framework of Canadian GAAP to include various different financial reporting frameworks. These different financial reporting frameworks in Canadian GAAP are identified in the CICA Handbook – Accounting as follows:

- Part I International Financial Reporting Standards (IFRSs)
- Part II Accounting standards for private enterprises
- Part III Accounting standards for not-for-profit organizations
- Part IV Accounting standards for pension plans
- Part V Canadian GAAP prior to the adoption of Parts I, II, III or IV (Prechangeover accounting standards)

The CICA Handbook – Part I was effective for interim and annual financial statements relating to fiscal years beginning on or after January 1, 2011, 14 with the exceptions noted below. Parts II and IV were also effective for annual financial statements relating to fiscal years beginning on or after January 1, 2011. Part III was effective for annual financial statements relating to fiscal years beginning on or after January 1, 2012. Certain entities were granted optional deferral periods,

allowing them to adopt IFRS at a later date. Specifically:

Entities With Rate-regulated Activities – In September 2012, 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, 2014.¹⁵

Investment Companies – The option to defer the IFRS changeover date for investment companies and segregated accounts of life insurance enterprises was extended to January 1, 2014 to correlate with the timing of the joint FASB-IASB Investment Companies project.

Of note, private enterprises can elect to apply IFRS. While private companies may generally prefer to adopt the less complex rules under CICA Handbook – Part II, some of the Canadian private company survey participants 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 52-107.¹⁶

¹⁰ Both Canadian publicly accountable enterprises and government business enterprises (GBEs) are mandated to adopt IFRS. In addition, private enterprises and private sector not-for-profit organizations (NPOs) have the option (but not the obligation) to adopt IFRS. For a more detailed definition of each type of entity and the available financial reporting options, refer to the CICA website at: http://www.cica.ca/applying-the-standards/index.aspx

¹¹ There a number of sources that can be used to get more familiar with this background. The following websites are some the examples where information is available to help gaining a better understanding of the current financial reporting framework in Canada: Chartered Accountants of Canada (CICA): http://www.cica.ca/index.aspx; and Financial Reporting and Assurance Standards Canada: http://www.frascanada.ca/
12 Source: The CICA's Guide to IFRS in Canada 2009 Edition.

¹³ The 2006-2011 strategic plan can be found here: http://www.frascanada.ca/accounting-standards-board/what-we-do/strategic-plan/item62118.pd

¹⁴ CICA Handbook, Part 1, Introduction, paragraph 1.7.

¹⁶ For additional details on the decision refer to: http://www.frascanada.ca/accounting-standards-board/meetings/decision summaries/2012/item67809.asp

¹⁶ Source: The CICA's Guide to IFRS in Canada 2009 Edition.

Overview of Goodwill and Goodwill Impairment

The study's base set of All Canadian Companies includes 621 companies now reporting under IFRS for calendar year 2011. While the CICA Handbook allows adoption deferral and/or U.S. GAAP reporting for certain entity types, the reality is that there are relatively few Canadian-traded companies who are non-IFRS adopters (see Table 1).

Notwithstanding the focus of this study on IFRS adopters, goodwill impairment amounts reported by all 673 companies, including the non-IFRS adopters, were also examined in aggregate. The magnitude of goodwill impairments recognized by non-IFRS adopters is summarized in Table 2.¹⁷

The amount of goodwill impairments recorded by non-IFRS adopters was minor relative to the aggregate goodwill impairment, as originally reported. As such, excluding them from the analysis likely had little impact on the overall outcome of the study.

First Time Adoption of IFRS - Overview

Mandatory IFRS adoption was required for fiscal years commencing on or after January 1, 2011 for most Canadian publicly accountable

enterprises. Early adoption was allowed for some of these entities. Nevertheless, most of them converted from Pre-changeover GAAP to IFRS at the mandatory date.

The special transitional rules that apply in the period that an entity changes from Prechangeover GAAP to IFRS are provided in IFRS 1 First-time adoption of International Financial Reporting Standards (IFRS 1).

IFRS 1 requires the first-time adopter to establish its date of transition to IFRS, which it defines as the beginning of the earliest period for which an entity presents full comparative information under IFRSs in its first IFRS financial statements [IFRS 1 – Appendix A]. For calendar year companies adopting IFRS on January 1, 2011, the transition date was January 1, 2010.

As of the transition date the first-time adopter prepares an opening balance using IFRS accounting rules. If appropriate, the entity also reclassifies items recognized under previous GAAP.

In general, IFRS 1 calls for full retrospective application of IFRS standards. However, acknowledging the challenges of retrospective

application (e.g. historical data availability), IFRS 1 includes several optional exemptions and mandatory exceptions to retrospective application.

Appendix C of IFRS 1 deals with exemptions for business combinations. In essence, first-time adopters may elect not to apply IFRS 3 *Business Combinations* (IFRS 3) retrospectively to all past business combinations (business combinations that occurred before the date of transition to IFRSs).

If a first-time adopter does not apply IFRS 3 retrospectively to past business combinations, this has a number of consequences. Importantly, regardless of whether there is any indication that goodwill may be impaired, the first-time adopter must apply International Accounting Standard 36 *Impairment of Assets* (IAS 36) at the transition date. In addition, the entity must recognize any resulting impairment loss in retained earnings (or, if so required by IAS 36, in revaluation surplus). The impairment test must be based on conditions at the date of transition to IFRS [IAS 36.C4(g)].

Table 1: Accounting standards of Canadian Companies Over Time 2007-2011

	2007	2008	2009	2010	2011
U.S. GAAP	16	16	19_	22 🛕	36 🛕
IFRS	0	0	4	15 📥	621 📥
Canada GAAP	657	657	650▼	636 V	16▼
Total	673	673	673	673	673

Table 2: Non-IFRS Adopters' Goodwill Impairment (GWI) as a Percentage of Total Goodwill Impairment (as originally reported) 2007-2011

	2007	2008	2009	2010	2011
(Non-IFRS Adopters' GWI) / (IFRS Adopters'	4.0%	7.2%	7.4%	0.3%	3.2%

¹⁷ Table 2 does not include 2010 data restated under IFRS. Rather, 2010 reflects information as originally reported under Pre-changeover GAAP.

Overview of Goodwill and Goodwill Impairment

Goodwill Impairment - Accounting Overview

As previously noted, the general conceptual framework and many of the general principles may be similar between IFRS and Prechangeover GAAP, but certain aspects of IFRS can differ significantly. Goodwill impairment rules are one of those areas.

According to IAS 36, goodwill recognized in a business combination is "an asset representing the future economic benefits arising from other assets acquired in a business combination that are not individually identified and separately recognized" [IAS 36.81].

The amount of goodwill recognized is measured as the excess of the consideration transferred (including the amount of any non-controlling interest and the fair value of any acquirer's previously held equity interest) over the net acquisition-date amounts of identifiable assets acquired and liabilities assumed [IAS 36.C1].

This study examines goodwill impairment over the past five years spanning Pre-changeover GAAP 3062 and IAS 36. From a technical point of view, IAS 36 is significantly different than Pre-changeover GAAP. Some of the more material differences are presented in Table 3. Further guidance is provided in Appendix C, Goodwill Impairment Frequently Asked Questions, and Appendix D, Overview of Goodwill Impairment Testing under IAS 36.

Table 3: Testing for Impairment Under Pre-changeover GAAP vs. IFRS

	Pre-Changeover GAAP	IFRS (IAS 36)
Method of determining a goodwill impairment	Two-step approach which requires an impairment test to be performed at the reporting unit, where the carrying amount of the reporting unit is compared to the calculated fair value (a.k.a. Step 1). If carrying value exceeds fair value of the reporting unit, an impairment loss calculation is triggered (a.k.a. Step 2).	One-step approach now demands calculating the impairment loss for each cash-generating unit or CGU by comparing the CGU's carrying amount to its recoverable amount. Recoverable amount is the highest of fair value less costs to sell or value in use.
Allocation of goodwill	Allocated to a reporting unit	Allocated to a CGU or group of CGUs, defined as the lowest level at which the goodwill is reviewed internally.
Calculation of an impairment loss	Loss calculated as the amount that the carrying value of goodwill exceeds the implied fair value of the goodwill. The implied fair value of goodwill is derived by performing Step 2 of the impairment test.	Loss calculated as the amount by which the carrying value of the CGU exceeds its recoverable amount. The calculated loss is allocated to goodwill first and then to other assets pro rata.
Reversal of loss	Not allowed	Not allowed for goodwill

Goodwill Impairment Study

Goodwill impairment information was compiled for Canadian companies for the years 2007-2011 and is summarized in Graph 2. The analysis included 621 Canadian-based, Canadian-traded companies, as previously described.¹⁸

In 2007 Canadian companies recorded aggregate goodwill impairments of \$3.7 billion. During the onset of the global financial crisis in 2008, this rose to \$10.4 billion, an increase of over 180%. 2009 saw the aggregate amount of goodwill impairment decline significantly to \$2.9 billion.

Since 2010 marked the transition date to IFRS for most publicly traded entities, goodwill impairment is presented in two alternative ways: as originally reported under Pre-changeover GAAP, and as restated under IFRS.

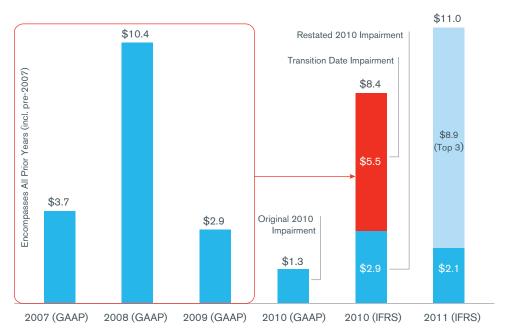
The aggregate amount of goodwill originally impaired during 2010 under Pre-changeover GAAP ("Original 2010 Impairment") was \$1.3 billion. It was subsequently restated under IFRS ("Restated 2010 Impairment") to \$2.9 billion. This excludes amounts due to transitional goodwill impairment testing that occurred as of January 1, 2010.

