A U.S. Manager's Guide to Differences Between IFRS and U.S. GAAP

James F. Sander
Butler University, jsander@butler.edu

Susan B. Hughes

Follow this and additional works at: https://digitalcommons.butler.edu/cob_papers

Part of the Accounting Commons

Recommended Citation
https://digitalcommons.butler.edu/cob_papers/69

This Article is brought to you for free and open access by the Lacy School of Business at Digital Commons @ Butler University. It has been accepted for inclusion in Scholarship and Professional Work - Business by an authorized administrator of Digital Commons @ Butler University. For more information, please contact digitalscholarship@butler.edu.
The original publication appeared at:

A U.S. Manager’s Guide to Differences Between IFRS and U.S. GAAP

BY SUSAN B. HUGHES, PH.D., CPA, AND JAMES F. SANDER, PH.D., CPA

EXECUTIVE SUMMARY  International Financial Reporting Standards (IFRS) are now required for consolidated financial reports for all European Union exchange-listed companies. Officials estimated that for 2005, the initial year of EU adoption, 8,000 financial statements were prepared in accordance with IFRS for the first time. Other countries have also adopted IFRS or IFRS-equivalent financial reporting standards. IFRS differ from U.S. Generally Accepted Accounting Principles (GAAP) in many key areas. The International Accounting Standards Board (IASB) and the Financial Accounting Standards Board (FASB) are working on various convergence projects designed to reduce or eliminate differences between the two sets of reporting standards. But existing differences will likely continue for at least the next two years, and, for many accounting topics, differences are likely to last much longer. This article highlights the 20 convergence projects and summarizes the differences between the two sets of standards. In addition, differences in three topics that are not included in the convergence efforts are identified. Differences between IFRS and U.S. GAAP found in actual EU company Form 20-F filings are used to illustrate the impact of the reporting-standard differences.
IFRS or IFRS-equivalent financial reporting standards. Canada, for example, is expected to adopt IFRS effective January 1, 2011.\textsuperscript{1}

In today’s global business environment, it is likely that U.S. businesses have customers, suppliers, or potential acquisition candidates that prepare their financial statements in accordance with IFRS. To evaluate the financial condition and net income of these companies appropriately, accountants familiar with U.S. GAAP need to understand where U.S. GAAP and IFRS differ and be able to estimate the potential impact of these differences. We will look at current differences between U.S. GAAP and IFRS using three steps:

1. The FASB and IASB identified short- and long-term convergence projects in their 2006 “Roadmap for Convergence.”\textsuperscript{2} The accounting topics mentioned in these convergence projects are listed in two tables, and key differences between IFRS and U.S. GAAP are provided.

2. A few additional accounting topics not addressed by either convergence project are noted, and key differences are highlighted.

3. The actual impact of the key differences on net income is illustrated using Form 20-F reconciliations of IFRS-based net income compared to that computed using U.S. GAAP.

In 2006, the IASB announced that no major changes in IFRS will occur before 2009.\textsuperscript{3} The implementation dates for new standards adopted during the next two years will be delayed until then. This means that even if differences between the two sets of accounting standards are resolved through the FASB and IASB convergence projects, important differences in the existing financial reporting standards will continue for at least the next few years. There are other differences between the two sets of financial reporting standards that are not included in the convergence projects, and these differences may continue to exist indefinitely.

**Short- and Long-Term Convergence Projects**

**Short-term Convergence Projects.** The Boards are working individually and jointly on nine short-term convergence projects. The goal is to complete work on these specific standard-setting projects by the end of 2008. See Table 1 for a list of the short-term convergence projects. The table provides information on which Board is examining the topic, the underlying differences between IFRS and U.S. GAAP, and the status of the project as of July 2007.\textsuperscript{4}

As indicated in Table 1, three of the short-term convergence projects have been completed: IFRS 8, “Operating Segments,” was issued by the IASB in 2006; Statement of Financial Accounting Standards (SFAS) No. 159, “The Fair Value Option for Financial Assets and Financial Liabilities—Including an amendment of FASB Statement No. 115,” was issued by the FASB in 2007; and Revised IAS 23, “Borrowing Costs,” was issued by the IASB in 2007. Completion of these projects indicates that significant accounting differences in these topics no longer exist. For the six ongoing projects, the project status and key differences column of Table 1 describes the existing points of divergence between IFRS and U.S. GAAP, and it provides the expected timetable for each project. Exposure drafts are expected for three of the projects (income taxes, joint ventures, and subsequent events) by the first quarter of 2008. Neither the FASB nor the IASB website lists the anticipated work schedule for projects related to impairments or research and development. The IASB website indicates that work on government grants is deferred until other projects are completed.

