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Framework-based Teaching of IFRS Judgements

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ABSTRACT *International Financial Reporting Standards (IFRS) are principles-based accounting standards that provide less prescriptive, interpretive and implementation guidance than do some national standards. Thus, considerable judgement in the application of IFRS is often required. We suggest a three-step approach to teaching IFRS judgements (concepts, to principles/rules, to the judgements required in the application of those rules), and provide accounting educators with guidance and resources that will help them create and enhance students' awareness of the importance of making professional judgements in the application of IFRS. We consider both pervasive issues, such as the going concern assumption, materiality and related disclosures, and issues encountered in the application of most IFRSs, such as presentation and disclosure, classification, recognition/de-recognition, and measurement. We illustrate past judgements with examples from corporate annual reports, regulatory enforcement decisions published by the ESMA, and other sources for classroom use.*

KEY WORDS: International financial reporting standards, judgements, framework-based teaching

Introduction—the Importance of Judgements and Estimates in the Application of IFRS

The goal of the International Financial Reporting Standards (IFRS) Foundation and the International Accounting Standards Board (IASB) is to develop, in the public interest, a single set of high-quality, understandable, enforceable and globally-accepted accounting standards based upon clearly articulated principles. Progress toward achieving this goal hit a milestone in 2005 with the mandatory adoption of IFRS for the consolidated accounts of all publicly-traded companies in the European Union (EU); that same year IFRS were adopted in Australia. The number of countries using IFRS as of 2011 exceeds 120.[1] Today all major economies have either adopted IFRS or have established timetables to adopt or converge with IFRS.

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Under the IFRS principles-based system, the fundamental requirements of the standards are developed using the IASB Framework (IASB, 2010a). As a result, IFRS tend to include few exceptions, and less interpretive and implementation guidance than may be found in some national standards. Many aspects of financial reporting are, therefore, based upon judgements underlying the application of IFRS, including the presentation and disclosure, classification, recognition/derecognition, and measurement of transactions and accounts. Furthermore, preparers of financial information also have to exercise judgement in choosing an appropriate accounting treatment where no applicable international standard currently exists. In these cases, preparers must select an accounting policy that provides relevant and representationally faithful information with primary consideration being given to international standards dealing with similar and related issues (IASB, 2003, paragraph 10). When such guidance is not available, preparers must rely on their judgement as they interpret the definitions, recognition criteria and measurement concepts for assets, liabilities, income and expenses defined in the IASB Framework[2] (IASB, 2010a, paragraph BC3.4).

The IASB highlights the pervasive importance of judgements in *IAS 1, Presentation of Financial Statements*. In 2003, the Board revised IAS 1 to require the disclosure of judgements made by management within the application of the company's accounting policies which significantly impact line items in the financial statements. The standard was again revised in 2007, but the need to disclose judgements (as well as the potential impact of estimation uncertainty) remain:

> An entity shall disclose, in the summary of significant accounting policies or other notes, the judgements, apart from those involving estimations, that management has made in the process of applying the entity's accounting policies and that have the most significant effect on the amounts recognized in the financial statements. (IASB, 2008a, paragraph 122.)

Owing to the pervasiveness of judgement in the application of IFRS, it is extremely important that students be made aware of the nature of judgements and their potential impact on the outcome of the financial reporting process. It falls to accounting educators to insure that all accounting classes, including those at the introductory/principles level, create an awareness of the judgements that are pervasive in the application of IFRS (e.g. going concern assumption, materiality, key disclosures). As students progress to intermediate level and then more advanced accounting classes, it is crucial that educators provide them with an opportunity to gain experience in making simple and eventually more complex judgements which underlie IFRS-based financial statements (e.g. presentation and disclosure, classification, recognition/derecognition, and measurement).

The IASB Framework sets forth the concepts that underlie the estimates and judgements that must be made in the application of IFRS to specific accounting issues. Accounting educators can enhance the ability of students to apply the professional judgement necessary in the application of international standards by relating the concepts in the Framework to specific IFRS requirements.

In this paper, we provide suggestions for helping students develop an awareness of the judgements that underlie IFRS-based reporting, and gain experience making at first simple, and then later more complicated, judgements required in the application of IFRS. We frame the awareness of and experience in forming judgements first on pervasive issues and, second, in the application of key international standards. To help students understand the complexity of identifying and forming judgements, we provide examples from European Union (EU) company annual reports and cite regulatory enforcement decisions published by the European Securities and Markets Authority (ESMA)[3] to illustrate the use (and potential misuse) of judgements in IFRS-based financial statements.