As mentioned earlier, upon adoption companies can elect to restate all prior business combinations; otherwise goodwill must be tested for impairment on the transition date (January 1, 2010 in this study). The aggregate amount of goodwill impairment recorded as a result of testing goodwill for impairment under IFRS on the transition date ("Transition Date Impairment") was \$5.5 billion. While it does not reflect the exact impact of restating all prior business combinations, the IASB's optional exemption intended the \$5.5 billion to be a reasonable

approximation of the incremental cumulative impairment that would have been recognized under IFRS. This analysis indicates that Canadian companies' transition from Prechangeover GAAP to IFRS did have a significant impact on the aggregate carrying amount of goodwill.

2011 was the first year that Canadian companies that adopted IFRS in 2011 reported solely under IFRS.¹⁹ Aggregate goodwill impairment for these companies was \$11.0 billion, with three large-cap companies recognizing \$8.9 billion (or 81%) of the total. These companies (Thomson Reuters, Kinross Gold Corporation, and Yellow Media Inc.), were all impacted by either organizational and/or external industry challenges.

Graph 2: Goodwill Impairments, Canadian Companies (in CAD \$billions) 2007-2011



Definitions: Income Statment ("IS") & Retained Earnings ("RE")

¹⁸ See description of the study on page 4.

¹⁹ As noted on Table 1, there were still 16 public companies reporting under Pre-changeover GAAP. Possible explanations for the delay in adopting IFRS may include the use of optional exemptions described earlier for entities with rate-regulated activities and investment companies.

The concentration in goodwill impairment was not an aberration in 2011. Table 4 summarizes the percentage of aggregate goodwill impairments represented by the three largest goodwill impairments in each year.

The number of goodwill impairment events, and the average and median dollar amounts are provided in Table 5. In 2010, under

Pre-changeover GAAP, there were 22 goodwill impairment events with average and median dollar amounts of \$61.2 million and \$6.1 million, respectively. Under IFRS, there were 39 goodwill impairment events in 2010 with the average and median goodwill impairment dollar amounts increasing to \$215.8 million and \$14.3 million, respectively.

On its face this analysis suggests that goodwill impairments under IFRS are greater than under Pre-changeover GAAP. However, as alluded to before, a majority of the goodwill impairment adjustment in 2010 was the result of transition date requirements. This is examined in greater detail in the following section.

Table 4: Three Largest Goodwill Impairments (GWI), by Dollar Value, as a Percentage of Total Goodwill Impairments 2007-2011

	Pre-changeover GAAP			IFRS		
	2007	2008	2009	2010	2010	2011
(Largest 3 GWI Amounts) / (Aggregate GWI Amount) x 100%	74%	32%	59%	88%	73%	81%

Table 5: Goodwill Impairment Events; Counts, Averages, and Medians Over Time 2007-2011

	Pre-changeover GAAP				IFRS		
	2007	2008	2009	2010	2010	2011	
Number of Goodwill Impairment Events	28	78	32	22	39	36	
Average Impairment	\$131.5	\$133.7	\$91.7	\$61.2	\$215.8	\$306.7	
Median Impairment	\$15.2	\$26.8	\$21.3	\$6.1	\$14.3	\$22.8	

Further quantifying the impact of IFRS adoption

Calendar year 2010 provides a unique opportunity to assess the incremental amount of goodwill impairment due specifically to the adoption of IFRS. Upon adoption of IFRS companies are required to prepare comparable prior-year financial statements that reflect adjustments to goodwill impairments and the carrying amount of goodwill (see earlier discussion under *First Time Adoption of IFRS – Overview*).

There are two potential sources of goodwill impairment (or adjustment) resulting from the adoption of IFRS. For purposes of the 2012 study, we refer to these two potential sources as:

- · Transition Date Impairment
- Restated 2010 Impairment

We employed the following steps to identify the magnitude of these impacts:

Step 1: The original amount of goodwill reported in the year-end 2010 balance sheet by each of the 2012 study's 621 Canadian publicly-traded companies under Pre-changeover GAAP was compared to their IFRS restated carrying amount of goodwill.²⁰ The reported carrying amounts differed for 153 companies.

Step 2: The footnote disclosures for each of the 153 companies were examined to isolate the cause of this difference. There were 31 companies identified for which

the change in goodwill balance was at least partly due to goodwill impairment testing (either due to "Transition Date Impairment" and/or "Restated 2010 Impairment"). This was done by comparing the balance as originally reported under Pre-Changeover GAAP relative to the amounts reported under IFRS. Goodwill impairment amounts for the following three categories were documented for each of the 31 companies:

Original 2010 Impairment – Aggregate amount of goodwill impairment originally reported in 2010 under Pre-changeover GAAP.

Transition Date Impairment -

Aggregate amount of goodwill impairment reported as a result of the 2010 transition date testing (January 1, 2010 for most companies).

Restated 2010 Impairment -

Aggregate amount of goodwill impairment reported during 2010 as a result of the restatement of 2010 financials under IFRS.

The overall initial impact that the transition from Pre-changeover GAAP to IFRS had on aggregate goodwill impairments is therefore:

Overall initial impact = Transition Date Impairment + Restated 2010 Impairment - Original 2010 Impairment

Table 6 summarizes the number of companies that recorded Transition Date Impairment, Restated 2010 Impairment, or both.

Step 3: In addition to the 153 companies that passed the initial Step 1 screen, we identified 8 additional companies whose goodwill balance did not change, although a goodwill impairment was recognized. These 8 companies recorded \$126 million of goodwill impairment, which is reflected in the \$8.4 billion of total impairment under IFRS in 2010.

It is noted that of the 153 companies identified in Step 1, there were 122 that did not report goodwill impairment under IFRS as a result of adoption (153 companies – 39 goodwill impairments = 122). There are other standards besides IAS 36 that can cause the goodwill carrying amount to change from Prechangeover GAAP to IFRS. Some of the most common standards cited in the footnotes include:²¹

- IFRS 3 Business Combinations
- IAS 21 The Effects of Changes in Foreign Exchange Rates
- IAS 37 Provisions, Contingent Liabilities, and Contingent Assets
- IAS 38 Intangible Assets

The 2012 study does not examine the impact of goodwill adjustments due to any standards other than IAS 36.

Finally, the study uses calendar years (rather than "most recent fiscal year") in all cases in order to examine impairment values during a specific period of time, regardless of company specific choices of fiscal years.

Table 6: 2010 Transition Date Impairment and Restated 2010 Impairment Events

	Transition-Date Impairment	Restated 2010 Impairment	Both	Total
2010 Transition Date Impairment and Restated Impairment: Company Counts	19	12	8	39
	49%	31%	20%	100%

²⁰ This comparison was made as of the end of their fiscal years, during calendar year 2010

²¹ For more information, please refer to the section "Overview of Goodwill and Goodwill Impairment - Background on Accounting Framework" on page 6

Transition Date Impairment

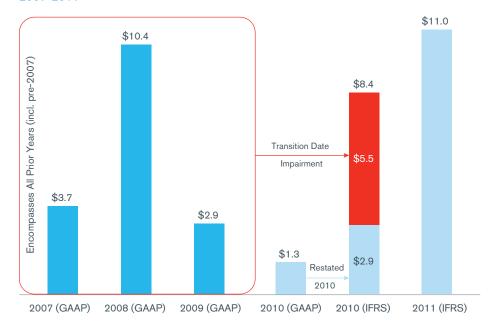
Companies have the option of restating all prior business combinations and subsequent impairment tests under IFRS or testing goodwill for impairment on the transition date (the beginning of the year prior to the adoption year, January 1, 2010 in most cases). Canadian companies generally opted

to perform a Transition Date Impairment test rather than perform a historical restatement of prior business combinations.

Any changes arising from difference between Pre-changeover GAAP and IFRS, which relate to events and transactions occurring before the transition date, are recorded directly in retained earnings at the transition date.²² Transition date impairments did not impact a company's IFRS restated income statement.

Transition Date Impairments accounted for \$5.5 billion of the aggregate \$8.4 billion in goodwill impairments in 2010, as recorded under IFRS (see Graph 3).

Graph 3: Transition Date Impairment (in CAD \$billions) 2007-2011



²² For more information, please refer to the section "Overview of Goodwill and Goodwill Impairment – First Time Adoption of IFRS – Overview" on page 6.

Restated 2010 Impairment

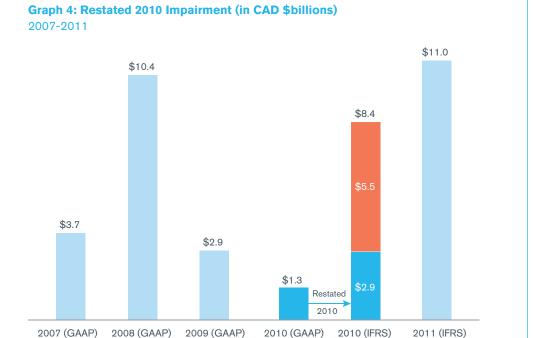
Under IFRS, companies conducted goodwill impairment tests following IAS 36 guidance, which may have resulted in a restatement of impairment charges originally recorded during 2010 under Pre-changeover GAAP. These Restated 2010 Impairment charges have been examined separately and are highlighted in Graph 4.