**Long-term Convergence Projects.** The Boards identified 11 long-term “areas of focus” that will be completed or in process by the end of 2008. Table 2 lists the long-term projects in the order in which they were announced, details the progress expected by 2008, and provides key differences between the two Boards’ standards.\textsuperscript{5} The first seven topics were on the agendas of both Boards when the Roadmap for Convergence was announced; the last four topics were not on the active agendas then. While the Boards anticipate issuing converged standards in the area of business combinations during 2007 and converged guidance on measuring fair values during 2008, the other topic areas are in preliminary stages of development.

Together, the short- and long-term lists include 20 different reporting areas. Differences in three of the areas have been resolved (fair-value option, segment reporting, and borrowing costs). One or both Boards
have indicated that differences in business combinations and measuring fair values should be resolved no later than 2008. Even if the two Boards are able to complete the anticipated work on schedule, differences between IFRS and U.S. GAAP will continue for many years in those topics for which only the due-process documents or decisions on scope and timing are anticipated by 2008.

Differences in Other Reporting Areas

Some noteworthy differences between the reporting standards are not addressed by either the short- or long-term convergence project. These differences that affect many industries include:

Inventory—Two key differences exist in the area of inventory valuation. First, IFRS prohibits the use of the LIFO (Last-in, First-out) inventory valuation method allowed under U.S. GAAP. Second, IFRS requires the reversal of inventory write-downs under certain conditions, whereas reversals are prohibited under U.S. GAAP.

Property, Plant, and Equipment—The most obvious and significant difference is that IFRS allows companies to revalue property, plant, and equipment to fair value while U.S. GAAP relies on historic cost.

Share-based Payments—Differences exist in the treatments of volatility, the measurement date, and the determination of expense when awards are modified.

Examples of Company Differences between IFRS and U.S. GAAP

Net Incomes

Some differences between IFRS and U.S. GAAP result in immaterial or small differences between their income calculations, while others result in significant changes in net income. One way to determine the impact of the
differences is to apply both sets of financial reporting standards to the same underlying financial information. U.S. users of IFRS-based financial reports may find themselves doing just that to derive comparative U.S. GAAP results to evaluate potential investments. Another way to identify where significant differences exist between IFRS and U.S. GAAP is to review company-prepared reconciliations of IFRS to U.S. GAAP net income and equity. These can be found in some Form 20-Fs filed with the SEC.

Form 20-Fs are filed on an annual basis by foreign private issuers with securities traded on U.S. markets and exchanges. Foreign private issuers are defined as those companies in which the majority of shareholders and officers are located outside the United States. Other foreign companies with securities traded on U.S. markets and exchanges file Form 10-K. Companies filing Form 10-K must prepare financial statements in