In addition, the IFRS Foundation provides free training materials on IFRS for Small and Medium Sized Enterprises (SMEs) (IASB, 2009a) on its website.[4] Each module includes a section on significant estimates and other judgements involved in the application of the IFRS for SME standard. We encourage accounting educators to review each of the modules and consider using some of the examples in their teaching of IFRS judgements. Although designed for IFRS for SMEs, many of the examples are also relevant for the teaching of full IFRS.

This article is one of several appearing in this themed issue of *Accounting Education*: *an international journal* which build on a series of IFRS Teaching Workshops conducted jointly by the IFRS Foundation Education Initiative and the International Association for Accounting Education and Research (IAAER). These Workshops support teaching six key elements regarding international accounting standards (Barth, 2010):

1. Teach understanding of the IFRS Framework
2. Teach foundational economic concepts
3. Teach current IFRS requirements
4. Teach how to make judgments using IFRS
5. Prepare students for a global world
6. Adopt a global perspective.

The present paper focuses on item 4.

Making Judgements—Pervasive Issues

Preparers and auditors are faced with a host of judgements and estimates when preparing and auditing financial statements. For example, the Advisory Committee on Improvements to Financial Reporting to the United States (US) Securities and Exchange Commission identified the following activities that require accounting and auditing judgements (SEC, 2008, pp. 89–91):

1. Selection of accounting standard
2. Implementation of an accounting standard
3. Lack of applicable accounting standards
4. Financial statement presentation
5. Estimating the actual amount to record, and
6. Evaluating the sufficiency of evidence.

Judgements in the above areas are not specific to the reporting environment of the USA. They are as necessary when reporting under IFRS, and may be more critical given the principles based nature of IFRS. For example, entities adopting IFRS for the first time must rely heavily on judgements in the retroactive application of IFRS as required by IFRS 1, *First-time Adoption of IFRS* (IASB, 2008f; IASB, 2009e). Primers prepared by international accounting firms (and downloadable free of charge from the Internet) can be used to help students appreciate the wide array of judgements required in applying IFRS 1 (see, for example, Ernst & Young, 2009; RSM International, 2008). Certain IFRS also allow preparers to choose among acceptable, alternative accounting policies (see RSM International, 2008 for numerous examples). Many other illustrations and examples are available; however, ours should not be considered to be an exhaustive list of judgements required in the application and reporting under IFRS.

Helping students develop both the awareness needed to identify where judgements are required and the thought process that informs professional judgements can be viewed as a three-step process (Wells, 2010). The first step is to identify if the underlying concept is included in (i.e. consistent with) the IASB Framework. Step two is to identify whether or not IFRS provide a specific rule applicable to the concept, including those instances in which specific international standards contain provisions that are inconsistent with the Framework. The third step is to identify where judgement is required and how it should be applied. We illustrate this process by describing judgements required by three reporting issues that are critical to financial reporting: the going concern concept, correcting material prior period errors, and key disclosures.

Going Concern Concept

The *concept* of going concern is defined in paragraph 4.1 of the Framework (IASB, 2010a):[5]

> The financial statements are normally prepared on the assumption that an entity is a going concern and will continue in operation for the foreseeable future. Hence, it is assumed that the entity has neither the intention nor the need to liquidate or curtail materially the scale of its operations; if such an intention or need exists, the financial statements may have to be prepared on a different basis and, if so, the basis used is disclosed.

The *rule* governing going concern appears in IAS 1, paragraph 25 (IASB, 2008a):

> When preparing financial statements, management shall make an assessment of an entity's ability to continue as a going concern. An entity shall prepare financial statements on a going concern basis unless management either intends to liquidate the entity or to cease trading, or has no realistic alternative but to do so.

Judgement is required of both managers and auditors as they consider all available information about the future to determine whether or not the going concern assumption is appropriate. The degree to which managers and auditors need to evaluate the going concern assumption depends on the individual facts of each case. In some situations, management may need to consider a wide range of factors, including current and expected profitability, debt repayment schedules and potential sources of replacement financing. The International Auditing and Assurance Standards Board (IAASB) Staff Audit Practice Alert, *Audit Considerations in Respect of Going Concern in the Current Economic Environment* (IAASB, 2009, paragraph 11), is an excellent classroom resource and may be down loaded free of charge from the International Federation of Accountants' (IFAC) web site. The Audit Practice Alert emphasizes the need to consider fixed-term borrowings near maturity without any realistic prospects for renewal or repayment, excessive reliance on short-term borrowings to finance long-term assets, indications of withdrawal of support by creditors, an inability to comply with terms of loan agreements, and the loss of a major market, supplier, or franchise. How these factors enter into a determination that the entity is a going concern is illustrated in the footnote disclosures included in the Austrian Airlines Group Annual Report 2008, summarised in the following paragraphs.[6] Similar disclosures are included in the Bradford and Bingley Annual Report and Accounts 2008,[7] and the Hypo Real Estate Annual Report 2008.[8] In each instance, the entity faced significant liquidity pressures and constraints which required that judgement be used on the part of management and the firm's auditors in determining whether financial statements prepared on a going concern basis were appropriate after considering all relevant factors. Bradford and Bingley (UK) and Hypo Real Estate (Germany) provide the opportunity for students to further consider the consequences of government bail-outs associated with the recent credit crisis.