Original 2010 Impairment under Prechangeover GAAP was \$1.3 billion. This was restated to \$2.9 billion, a net increase of \$1.6 billion. While there were a small number of entities with a decline in 2010 goodwill impairment as a result of IFRS adoption, a majority saw a rise in the amount of impairment recognized.

adoption of IFRS had on goodwill impairments in 2010 thus includes both restatements (under IFRS) of 2010 impairments originally recorded under Pre-changeover GAAP and goodwill impairments that were recorded as an equity adjustment (rather than an impairment expense) as of the transition date. The overall initial impact can be expressed as:

A measure of the overall initial impact that the

Overall Initial Impact of IFRS Adoption



Impairment	CAD \$billions
Transition Date	5.5
+ Restated 2010	2.9
- Original 2010	(1.3)
Overall Initial Impact	\$7.1

Contributed by Duff & Phelps

In order to assess the relative performance of a subject company and evaluate the impact of industry trends, it is beneficial to understand how Canadian companies recorded impairments of goodwill within specific industries.²³ This information can facilitate the comparability of financial statements and provide a useful benchmark during the goodwill impairment testing process.

Pre-changeover GAAP

In order to better understand which industries were most affected by goodwill impairments over time, Table 7 provides the rank order (from 1 to 10) of total dollar value of goodwill impairment by industry during the period 2007–2011.

We note that for purposes of this industry analysis, 2010 under IFRS includes both Restated and Transition Date Impairments.

Industries were ranked annually from the highest dollar value of goodwill impairment (ranked first) to the lowest dollar value of goodwill impairment (ranked tenth).

Looking to Table 7, in 2007 Information
Technology impaired the 5th largest amount
of goodwill, but in 2011 Information
Technology recorded the 10th largest
amount of goodwill impairment. Another
example is Financials, which ranked fourth in
overall goodwill impairment charges in 2008,
but ranked first in both 2010 for both
Pre-changeover GAAP and IFRS.

Table 7: Rank Order of Goodwill Impairments, Canadian Companies, by Dollar Value, by Industry (1 = Highest, 10 = Lowest) 2007-2011

	. To onlying cover on			
Rank Order	2007	2008	2009	2010
1	Consumer Discretionary	Materials	Consumer Discretionary	Financials
2	Energy	Consumer Discretionary	Financials	Energy
3	Materials	Information Technology	Industrials	Industrials
4	Industrials	Financials	Energy	Consumer Discretionary
5	Information Technology	Industrials	Consumer Staples	Healthcare
6	-	Energy	Healthcare	Telecommunication Services
7	-	Telecommunication Services	Materials	Consumer Staples
8	-	Utilities	Information Technology	Materials
9	-	Consumer Staples	-	Information Technology
10	-	Healthcare	-	-

2010 2011 Consumer **Financials** Discretionary Energy Materials Consumer Financials Staples Industrials Industrials Utilities Energy Healthcare Healthcare Consumer Telecommunication Discretionary Services Consumer Telecommunication Services Staples Materials Utilities Information Information

Technology

IFRS

Technology

²³ Industries are defined throughout the 2012 study in accordance with Global Industry Classification Standard (GICS) codes.

In Table 8, the percentage of Canadian companies that carried goodwill on their balance sheets in each of the 10 industries is shown over time (the largest percentage in each year is indicated in gray, and the smallest percentage in each year is indicated in blue).

Overall, approximately 60%–70% of Canadian companies carry goodwill on their balance sheets. All seven of the companies in Telecommunications services carried goodwill over the 2007–2011 period, followed by Consumer Staples at around 80%–85%.

Materials had the lowest percentage of companies with goodwill in each year at approximately 14%. The 2010 transition to IFRS did not have a significant impact as roughly the same number of companies carried goodwill.

Table 8: Percentage of Canadian Companies with Goodwill, by Industry 2007-2011

	Pre-changeover GAAP				IFRS	
	2007	2008	2009	2010	2010	2011
Energy	47%	42%	39%	42%	39%	41%
Materials	15	14	13	13	13	14
Industrials	74	69	70	69	70	71
Consumer Discretionary	65	65	65	68	68	65
Consumer Staples	79	86	86	83	83	86
Healthcare	29	29	26	29	29	26
Financials	57	55	55	55	55	57
Information Technology	79	74	76	79	74	79
Telecommunication Services	100	100	100	100	100	100
Utilities	50	40	60	70	70	80
Average	60%	57 %	59%	61%	62%	62%
Median	61%	60%	63%	68%	69%	68%

In Table 9, the percentage of Canadian companies *with* goodwill that recorded goodwill impairment in each of the 10 industries is shown over time (the largest percentage in each year is indicated in gray).

Of the Canadian companies with goodwill in 2011, Healthcare was the industry with the highest percentage of firms recognizing a goodwill impairment (33%). Conversely, only 3% of Information Technology companies with goodwill recognized an impairment in 2011, the lowest level of all industries.

The 2010 transition to IFRS resulted in some meaningful changes: the percentage of companies with goodwill that recorded goodwill impairment in the Utilities, Energy, Financials, Consumer Staples, Industrials, and Information Technology increased, while Consumer Discretionary declined. Materials, Healthcare and Telecommunication Services were unchanged.

Energy and Utilities were the industries registering the biggest changes, as a result of the 2010 transition to IFRS. Under

Pre-changeover GAAP, only 10% of Energy companies with goodwill had recorded a goodwill impairment in 2010. However, that proportion increased to 35% for the Energy industry under IFRS.

The impact was even greater for Utilites in that none of the companies with goodwill had reported an impairment under Pre-changeover GAAP, but 29% did so under IFRS.

Table 9: Percentage of Canadian Companies with Goodwill that Recorded Goodwill Impairment, by Industry 2007-2011

	Pre-changeover GAAP				IFRS		
	2007	2008	2009	2010	2010	2011	
Energy	23%	40%	11%	10%	35%	15%	
Materials	17	52	12	4	4	11	
Industrials	8	38	14	6	10	12	
Consumer Discretionary	12	28	16	9	7	21	
Consumer Staples	-	4	16	8	13	8	
Healthcare	-	20	22	20	20	33	
Financials	_	7	7	11	18	7	
Information Technology	3	25	7	3	4	3	
Telecommunication Services	-	14	-	14	14	29	
Utilities	-	25	-	-	29	13	
Average	6%	25%	11%	9%	15%	15%	
Median	2%	25%	11%	9%	13%	12%	

The total dollar value of goodwill impairments by industry over the time period 2007–2011 is shown in Table 10.²⁴ For example, in 2008 during the height of the financial crisis, Materials and Consumer Discretionary impaired the largest aggregate amount of goodwill, at \$3.3 billion and \$2.6 billion, respectively. Consumer Discretionary and Materials again topped the list in 2011 at \$3.0 and \$6.3 billion, respectively. Nearly 81% of aggregate goodwill impairment in 2011 was

Utilities

Total

recognized by three companies in these industries, two in Consumer Discretionary (Thomson Reuters at \$3.1 billion and Yellow Media at \$2.9 billion) and one in Materials (Kinross Gold Corporation at \$3.0 billion).

2010 also captures the impact of IFRS adoption for each of the industries. Table 10a breaks out aggregate 2010 IFRS goodwill impairments for each industry into Transition Date Impairment and Restated 2010 Impairment.

Energy and Financials had the largest amount of goodwill impairment in 2010 as originally reported under GAAP (\$102.8 million and \$1,051.2 million, respectively), and also had the largest amounts as restated under IFRS (\$1,870.0 million and \$6,187.0 million, respectively).

Table 10 and 10a: Goodwill Impairments, Canadian Companies, by Industry (in CAD \$millions)

Table 2007-2011							
	Pre-changeover	GAAP				FRS	
	2007	2008	2009	2010		2010	2011
Energy	\$768.4	\$973.8	\$95.1	\$102.	8	\$1,870.0	\$121.8
Materials	464.8	3,343.0	52.6	0.3		3.4	3,022.7
Industrials	61.0	1,048.6	311.0	93.9		85.1	554.0
Consumer Discretionary	2,386.8	2,582.4	1,232.8	35.4		27.4	6,257.8
Consumer Staples	-	20.3	85.1	14.0		135.8	8.6
Healthcare	-	9.9	53.6	34.5		34.1	55.6
Financials	-	1,118.1	1,077.3	1,051.	2	6,187.0	972.0
Information Technology	1.9	1,135.5	25.5	0.1		1.6	4.6
Telecomm. Services	-	154.0	-	14.1		14.1	36.0
Utilities	_	43.3	-	_		58.3	7.7
Total	\$3,682.9	\$10,428.9	\$2,933.0	\$1,346	i.3	\$8,416.7	\$11,040.8
	+		↓				
	Transition Date Impairment January 1, 2010 (IFRS)		Restated 2010 Impairment (IFRS)		2010 (IFRS)		
Energy	\$1,370.	4	\$499.6		\$1,870.0		
Materials	3.4		-		3.4		
Industrials	79.6		5.5		85.1		
Consumer Discretionary	13.0		14.4		27.4		
Consumer Staples	121.5		14.3		135.8		
Healthcare	34.1		-		34.1		
Financials	3,843.0)	2,344.0		6,187.0		
Information Technology	1.6		-		1.6		
Telecomm. Services	14.1		_		14.1		

23.2

\$2,900.9

58.3

\$8,416.7

35.1

\$5,515.8

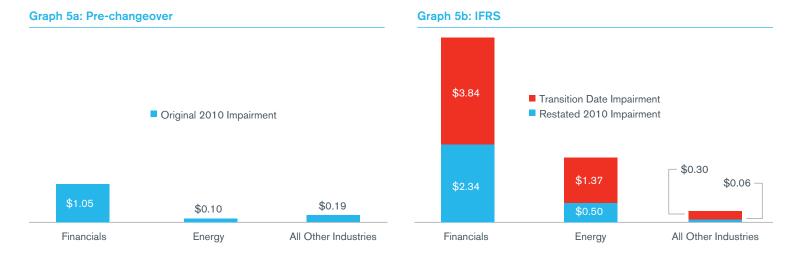
²⁴ Source: Standard & Poor's Research Insight and Capital IQ databases. For a complete listing of goodwill impairments for 2011 at GICS sub-industry level, see Appendix E.