Table 2: **LONG-TERM CONVERGENCE PROJECTS**

<table>
<thead>
<tr>
<th>TOPIC</th>
<th>PROGRESS EXPECTED BY 2008</th>
<th>KEY DIFFERENCES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business combinations</td>
<td>Converged standards: IFRS/SFAS due Q3 2007</td>
<td>Differences exist in the valuation dates, determination of the minority interest, treatment of in-process research and development, and treatment of “negative” goodwill. Differences will continue to exist through 2008 as the new SFAS (and IFRS) is effective for years beginning after December 15, 2008.</td>
</tr>
<tr>
<td>Consolidations</td>
<td>Due-process documents: discussion paper due H1 2008</td>
<td>U.S. GAAP relies upon majority ownership to determine consolidation status; IFRS rely upon control. Differences also result from the application of FIN No. 46R under U.S. GAAP.</td>
</tr>
<tr>
<td>Fair value measurement guidance</td>
<td>Converged guidance: roundtable expected Q3 2007; exposure draft due H2 2008</td>
<td>The SFAS definition differs from IFRS in definitions of the relevant price, the parties, and treatment of liabilities.</td>
</tr>
<tr>
<td>Liabilities and equity distinctions</td>
<td>Due-process documents: joint issue of preliminary views due Q3 2007</td>
<td>The objective is to develop a comprehensive standard of reporting for financial instruments with characteristics of equities, liabilities, equities and liabilities, and assets.</td>
</tr>
<tr>
<td>Financial statement presentation (formerly known as performance reporting)</td>
<td>Due-process documents: discussion paper expected Q4 2007</td>
<td>Support for a single statement of comprehensive income seems to be greater among U.S.-based users of financial information than among international users.</td>
</tr>
<tr>
<td>Post-retirement benefits (including pensions)</td>
<td>Due-process documents: discussion paper expected Q4 2007</td>
<td>Differences result from the treatment of benefit termination, curtailments of benefit plans, the treatment of actuarial gains and losses, and other plan considerations.</td>
</tr>
<tr>
<td>Revenue recognition</td>
<td>Due-process documents: discussion paper expected Q1 2008</td>
<td>U.S. GAAP includes detailed, specific industry guidance.</td>
</tr>
<tr>
<td>Derecognition</td>
<td>Due-process documents</td>
<td>Differences exist in rates and the provision to adjust rates at the end of each accounting period.</td>
</tr>
<tr>
<td>Financial instruments</td>
<td>Due-process documents: discussion paper expected Q4 2007</td>
<td>IFRS allow the reversal of impairment losses previously recognized; this treatment is prohibited under U.S. GAAP. Differences exist in the types of transactions that qualify for hedge accounting, the timing of impairment loss recognition, use of qualifying SPEs, and other differences.</td>
</tr>
<tr>
<td>Intangible assets</td>
<td>Agenda decision expected Q4 2007</td>
<td>IFRS allow the upward revaluation of intangible assets when an active market exists; however, upward revaluation is not allowed under U.S. GAAP.</td>
</tr>
<tr>
<td>Leases</td>
<td>Due-process documents: discussion paper/preliminary views expected H1 2008</td>
<td>Differences occur in the treatment of gains on sale and leaseback transactions that result in an operating lease. Under U.S. GAAP, the gain is amortized over the life of the lease, but IFRS recognize the gain at the time of the sale and leaseback.</td>
</tr>
</tbody>
</table>

For updated information on the status of these projects, please refer to www.iasb.org/Current+Projects/IASB+Projects/IASB+Work+Plan.htm and www.fasb.org/project. Information included in Table 2 reflects the information on the two websites as of July 19, 2007.
accordance with U.S. GAAP. Companies filing Form 20-F may submit their financial statements in accordance with U.S. GAAP or in accordance with non-U.S. GAAP. If non-U.S. GAAP is used (for example, if the company prepares its financial statements in accordance with IFRS), the company must then reconcile income and equity determined under that basis of accounting to the amounts determined under U.S. GAAP. The 20-F reconciliations of IFRS to U.S. GAAP net income and equity clearly indicate where differences between IFRS and U.S. GAAP occur. The reconciliations also provide explanations for each of the reconciling items, allowing readers to determine if the differences will recur on an annual basis or are a one-time occurrence.

On June 21, 2007, the Securities & Exchange Commission (SEC) reiterated the possibility of allowing U.S. companies to file regulatory reports in accordance with IFRS. These developments further emphasize the need for U.S. accountants to familiarize themselves with the differences between the two sets of standards.

We selected 12 EU company Form 20-Fs filed in accordance with IFRS for 2005 to illustrate where significant differences occur between IFRS and U.S. GAAP. Table 3 lists each of the sampled companies and summarizes the net income determined under IFRS and U.S. GAAP, the difference in the incomes, and the relative size of the difference as a percentage of IFRS net income. We reviewed the individual reconciling items and identified those greater than 10% of IFRS net income. These reconciling items are also shown in Table 3. The reconciling items are classified as relating to a long-term convergence project topic (LT), a short-term project topic (ST), or a topic not addressed by either convergence project (NA).

As shown in Table 3, converting IFRS net income to its U.S. GAAP equivalent generally reduces net income. Specifically, it decreased the net income of nine companies, increased the net income of one company, and increased the net loss of two. The change in net income ranged from a decrease of $951 million for Novartis to an increase of €16 million for Campagnie Generale de Geophysique. When the change in net income is divided by IFRS net income, the effects of the change range from a decrease of 67.2% to an increase of 206.4%. The changes occurred because of reconciling items related to topics included in the short- and long-term convergence projects and areas not included in the convergence projects.