Under both Pre-changeover GAAP and IFRS, the Financial and Energy sectors impaired the largest amount of aggregate goodwill in 2010. Financials and Energy accounted for \$1.15 billion (\$1.05 billion + \$0.10 billion) or 86% of the \$1.35 billion goodwill impairment originally recorded in 2010 under Prechangeover GAAP (Graph 5a).

Graph 5b displays Restated 2010 Impairment and Transition Date Impairment under IFRS. Unsurprisingly, Financials and Energy accounted for the majority of Restated 2010 Impairment as well, (shown in the lower half of each bar, in blue), at \$2.84 billion (\$2.34 billion + \$0.50 billion) or 98% of the total \$2.9 billion Restated 2010 Impairment.

The Financials and Energy sectors also accounted for the majority of Transition Date Impairment (shown in the upper half of each bar, in red). In Graph 5b, Financials and Energy accounted for \$5.21 billion (\$3.84 billion + \$1.37 billion) or 95% of the total \$5.5 billion of Transition Date Impairment recorded by Canadian companies in 2010.

Graph 5a and 5b: 2010 Goodwill Impairments (Pre-changeover GAAP, and then IFRS), Canadian Companies (in CAD \$billions).



Goodwill Impairment and Market-to-Book Value

Contributed by Duff & Phelps

Market-to-Book Value Overview

A company's market capitalization, while certainly not the definitive indicator of impairment, should not be ignored in the assessment of goodwill impairment. IAS 36 incorporates this sentiment by stating that external sources of information should be considered when determining whether there is any indication that an asset may be impaired.²⁵ In the list of potential impairment indicators is precisely the carrying amount of the entity's net assets exceeding its market capitalization. Companies that record goodwill impairment charges ostensibly do so as a result of more-than-temporary changes in the financial and operating conditions of their CGUs, often corroborated by aggregate market capitalization declines. It seems reasonable that companies, which have historically relied upon their stock prices during up markets to justify that there are no impairments in their businesses, should consider the implication of stock price declines as well.²⁶

Graph 6 plots the median market-to-book ratio for the following three portfolios of companies:

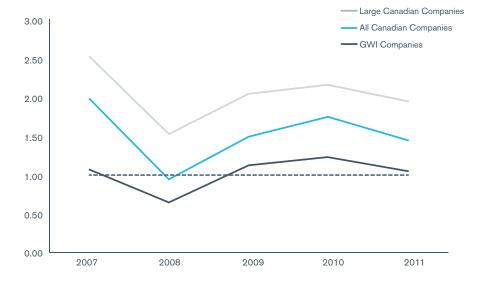
- All Canadian Companies: 621 Canadian publicly-traded companies in the dataset,
- Large Canadian Companies: 50 largest Canadian publicly-traded companies,²⁷

 GWI Companies: Canadian publiclytraded companies that recorded a goodwill impairment charge at any time over the 2007–2011 time horizon.^{28, 29}

All three of these portfolios experienced relatively low market-to-book ratios at the height of the financial crisis in 2008, with GWI Companies and All Canadian Companies trading below the reported book value of equity. This implied, at least temporarily, the market perceived that the reported book values were too high relative to the underlying value of these companies.

Rather unsurprisingly, the GWI Companies portfolio had the lowest median market-to-book value ratio over the entire 2007-2011 period.

Graph 6: Median Market-to-Book Ratio for All Canadian Companies, Large Canadian Companies, and GWI Companies 2007-2011



 $^{^{\}rm 25}\,\mbox{Subject}$ to limitations and guidance provided for in IAS 36, paragraph 12

²⁶ Mark M. Donahue, MBA. 'Impairment Revisited: Beware of goodwill impairment analyses during extreme market conditions", The Value Examiner, September/October 2010, pages 13-16

²⁷ As determined by market capitalization in the year measured.

Standard & Poor's Research Insight and Capital IQ databases. Market-to-book is defined as monthly market value divided by the common shareholder's interest in the company, including common stock, capital surplus, retained earnings.

²⁰ Companies that recorded goodwill impairment were identified based upon the goodwill impairments originally reported, across all years. As such, the effect of restating 2010 under IFRS is not captured here

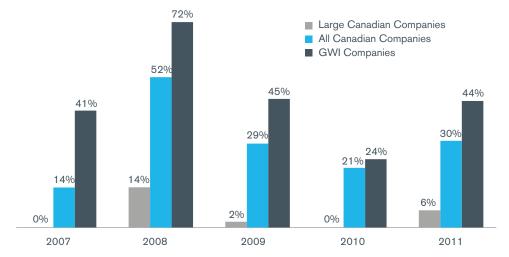
Goodwill Impairment and Market-to-Book Value

While it is instructive to analyze the market-to-book ratios over time, it is also informative to measure the percentage of companies with market-to-book ratios less than 1.0 over similar periods. As illustrated in Graph 7 the percentage of such companies, in each of the three portfolios, peaked towards the end of 2008.

Understanding the dynamics of the marketto-book ratios is informative, but the fact that an individual company has a ratio below 1.0 does not, by default, result in an impairment of goodwill. CGU structures, their respective performance, and where the goodwill resides are all critical factors that must be considered during the impairment testing process. A low market-to-book ratio, however, is an indicator for possible impairment and may require further analysis to conclude that there is no impairment.

It is also important to differentiate between a goodwill impairment event that may be corroborated by market capitalization declines, and a goodwill impairment event purely due to an "accounting" event.
Changes in goodwill impairment amounts
that result from the adoption of a new
accounting standard (e.g., Pre-changeover
GAAP to IFRS) are more likely a function of
the change in accounting standards, and may
not be accompanied by aggregate market
capitalization declines.

Graph 7: Percentage of All Canadian Companies, Large Canadian Companies, and GWI Companies with Market-to-Book Value Ratios Less than 1.0 2007-2011



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

One study (among others) found that "Impairments are associated with low market returns before the impairment, indicating that market investors anticipate goodwill impairments" ³⁰ (emphasis added).

Another study found that "impairments are negatively associated with corporate performance after the impairment"³¹ (emphasis added). The authors of this study also find evidence that investors and financial analysts revise their expectations downwards following a goodwill impairment announcement and those revisions are related to the size of the impairment.

Others remark on the amount of time between probable goodwill impairment and the actual accounting entry. As one study stated, "...we find that goodwill impairments lag deteriorating operating performance and stock returns by at least two years. Furthermore, the announcements of goodwill impairments elicit little market response. The evidence suggests that goodwill impairment decisions by management are not a timely reflection of the changes in estimated future underlying cash flows but rather a delayed response to the almost complete exhaustion of the goodwill." 32

A recent study has constructed alternative measures to accounting goodwill that the authors believe to be better predictors of future impairment charges and post acquisition operating performance. For instance, the authors measure a construct they call *fair value goodwill* ³³ and find that it significantly improves the prediction of operating returns. ³⁴

Relative performance by goodwill impairment characteristic

To study the performance of companies that have impaired goodwill relative to the market

in general, portfolios of Canadian companies were created with certain characteristics and then the relative performance of each was calculated over time.

Market-capitalization-weighted returns for each of the portfolios were calculated, and indices representing the growth of \$1 invested at year-end 2006 were constructed for each portfolio and compared to an index representing an investment of \$1 in the S&P/TSX Composite Index (the market) over the same period.³⁵

Impairments before 2011 are reported and calculated under Pre-changeover Canadian GAAP, with impairments in 2011 calculated under IFRS. This returns-based analysis is limited to the extent there are differences in calculating and quantifying impairments under both methods. We note, however, the results of our analysis are similar to the U.S. study, which has not undergone a significant accounting standard shift.

³⁰ Alciatore, M., P. Easton, and N. Spear. 2000. "Accounting for the Impairment of Long-Lived Assets: Evidence from the Petroleum Industry," Journal of Accounting and Economics 29: 151-172. Henning, S., B. Lewis, and W. Shaw. 2000. "Valuation of the Components of Purchased Goodwill," Journal of Accounting Research 38: 375-386. Herschey, M., and V. Richardson. 2003. "Investor Underreaction to Goodwill Write-Offs," Financial Analysts Journal, November/December: 75-84.

²¹ Li, Z., Shroff, P.K., Venkataraman, R., and Zhang, I. (2010) "Causes and Consequences of Goodwill Impairment Losses." Working paper.

Li, Z., Shroff, P.K., Venkataraman, K., and Zhang, I. (2010) "Causes and Consequences of Goodwill Impairm ³²Li, K.K. and Sloan, R.G. (2011) "Has Goodwill Accounting Gone Bad?." Working paper.

³³ The authors define market value of goodwill as the goodwill stat would have been recognized had the acquisition been carried out at fair market value (i.e., with a zero future economic profit for the acquirer), which according to them includes both synergies that were paid for (i.e., benefiting the target shareholders) and synergies that were not paid for (i.e., benefiting the acquirer shareholders).

³⁴ Lys, T.Z., Vincent, L., and Yehuda, N. (2012). "The Nature and Implications of Acquisition Goodwill." Working paper

²⁸ Market-capitalization-weighted returns were calculated at the company level for each of the 60 months in the time horizon studied for each portfolio; the sum of these represents the portfolio return

YES/NO Portfolios:

Companies that had impaired goodwill vs. companies that did not.

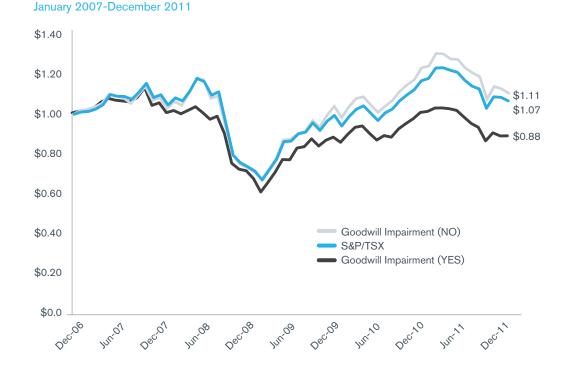
In an attempt to broadly gauge the performance differences between companies that had recognized goodwill impairment and those that had not, two separate portfolios were constructed:

 "Goodwill Impairment (YES)" portfolios: Comprised of companies that impaired goodwill in any quarter over the quarters ending March 2007 through December 2011. "Goodwill Impairment (NO)" portfolios: Comprised of companies that did not impair goodwill in any quarter over the period March 2007 through December 2011.

The returns of these two portfolios and the S&P/TSX Composite Index are then compared, as presented in Graph 8. Over the time horizon 2007–2011, companies that had not recorded goodwill impairment outperformed both companies that had recorded goodwill impairment and the S&P/TSX Index. An investment of \$1 at the end of December 2006 in the S&P/TSX Composite Index would have

grown to \$1.07 by the end of December 2011, while a similar investment in the "Goodwill Impairment (NO)" portfolio would have grown to \$1.11. The "Goodwill Impairment (YES)" portfolio, however, would have decreased to \$0.88.

Graph 8: Goodwill Impairment (YES) and Impairment (NO) Portfolios vs. the S&P/TSX Composite Index Index (Year-End 2006 = \$1.00)



Relative performance before and after goodwill is impaired

"Impairments are associated with low market returns before the impairment, indicating that market investors anticipate goodwill impairments.³⁶ Impairments are negatively associated with corporate performance after the impairment, indicating that goodwill, once written off, does not continue to produce income.⁷⁸⁷

The performance of U.S. companies relative to the market before and after goodwill is impaired was examined in a shared study between the Canadian and American offices of FEI and Duff & Phelps.³⁸ To complete this analysis, all (quarterly) occurrences of U.S. goodwill impairment over the 2006–2010 period were first mapped to the month that they were made public (i.e. the "reveal" month), using the filing date and the financial statement in which the impairment was originally announced as a proxy for the reveal month.³⁹

Then, for all companies revealing impairments in each month from January 2006 to December 2010, market capitalization weighted portfolio returns were calculated for the 12 months before the impairment reveal month, and for the 12 months after the impairment reveal month, as shown on Figure 1.



³⁶ Alciatore, M., P. Easton, and N. Spear, 2000. "Accounting for the Impairment of Long-Lived Assets: Evidence from the Petroleum Industry," Journal of Accounting and Economics 29: 151-172. Henning, S., B. Lewis, and W. Shaw. 2000 "Valuation of the Components of Purchased Goodwill", Journal of Accounting Research 38: 375-386. Herschey, M., and V. Richardson. 2003 "Investor Underreaction to Goodwill Write-Offs," Financial Analysis Journal, November / December: 75-84.

³⁷ Li, Z. P. Shroff, R, Venkataraman. 2006. "Goodwill impairment Loss: Causes and Consequences." University of Minnesota Working Paper."

ab In the U.S. Goodwill Impairment study, the market is defined as the S&P 500 Index. To learn more and for a free download of the U.S. study, visit http://www.duffandphelps.com/Pages/default.aspx and go to Expertise/Publications/View all Reports

³⁹ This was a simplification in the sense that some companies may announce the magnitude of goodwill impairment prior to filing their financial statements with the SEC.

The results of this study are summarized in Graph 9. For example, the average relative performance in the first six months after impairment (for all 60 reveal months) was -1.2 percent.

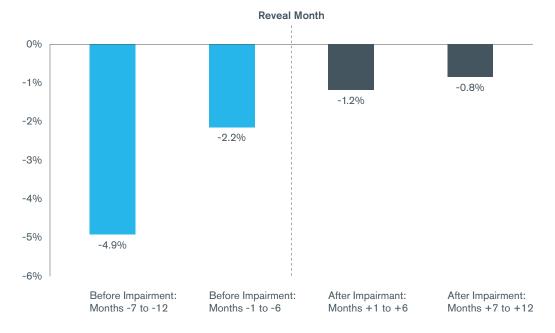
The overall results are as follows:

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

Again, this analysis is based on U.S. companies under U.S. GAAP, and results could be different if this same analysis were to be completed under IFRS as the nature of the impairment test is different. In the future, as more impairment data under IFRS is accumulated in Canada we will consider updating this analysis using Canadian companies.

Graph 9: Performance Relative to the S&P 500 Before and After Goodwill is Impaired (in%)

Goodwill Impairment "Reveal" Months January 2005-December 2009



Contributed by CFERF

Methodology

As part of this study, an online survey of Canadian financial executives was conducted in the spring of 2012. Respondents included CFOs (43%), controllers (20%), finance directors (13%), VP finance (11%), chief accountants (4%), as well as other titles (9%). The largest industry group (26%) was from the energy industry, 13% were from financial services, 8% from manufacturing and the remainder from more than a dozen other industries. 68% were from public companies and 32% from private companies. Responding public companies were dimensioned as follows: \$1 billion in revenues or higher (33%), revenues between \$100 million and \$1 billion and revenues less than \$100 million

(34%). Private companies, however, were more likely to be concentrated in either the range of \$100-499 million of revenues (47%) or \$500 million to \$1 billion (24%). More demographic information can be found in Appendix A.

The survey was followed by an executive research forum held on September 18, 2012 in which the views and insights of financial executives from a variety of industries were sought.

Cause and Effect

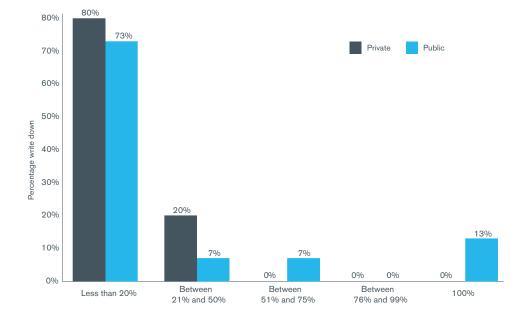
Of the respondents that had adopted IFRS, the majority tested goodwill for impairment upon adoption (81% of public companies and 76% of private). The majority of those who tested for impairment upon adoption and

who did find that the goodwill was impaired indicated that the necessary write-down was less than 20 percent. Only 20% of public companies wrote off more than 50% of their goodwill. No private companies wrote off more than 50%. See graph 10 below.

"Prior to IFRS, even though it didn't impact us at the time, you could have one part of the business doing extremely well that would shield the potential goodwill impairment of another part of the business. Now you can't do that ... And in any given year, if one part of the business underperforms, you could have a goodwill impairment when every other part of the business is strikingly handsome.

Michael Staresinic –Vice President, Sprott Inc.



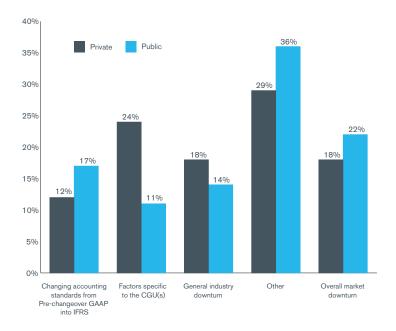


Interestingly, when asked for the main driver(s) causing their most *recent* goodwill impairment, a sizeable portion of respondents (17% of public company respondents and 12% of private company respondents) indicated that the transition from pre-changeover GAAP to IFRS itself was the main cause. However in the research forum, Vic Wells, a corporate director and retired CFO who serves on several audit committees, said he suspected that there are a few companies which did not hesitate to use the IFRS conversion as a good reason for justifying impairments that may have already been in the works. "It was good timing," Wells said.

The most common reason for public companies was the overall market downturn (22%), and factors specific to the cash generating units (CGUs) were most common for private companies (24%). These responses differed significantly from those of the American respondents, of whom 51% indicated that the main driver of the goodwill impairment were factors specific to the reporting units (which are similar to CGU's but typically aggregated at a higher level). General industry downturn was cited by 18% of private companies and 14% of public companies.

Participants at the research forum were asked if they thought the requirement under IFRS to drill into the CGU(s) at a lower level than previously could be one of the contributing factors to greater impairments, rather than the more consolidated look previously seen under Pre-changeover GAAP. "You're not able to consolidate and essentially borrow off the surplus of other assets. So I think that that's definitely a factor," said Rob Jacobucci, Director of Financial Reporting of TransCanada.

Graph 11: In your professional opinion, what was the main driver/s that caused your most recent impairment?



Trials and Tribulations

The most significant challenge noted by public company respondents with respect to goodwill impairment upon the initial adoption of IFRS was the identification of cash generating units (25% of public companies). The challenges for the private company respondents were evenly spread between the identification of CGUs, determining the carrying amount of the CGUs, and developing projections for the value in use estimate.

"In our business we mostly we offer services, so as soon as you've made an acquisition, the objective is to integrate the service within your overall portfolio. Now, try to track that service back to the original acquisition. Good luck. I'd say that's our biggest challenge. We kind of start sweating towards close to the end of the year in terms of how do we track these services that were acquired, once they're integrated. Very challenging."

Raymond Castonguay – Senior Vice President, Finance, Morneau Shepell Inc. 33% of public company respondents and 41% of private company respondents indicated that there were no issues worth mentioning related to goodwill impairment upon the initial adoption of IFRS.

Table 11: What was your most significant challenge related to goodwill impairment upon initial adoption of IFRS?