Reconciling items included in the long-term convergence projects resulted in income-reducing adjustments related to pensions and other post-retirement benefits (four companies), business combinations (three companies), intangible assets (two companies), and revenue recognition (one company). Two companies included reconciling items related to financial instruments: In one case, income was increased, and, in the other, income was reduced.

Among the nine short-term convergence project topics, we found that only the topic of income-tax effects resulted in significant reconciling items, and that item is seen in the reconciliations of two companies. Within the topics for which no convergence projects are planned, property, plant, and equipment reporting differences resulted in a 31.3% reduction in IFRS net income for Intercontinental Hotels, and differences in reporting share-based payments increased Alcatel's IFRS net income by 7.4%. Although this reconciling item is less than the 10% of IFRS net income we used as a cutoff in identifying other reconciling items, we show it to illustrate that companies include reconciling items related to many topics that could have a substantial impact on net income.

To understand the net income effect of differences in U.S. GAAP and IFRS, it is also important to consider reconciling item effects by company. Seven of the 12 companies included in Table 3 had only one significant reconciling item. The other five companies had a variety of reconciling items. When offsetting items exist, the net change in income from IFRS to U.S. GAAP may not reveal significant differences between the two sets of accounting standards.

For example, Novartis reported IFRS net income (in millions) of $6,141 and U.S. GAAP net income of $5,190, a difference of $951 (16% of IFRS net income). Accounting for intangible assets resulted in a $1,248 reconciling item (20.2% of IFRS net income). No other significant reconciling items were included for 2006. A different pattern is seen in British Airways’s March 31, 2006, reconciliation. IFRS net income was reported (in millions of British pounds) as £451, U.S. GAAP net
<table>
<thead>
<tr>
<th>Company Name</th>
<th>Alcatel</th>
<th>AstraZeneca PLC</th>
<th>Bayer AG</th>
<th>British Airways</th>
<th>Campagne Generale de Geophysique</th>
<th>Imperial Chemicals Industries PLC</th>
<th>Intercontinental Hotels</th>
<th>The Novartis Group</th>
<th>Reed Elsevier</th>
<th>Sorono</th>
<th>Thomson</th>
<th>SCG Carbon Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>For the year ended</td>
<td>12/31/05</td>
<td>12/31/05</td>
<td>12/31/05</td>
<td>3/31/06</td>
<td>12/31/05</td>
<td>12/31/05</td>
<td>12/31/05</td>
<td>12/31/05</td>
<td>12/31/05</td>
<td>12/31/05</td>
<td>12/31/05</td>
<td>12/31/05</td>
</tr>
<tr>
<td>Net income attributable to the equity holders of the parent according to IFRS</td>
<td>1,101</td>
<td>4,706</td>
<td>1,595</td>
<td>451</td>
<td>-7.8</td>
<td>390</td>
<td>460</td>
<td>6,141</td>
<td>462</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net income according to U.S. GAAP</td>
<td>903</td>
<td>3,884</td>
<td>1,327</td>
<td>148</td>
<td>20.8</td>
<td>355</td>
<td>5,190</td>
<td>374</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent of IFRS net income</td>
<td>-18.0%</td>
<td>-17.5%</td>
<td>-16.8%</td>
<td>-16.8%</td>
<td>-16.8%</td>
<td>-16.8%</td>
<td>-16.8%</td>
<td>-16.8%</td>
<td>-16.8%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Table 3: IFRS TO U.S. GAAP NET DIFFERENCES AND KEY RECONCILING ITEMS**

<table>
<thead>
<tr>
<th>Convergence Project</th>
<th>Key Reconciling Items</th>
<th>ST</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>LT</td>
<td>Business combinations and amortization of goodwill (Consolidations, Long-term convergence)</td>
<td>11%</td>
<td>-8.9%</td>
</tr>
<tr>
<td>LT</td>
<td>Financial instruments (Derivatives, Long-term convergence)</td>
<td>-219</td>
<td>-84</td>
</tr>
<tr>
<td>LT</td>
<td>Intangible assets</td>
<td>-1,230</td>
<td>-80.0%</td>
</tr>
<tr>
<td>LT</td>
<td>Pensions</td>
<td>-450</td>
<td>-70</td>
</tr>
<tr>
<td>LT</td>
<td>Revenue recognition</td>
<td>20.2%</td>
<td>-16.4%</td>
</tr>
<tr>
<td>ST</td>
<td>Income tax effects</td>
<td>18%</td>
<td>-16.4%</td>
</tr>
<tr>
<td>NA</td>
<td>Property, plant, and equipment revaluation</td>
<td>-15%</td>
<td>-31.2%</td>
</tr>
<tr>
<td>NA</td>
<td>Share-based payments</td>
<td>7.4%</td>
<td>-31.2%</td>
</tr>
</tbody>
</table>