	Public	Private
Determining the carrying amount of the CGUs	11%	18%
Developing market-participant based projections for the Fair Value Less Costs to Sell (FVLCS) estimate	8%	6%
Developing projections for the Value in Use (VIU) estimate	14%	18%
Grouping the CGUs to test goodwill and other higher level assets	8%	0%
Identification of Cash Generating Units (CGUs)	25%	18%
No issues worth mentioning	33%	41%

Restating business combinations

For the prior transactions that qualified as business combinations, companies were entitled to select whether they wanted to restate the past business combinations in accordance with IFRS. The private companies, excluding the 18% which did not have any prior transactions, generally did not restate (53%). The public companies also, excluding the 14% that did not have prior transactions, were even less likely to restate (64%). Some 14% of public companies restated all prior transactions and some 8% of

public companies restated from a point in time onwards. Private companies restated 30% of past business combinations.

CGU

Most survey respondents had between two to five CGUs in the most recent reporting period. Interestingly, one in four private companies had more than 10 CGUs. Adam Barnard of Canadian Tire speculated that certain private companies may be run by owner/founders who are analyzing their organizations at a more microscopic level because they have "much

more skin in the game". Raymond Castonguay of Morneau Sheppell suggested private companies are using CGUs for operational monitoring, whereas public companies have a dual purpose, both operational monitoring and for reporting purposes. "These are very different objectives in my mind," he said. "It is counter-intuitive because you would think that private companies would try to simplify their life. You know, why shoot yourself in the foot? Say that you don't need it, and just aggregate as much as possible and monitor differently."

It makes sense for public companies to amalgamate their CGUs if there is the opportunity to do so, given the fact that having more CGUs can make it harder to shield impairments, said Adam Bernard of Canadian Tire. "If it's not appropriate to amalgamate then you wouldn't do it. But I think given an opportunity, absolutely, you would do it. But you wouldn't do it to the detriment of staying true to the standard." Rob Jacobucci from TransCanada agreed, noting "to the extent that it makes sense and it's still within the guidelines, I think that companies would aggregate."

Similarly, Marc-Antoine Daoust from Bombardier noted: "It's simple when you have the opportunity to amalgamate certain things together. I think senior management prefer that route. It gives a bit more flexibility in that sense. But if by doing so you go against the IFRS principles, you could be challenged by your auditors. But given the opportunities and when you can justify it, I think it would be preferable to combine CGUs, as opposed to having more CGUs." On the other hand, Raymond Castonguay of Morneau Shepell suggested that small

"At a previous entrepreneurial company I worked for, we had 13 business units and each of them was run by a business unit manager. The performance that their incentive pay was based on was the bottom line, and very close scrutiny over the transactions, the profitability of the business. So I can understand why there would be more CGUs in a smaller company."

Rose Papastamos – Vice President and Corporate Controller, Prism Medical Ltd.

impairments in individual CGUs might not be considered material enough to report, whereas when combined into a larger, single CGU, the combined impact could be considered material.

Prism Medical Ltd., a company which makes medical devices such as lifts for hospital patients, has grown through acquisition primarily, with about 12 acquisitions in the last ten years, according to Rose Papastamos, the company's Vice President and Corporate Controller. Defining the company's CGUs has been a challenge under IFRS, and will be so going forward. This is particularly challenging when a company has put great effort into integrating an acquisition, only to have to go back and isolate it for the purpose of identifying a CGU, she said. "Our challenge is going back to the acquisition, the assets that we acquired and substantiating that that asset is still there in a similar form with growth and value to it," she said.

According to one survey respondent, the impairment process provides some ability to understand what expectations are for the

future CGU. "If the CGU is developed and defined well, it can provide a great deal of value on the actual expectations of the business," the survey respondent wrote. According to another respondent, impairment testing is not an exact science, with many valuation techniques and assumptions to derive a "fair value" for the CGU. It is a valuation exercise that most analysts find difficult to understand and therefore somewhat ignore, and instead focus on EBITDA," the respondent wrote.

"We didn't have any significant impairments. When you look at a business unit, and having a few hundred thousand dollars in a particular market -- the way we define CGU is based on retail markets. So we could have a Canadian Tire store and a gas bar together, and the gas bar could in fact have an impairment but because it's shielded by another Canadian Tire store or whether it's a Mark's Work Wearhouse retail market, by the way we've defined our CGUs, we have in fact shielded ourselves from that impairment. And rightly so."

Adam Barnard – Manager, Retail

Accounting, Canadian Tire Corp.

Is There More to Come?

In what may be a reflection of an improving economic climate and a "return to normalcy" after the initial adoption of IFRS, when asked if additional goodwill or other asset impairments during an upcoming interim or annual test were anticipated, the majority of Canadian respondents indicated that they were not.

"The history of Morneau Shepell has always been 5 to 7% organic growth. We're in an industry where there's not a lot of fluctuation. Our business is built on 12 or 24 month and five-year contracts. So when the market downturn hit, we didn't see any impact until early in the recovery as we were renewing our contracts. Then

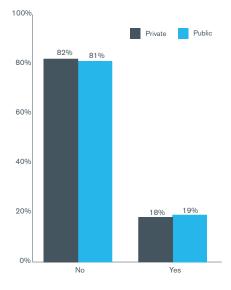
we started seeing revenue fall a bit. I think it was somewhat foreign in concept to the overall company because we had been used to growing or through acquisition organic growth. I think the management looked at it as really temporary and due to the market downturn, but really felt confident that the business would be coming back, so based on that they decided there was no need to take any impairment. And there was no impairment also in regards to the transition to IFRS. In fact, management was absolutely bang on, because in 2011 we started growing again, and 2012 has been a stellar year for us."

Raymond Castonguay – Senior Vice President, Finance, Morneau Shepell Inc.

"Upon conversion to IFRS, the decision was made not to impair any of the goodwill we have. The goodwill that we had resulted from a transaction a couple of years ago in Europe. Subsequently, the value of the business remained pretty much constant, despite the fact that the European economy is not too strong. But the public sectors still continue to invest into the rail infrastructure. So we still have good contracts in Europe, which is our main market. So in a nut shell, I think the situation before IFRS and post-IFRS is pretty much identical."

Marc-Antoine Daoust – Director of Financial Reporting, Bombardier

Graph 12: Do you anticipate additional goodwill or other asset impairments during an upcoming interim or annual test?



Goodwill

When asked about the lessons learned from the goodwill impairment-testing process, most of the respondents noted the complex, time-consuming, costly, and subjective nature of the process.

- "Impairment tests need to be made regularly and be very detailed."
 - Survey respondent
- "Start as early as possible and engage your auditors as soon as possible."
 - Survey respondent
- "There is still a lot of judgement required. Impairment analysis is not an exact science." - Survey respondent

There is a lack of adequate guidance to lean on when conducting goodwill impairment testing, observed Michael Staresinic, Vice President Finance for Sprott Inc. "It is quite complex," he said, noting testing with Value in Use (VIU) is more complex than using Fair Value Less Cost to Sell (FVLCTS). "If FVLCTS produces an impairment, you can go on to a second methodology which is Value In Use. If this fails, you then have an impairment that must be recorded."

Despite the complexity of goodwill impairment testing, interestingly, only 33% of Canadian public company respondents and 18% of Canadian private company respondents indicated that a valuation consultant was used for their goodwill impairment testing compared to 56% of American public company respondents and 43% of American private company respondents.

Three differing views of the impairment testing process from CFERF survey respondents:

- 1. "Very theoretical and not very useful to users of financial statements."
- 2. "Goodwill should be amortized, like it was prior to 2003."
- 3. "Highly judgemental, but the best we have."

"The challenge is that once you've done the impairment charge, there's no going back. So it's a confirmation of the loss of value and the CEO that did the acquisition will need to swallow the pill and I'm sure it would take a few iterations and discussions. Before getting to an impairment, depending on the level of impairment, but if it's material, there would be a lot of discussion. The pill wouldn't be swallowed in a quarter, there would be a lot of discussion, including with the audit committee."

Raymond Castonguay – Senior Vice President, Finance, Morneau Shepell Inc. "Goodwill impairment is a lagging indicator, because it would be very unlikely to look out so far into the future that you're going to forecast an impairment. I think that you're more likely to look at things that have already happened, either in your own company, in the industry, look at trends of lower revenues and then acknowledge that you do indeed have an impairment on your hands, but to forecast out years into the future to say there could be an impairment test, I think would be surprising."

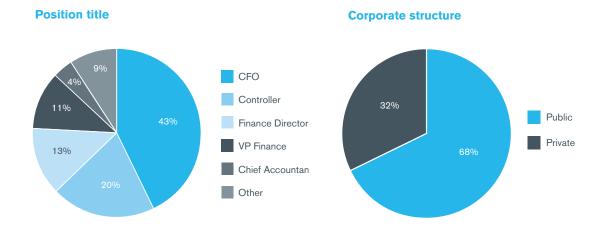
Rob Jacobucci – Director of Financial Reporting, TransCanada

Food for thought when doing M&A

"Because IFRS has a different way of testing for impairment, your volatility where impairment wouldn't have happened under Canadian GAAP - it will happen under IFRS. You have to write down the part that is impaired. I don't think it's ever going to slow down an acquisition because you don't make a business decision based on the accounting. But I think it should be an input. And I think the input on how IFRS and goodwill interact has not been considered nearly as much as it would have been under Canadian GAAP because it's just too new. People are still learning the impacts of it."

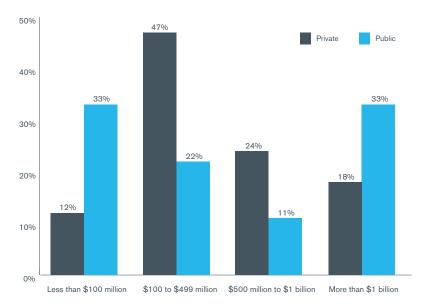
Michael Staresinic – Vice President, Finance, Sprott Inc.