**Convergence Project Key:**
- **ST** indicates a short-term convergence project item
- **LT** indicates a long-term convergence project item
- **NA** indicates that the topic is not addressed by either convergence project
income as £148, resulting in a difference of £303 (67.2% of IFRS net income). Three significant items were included in the reconciliation: Differences in reporting financial instruments reduced income by £219, differences in pensions reduced income by £281, and income-tax effects increased IFRS net income by £233.

The reconciling items included in Table 3 also indicate that reconciling items pertaining to a specific topic may increase IFRS net income for one company and decrease it for another. These mixed effects make it difficult to anticipate whether the presence of these items will increase or decrease IFRS net income. Therefore, the effects of reporting differences in these topic areas must be considered on a company-specific basis.

**Discussion and Checklist**

Accountants in the United States are increasingly more likely to encounter situations with customers, suppliers, or potential acquisition candidates that require both an understanding of where U.S. GAAP and IFRS differ and the ability to estimate the potential impact of these differences. Current differences between U.S. GAAP and IFRS, as well as examples taken from Form 20-F reconciliations, illustrate the potential magnitude of the resulting income differences.

In our small sample of 12 Form 20-F reconciliations, we identified material reconciling items that correspond with five long-term convergence project topics, one short-term convergence project item, and two topics not included in the convergence projects. Work on most of the convergence project topics is in the initial phase, so most reconciling items will continue to exist through at least 2008, and some differences may persist much longer. When you combine the evidence that differences may be material with the understanding that income differences are likely to persist for several years, you see why U.S. accountants should understand where differences are likely to occur and why they should adjust for these differences when evaluating or comparing companies that report under the two different sets of accounting standards.

When evaluating or comparing companies that use different sets of reporting standards, accountants might want to consider the following questions. Although this is not a complete checklist, it could help them identify factors that contribute to significant reporting differences in their global operations.

1. Has the company made a significant acquisition during the past year? What is the IFRS impact of the acquisition compared to the impact when measured using U.S. GAAP?
2. Has the company elected to revalue property, plant, and equipment under IFRS? Check the notes for disclosure.
3. Does the company utilize financial instruments? Again, check the notes, and estimate the reduction in U.S. GAAP net income.
4. Be clear about the standards governing revenue recognition. IFRS do not require companies to recognize up-front fees over the life of a contract, but U.S. GAAP does. What is the potential need for revenue adjustment?
5. IFRS do not allow the use of LIFO to estimate inventory cost. This restriction may actually simplify a financial evaluation or comparison of companies because the restriction eliminates the possible need to adjust LIFO inventory amounts to First-in, First-out (FIFO) values for foreign companies.
6. Disclosures under IFRS are likely to be less comprehensive than under U.S. GAAP. When dealing with disclosures under IFRS, plan to look through multiple notes, and be ready to piece together fragmented disclosures from multiple locations in order to obtain the complete disclosure about a topic.

Readers should keep in mind that the Boards and the SEC have acknowledged that it will take many years to achieve a common set of high-quality standards. Taking the time to identify where differences occur between the two sets of standards and the impact of those differences should result in better decision making for many years to come.

Susan B. Hughes, Ph.D., CPA, is an associate professor of accounting at the University of Vermont, Burlington. You can reach Susan at shughes@bsad.uvm.edu.

James F. Sander, Ph.D., CPA, is an associate professor of accounting at Butler University, Indianapolis, Ind. You can reach James at jsander@butler.edu.
ENDNOTES


4 The status of the short- and long-term convergence projects included in this article was last updated on July 19, 2007. Readers should access the Current Projects link on the IASB (www.iasb.org) and the FASB (www.fasb.org) websites to identify later progress on the projects.


8 British Airways’s year-end is March 31, so those statements are as of March 31, 2006.

9 A summary of the SEC Staff Comments pertaining to the first-year review of IFRS-based financial statement disclosures can be found at www.sec.gov/divisions/corpfin/ifrs_staffobservations.htm.