Appendix A: CFERF Survey Demographics



Appendix A: CFERF Survey Demographics

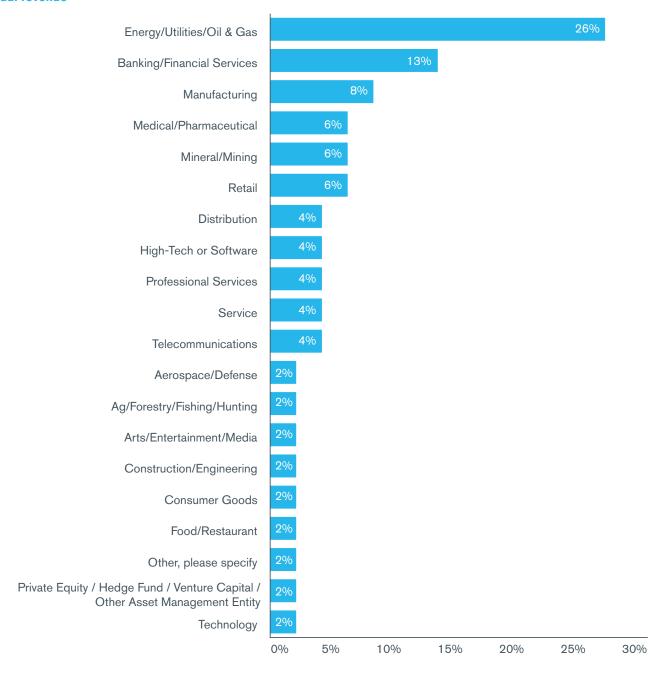
Annual revenue



 $^{^{\}star}$ Due to rounding graph will not add up to 100%

Appendix A: CFERF Survey Demographics

Annual revenue



Forum Chair:

Appendix B: CFERF Forum Participants

Vic Wells - Chair, CFERF

Moderators: Christian Bellavance – VP, Research & Communications, FEI Canada

Andrew Harington - Managing Director, Duff & Phelps

Toronto Participants: Adam Barnard – Manager, Retail Accounting, Canadian Tire Corporation

Rose Papastamos - VP Corporate Controller, Prism Medical Ltd.

Raymond Castonguay - Senior Vice-President, Finance, Morneau Shepell Inc.

Phone Participants: Michael Conway - Chief Executive & National President, FEI Canada

Marc-Antoine Daoust - Director of Financial Reporting, Bombardier

Yvonne Frame-Zawalykut - Manager, Financial Accounting & Projects, TransCanada

Rob Jacobucci, Director of Financial Reporting, TransCanada

Interview: Michael Staresinic - VP Finance, Sprott Inc.

Observers: Laura Bobak – Senior Writer, FEI Canada

Scott Davidson - Managing Director, Duff & Phelps

Chris Jones - Vice President, Duff & Phelps

Duff & Phelps Contact Information

For further questions: Andrew Harington

416 364 9790

Chris Jones 416 361 2589

Appendix C: Common Goodwill Impairment Questions

Can I use a projection period longer than a five year period?

When estimating Value in Use (VIU), management may use cash flow projections based on financial budgets/forecasts over a period longer than five years if it is confident that these projections are reliable and it can demonstrate its ability, based on past experience, to forecast cash flows accurately over that longer period [IAS 36.35]. In addition, demonstration of a business cycle being longer than five years can also provide additional support. Consistency with a prior valuation with longer projection period may also provide support. In short, the use of a longer period is possible as long as it is justified [IAS 36.33(b)]. If a longer period is used, management must disclose that fact, along with a justification for the use of such period [IAS 36.134(d)(iii)]. On the other hand, if management is measuring FVLCS using discounted cash flow (DCF) projections, it must simply disclose the period over which management has projected cash flows [IAS 36.134(e)(iii)].

How do I distinguish between maintenance costs and costs to enhance the asset's performance?

As the name suggest, maintenance costs are the costs that need to be incurred to ensure the normal operation of the business or the day-to-day servicing of the asset [IAS 36.41]. Conversely, costs to enhance the asset's performance would likely increase the efficiency and/or capacity of the operations and hence the associated profitability. Only committed costs should be included in the calculation of VIU, whereas uncommitted estimated costs and capital expenditures to enhance the asset's performance should be excluded from projections [IAS 36.33(b) and 44]. Accordingly, all associated projected cash flow benefits (e.g., sales or net working capital impact of excluding these costs)

should also be removed [IAS 36.46]. However, when an entity becomes committed to a restructuring initiative, some assets are likely to be affected by this restructuring. In that case, management's estimates of future cash flows for the purpose of determining VIU would reflect the cost savings and other benefits from the restructuring (based on the most recent financial budgets/forecasts approved by management) [IAS 36.47]. As a reminder, when estimating FVLCS, any restructuring initiatives or measures to enhance an asset's performance are included in the projections, if market participants would also consider them when pricing the asset or CGU [IAS 36.BC 69(c)].

Should I use a pre-tax WACC? What is a pre-tax WACC?

Strictly speaking, paragraph 55 of IAS 36. requires the use of a pre-tax discount rate when estimating VIU. This is a result of the requirement in paragraph 50 for projected cash flow to exclude income tax receipts or payments. The basis for such requirement stems from the fact that deferred tax assets and liabilities are NOT measured on a discounted basis and the Board perceived some complexity in trying to reconcile that with measuring the tax effects of temporary differences on a discounted basis. Therefore, the Board decided that the discount rate should be estimated on a pre-tax basis and, for consistency reasons, future cash flows should also be derived on a pre-tax cash basis. From a valuation perspective, using a pre-tax WACC to discount pre-tax cash flows should arrive at the same result as using a post-tax WACC to discount post-tax cash flows. However, as paragraph BCZ 85 points out, estimating a pre-tax discount rate is not as straightforward as dividing the post-tax discount rate by (1 - tax rate). The 'real' pre-tax discount rate differs from the post-tax discount rate grossed-up by the

standard rate of tax depending on the tax rate, the post-tax discount rate, the timing of the future tax cash flows and the useful life of the asset. The 'real' pre-tax discount rate can be determined by an iterative computation as illustrated in BCZ 85.

Is the goodwill impairment test of a CGU performed at the equity or enterprise value level?

In general, the focus of IAS 36 is to evaluate the impairment of assets within the scope of the standard. A CGU (and its goodwill) is tested for impairment at the enterprise value level, by comparing the recoverable amount of the CGU (or group of CGUs) to its carrying amount. By testing at the enterprise value level, a potential difference between the fair value and book value of debt does not influence the impairment test, except when reconciling the aggregate recoverable amount of all CGUs to the market cap of a publicly-traded company. Nevertheless, consistency in the comparison between recoverable amount and carrying amount is key. In other words, a CGU's carrying amount must be determined on a consistent basis with the way the CGU recoverable amount is estimated [IAS 36.75]. An entity should ensure that the carrying amount of the CGU includes only the assets directly attributable (or reasonably allocated) to the CGU and which will be used by the CGU to generate the relevant stream of future cash flows [IAS 36.76]. From a practical standpoint, the recoverable amount of a CGU is sometimes determined after consideration of assets that are not part of such CGU (e.g., receivables) or liabilities that have been recognized (e.g., payables, pensions, and other provisions). In such cases, the carrying amount of the CGU used for testing purposes is increased by the carrying amount of those assets and decreased by the carrying amount of those liabilities [IAS 36.79].

^{*}These questions and answers are intended to be considered only as general guidance. Readers should consult with their own expert advisors for assistance on any specific matter.

Appendix C: Common Goodwill Impairment Questions

How do I allocate corporate assets for impairment testing purposes?

Corporate assets, by definition, do not generate cash inflows independently of other assets or groups of assets and their carrying amount cannot be fully attributed to a single CGU. When testing good CGUs for impairment, if a portion of the carrying amount of a corporate asset [IAS 36.102]:

- a) Can be allocated on a reasonable and consistent basis to that CGU, the entity shall compare the recoverable amount of the CGU with its carrying amount, including the portion of the carrying amount of the corporate asset allocated to the CGU.
- b) Cannot be allocated on a reasonable and consistent basis to that CGU, the entity shall:

- i) Compare the carrying amount of the CGU, excluding the corporate asset, with its recoverable amount;
- ii) Identify the smallest group of CGUs that includes the CGU under review and to which a portion of the carrying amount of the corporate asset can be allocated on a reasonable and consistent basis; and
- iii) Compare the carrying amount of that group of CGUs, including the portion of the carrying amount of the corporate asset allocated to that group of units, with the recoverable amount of the group of CGU.

The smallest group of CGUs in (ii) or group of CGUs in (iii) may coincide with a company's division or the group company as a whole.

Can I use a discounted cash flow (DCF) model to determine FVLCS?

Yes, the DCF method, a form of the Income Approach, can be used to determine FVLCS. It does not necessarily have to be based on transactions or guideline company multiples. This is obvious, for example, in paragraph 134 of IAS 36, which requires management to disclose the period over which projected cash flows are estimated, in circumstances where discounted cash flow (DCF) projections are used to measure FVLCS.

^{*}These questions and answers are intended to be considered only as general guidance. Readers should consult with their own expert advisors for assistance on any specific matter.

Appendix D: Quick Accounting Reference Guide – IAS 36

Goodwill acquired in a business combination is allocated to each of the acquirer's cash generating units (CGUs), or group of CGUs that are expected to benefit from the synergies of the combination.⁴⁰ Each unit or group of units to which goodwill is so allocated represents the lowest level within the entity at which goodwill is monitored for internal management purposes and shall not be larger than an operating segment as defined by IFRS 8 *Operating Segments*. Allocation of goodwill is performed at the acquisition date.

CGUs that have been allocated goodwill shall be assessed for impairment at the end of each reporting period where there is an indication that an asset may be impaired (i.e., a triggering event). Further, irrespective of whether there is an indication of impairment, a company shall also measure recoverability annually.

Goodwill is considered impaired when the carrying amount of the CGU in question exceeds the recoverable amount of the unit. The recoverable amount of a CGU is the higher of: 1) its fair value less costs to sell, and 2) its value in use.⁴¹ Any impairment loss shall be allocated to reduce the carrying amount of goodwill to zero, and then to the other assets of the CGU on a pro-rata basis.⁴²

When calculating the recoverable amount of a CGU to which goodwill has been allocated, it is important to note that the most recent detailed calculation performed in a preceding period may be used in the impairment test as long as the following criteria are met [IAS 36. 99]:

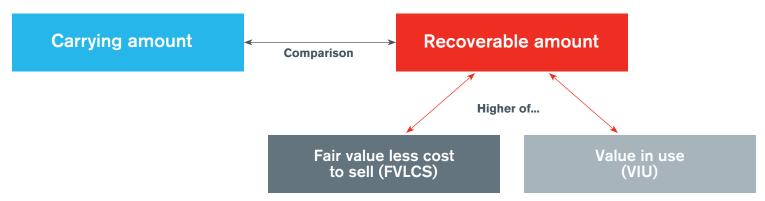
 The assets and liabilities making up the unit have not changed significantly since the most recent recoverable amount calculation:

- The most recent recoverable amount calculation resulted in an amount that exceeded the carrying amount of the unit by a substantial margin; and
- Based on analysis of events that have occurred and circumstances that have changed since the most recent recoverable amount calculation, the likelihood that a current recoverable amount determination would be less than the current carrying amount of the unit is remote.

The annual goodwill impairment test for a CGU 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.

Appendix C addresses common questions and concerns with regard to the application of this standard.





^{*}This section is intended to be considered only as general guidance. Readers should consult with their own expert advisors for assistance on any specific matter.

⁴⁰ Goodwill acquired in a business combination should be allocated to CGUs that are expected to benefit from the synergies of the combination irrespective of whether other assets or liabilities of the acquiree are assigned to those units or groups of units.

⁴¹ It is not always necessary to determine both an asset's FVLCS and its VIU. If either of these amounts exceeds the carrying amount, the asset is not impaired and it is not necessary to estimate the other amount [IAS 36.19].

⁴² Subject to limitations and guidance provided for paragraphs 104-106 in IAS 36.

Appendix E: Goodwill Impairments by Industry Group

GICS Code	GICS Industry Group Name	Original GWI (2010,GAAP) (in \$millions)	Transition-Date GWI (2010, IFRS) (in \$millions)	Restated GWI (2010, IFRS) (in \$millions)	Aggregate GWI (2010, IFRS) (in \$millions)	GWI (2011, IFRS) (in \$millions)	Number Co's (2011)
	Energy (Industry group total)	\$103	\$1,370	\$500	\$1,870	\$122	
1010	Energy	\$103	\$1,370	\$500	\$1,870	\$122	118
	Material (Industry group total)	\$0.3	\$3	_	\$3	\$3,023	
1510	Materials	\$0.3	\$3	-	\$3	\$3,023	197
	Industrials (Industry group total)	\$94	\$80	\$6	\$85	\$554	
2010	Capital Goods	\$89	_	\$6	\$6	\$432	41
2020	Commercial and Professional Services	\$5	\$5	_	\$5	\$121	16
2030	Transportation	_	\$74	-	\$74	\$1	13
	Consumer Discretionary	\$35	\$13	\$14	\$27	\$6,258	
	(Industry group total)						
2510	Automobiles and Components	-	\$13	\$3	\$16	\$84	10
2520	Consumer Durables and Apparel	-	-	\$11	\$11	-	5
2530	Consumer Services	\$32	-	_	_	\$1	17
2540	Media	\$3	-	_	_	\$5,994	17
2550	Retailing	_	-	_	_	\$179	17
	Consumer Staples (Industry group total)	\$14	\$122	\$14	\$136	\$9	
3010	Food and Staples Retailing	_	\$119	\$14	\$133	\$1	11
3020	Food, Beverage and Tobacco	\$14	\$2	_	\$2	\$8	16
3030	Household and Personal Products	-	-	-	-	-	2
	Healthcare (Industry group total)	\$34	\$34	_	\$34	\$56	
3510	Healthcare Equipment and Services	\$34	\$7	-	\$7	\$53	12
3520	Pharmaceuticals, Biotechnology and Life Sciences	-	\$27	-	\$27	\$2	23
	Financials (Industry group total)	\$1,051	\$3,843	\$2,344	\$6,187	\$972	
4010	Banks	\$7	\$1,261	_	\$1,261	_	16
4020	Diversified Financials	\$5	\$2,580	\$2,330	\$4,910	_	13
4030	Insurance	\$1,039	-	_	_	\$972	11
4040	Real Estate	_	\$2	\$14	\$16	_	11
	Information Technology (Industry group total)	\$0.1	\$2	-	\$2	\$4.6	
4510	Software and Services	-	-	-	-	\$5	22
4520	Technology Hardware and Equipment	\$0.1	\$2	-	\$2	-	16
4530	Semiconductors and Semiconductor Equipment	-	-	-	-	-	-
	Telecommunications Services (Industry group total)	\$14	\$14	-	\$14	\$36	
5010	Telecommunication Services	\$14	\$14	_	\$14	\$36	7
	Utilities (Industry group total)	\$0	\$35	\$23	\$58	\$8	
5510	Utilities	_	\$35	\$23	\$58	\$8	10

THE CANADIAN FINANCIAL EXECUTIVES RESEARCH FOUNDATION (CFERF) is

the non-profit research institute of FEI Canada. The foundation's mandate is to advance the profession and practices of financial management through research. CFERF undertakes objective research projects relevant to the needs of FEI Canada's 1,800 members in working toward the advancement of corporate efficiency in Canada. Further information can be found at www.feicanada.org.

FINANCIAL EXECUTIVES INTERNATIONAL CANADA (FEI CANADA) is the all industry professional membership association for senior financial executives. With eleven chapters across Canada and 1,800 members, FEI Canada provides professional development, thought leadership and advocacy services to its members. The association membership, which consists of Chief Financial Officers, Audit Committee Directors and senior executives in the Finance, Controller, Treasury and Taxation functions, represents a significant number of Canada's leading and most influential corporations. Further information can be found at www.feicanada.org.

DUFF & PHELPS is a leading global financial advisory and investment banking firm, Duff & Phelps balances analytical skills, deep market insight and independence to help clients make sound decisions. The firm provides expertise in the areas of valuation, transactions, financial restructuring, alternative assets, disputes and taxation. With more than 1,000 employees, Duff & Phelps serves clients from offices in North America, Europe and Asia. Investment banking services in the United States are provided by Duff & Phelps Securities, LLC. Investment banking services in the United Kingdom and Germany are provided by Duff & Phelps Securities, Ltd. Duff & Phelps Securities, Ltd. is authorized and regulated by Financial Services Authority. Investment banking services in France are provided by Duff & Phelps SAS. For more information, visit www.duffandphelps.com.

CORPORATE DONORS:

GOLD (\$10,000 +):

Husky Energy Inc.

Bell Canada

SILVER (\$5,000-10,000):

Agrium Inc.

CGI Group Inc.

Imperial Oil Ltd.

BRONZE (\$1,000-5,000):

Canadian Western Bank Group Open Text Corporation PotashCorp

FEI CANADA'S RESEARCH TEAM:

Michael Conway - Chief Executive & National President

Christian Bellavance - Vice President, Research & Communications

Laura Bobak - Senior Writer

Melissa Gibson - Communications & Research Manager

About Duff & Phelps

As a leading global independent provider of financial advisory and investment banking services, Duff & Phelps delivers trusted advice to our clients principally in the areas of valuation, transactions, financial restructuring, dispute and taxation. Our world class capabilities and resources, combined with an agile and responsive delivery, distinguish our clients' experience in working with us.

With offices in North America, Europe and Asia, Duff & Phelps is committed to fulfilling its mission to protect, recover and maximize value for its clients. Investment banking services in the United States are provided by Duff & Phelps Securities, LLC. Investment banking services in the United Kingdom and Germany are provided by Duff & Phelps Securities Ltd. Duff & Phelps Securities Ltd. is authorized and regulated by the Financial Services Authority. Investment banking services in France are provided by Duff & Phelps SAS. For more information, visit www.duffandphelps.com.

This material is offered for educational purposes with the understanding that Duff & Phelps, LLC is not rendering legal, accounting or any other professional service through presentation of this material.

The information presented in this report has been obtained with the greatest of care from sources believed to be reliable, but is not guaranteed to be complete, accurate or timely. Duff & Phelps, LLC expressly disclaims any liability, of any type, including direct, indirect, incidental, special or consequential damages, arising from or relating to the use of this material or any errors or omissions that may be contained herein.

Copyright ©2013 Duff & Phelps Corporation. All rights reserved.

Duff & Phelps Authors

James P. Harrington

Director

+1 312 697 4938

james.harrington@duffandphelps.com

Carla Nunes

Director

+1 215 430 6149

carla.nunes@duffandphelps.com

Gary Roland

Managing Director + 1 215 430 6042

gary.roland@duffandphelps.com

Duff & Phelps Contributors

Andrew Harington

Managing Director

+1 416 364 9790

andrew.harington@duffandphelps.com

Christopher Jones

Vice President

+1 416 361 2589

christopher.jones@duffandphelps.com

Niel Patel

Analyst

+ 1 312 697 4567

niel.patel@duffandphelps.com