During 2008 the Austrian state holding company ÖIAG announced its intentions to sell its 43% stake in Austrian Airlines. In the same year, Austrian Airlines announced its intent to issue 57.1 million new bearer shares to increase its capital.[9] In its 2008 Annual Report going concern principle disclosure the company stated:

> The Board of Management assumes that the contracts concluded with Lufthansa on 5 December 2008 will be implemented on schedule, and that liquidity and equity-enhancing measures amounting to €500m will be subsequently carried out. If the preconditions underlying the agreements are not fulfilled or are fulfilled at too late a time, the Board of Management will not be able to assume the continuing existence of the company without alternative financing. Considerable uncertainties exist in this respect.

Within the footnote 'Basis of preparation, The going-concern principle' management explained that:

> In the event of a negative decision on the part of the European Commission or a decision after 31.7.2009, the Board of Management will not be able to assume the continuing existence of the company which is why there are major uncertainties in respect to the going-concern principle. Any departure from the going concern premise would have a significant impact on the assets, financial position and profit and loss of the Austrian Airlines Group.

Management included a discussion of the following potentially negative events in the footnote. The EU Commission must approve the transfer of the ÖIAG shares to Lufthansa, an action designed to 'strengthen the liquidity and share capital of Austrian Airlines Group'; that through 'government-backing bridge financing, an Austrian bank granted the Austrian Airlines Group a line of credit amounting to €200m, for which ÖIAG has provided security', and that two unscheduled withdrawals of the funds occurred between January and March 2009; that 'the Republic of Austria notified the European Commission of a non-aid application, which basically assumes that 'the costs of a liquidation of Austrian Airlines would be considerably higher than the payment of €500m to be paid to Lufthansa less the purchase price'; that 'payment of the notified sum of €500m is first permissible following a positive decision on the part of the European Commission'; and that 'Lufthansa has the right to withdraw from the contract in accordance with the existing agreement' if no decision is made by 31 July 2009. Management also noted that Austrian Airlines Group should have sufficient liquidity until the July date.

The Audit Report notes that:

> Without qualifying our opinion, we draw attention to Note 1 to the consolidated financial statements "The going-concern principle", which explains that the going concern assumption for the preparation of the consolidated financial statements is mainly based on the realisation of the contracts signed on December 5, 2008 to transfer the shares in the company held by ÖIAG to companies belonging to the Lufthansa Group, as well as the financing agreements contained therein.

The opinion also includes three additional paragraphs reiterating the facts included in the company's footnote disclosures.

Materiality: Prior-period Errors

The concept of materiality is a pervasive issue in financial reporting and one which often requires judgement in the application of IFRS. Materiality is defined in the IASB Framework (IASB, 2010a, Chapter 3, paragraph QC11) as follows:

> Information is material if omitting it or misstating it could influence decisions that users make on the basis of financial information about a specific reporting entity. In other words, materiality is an entity-specific aspect of relevance based on the nature or magnitude, or both, of the items to which the information relates in the context of an individual entity's financial report. Consequently, the Board cannot specify a uniform quantitative threshold for materiality or predetermine what could be material in a particular situation.

Since no uniform threshold for materiality exists, the determination of what is or is not material can be highly subjective. The pervasive issue of materiality provides accounting educators with an opportunity to teach from the Framework's core concepts, then to principles, then to rules, and finally to where judgement is required in determining materiality. The correction of a material prior period error may be used as an example (Wells, 2010):[10]

> *Concept*: The Framework includes the concept that financial statements should provide capital providers with information that is useful for decision making. Underlying attributes include relevance, faithful representation and comparability.
>
> *Principle*: Paragraphs 41–49 of IAS 8 (IASB 2003) describe the retrospective restatement of material prior period errors.
>
> *Rule:* IAS 8, paragraphs 43–45 contains an exemption for when prior period estimates are impractical, and the related disclosures. Application of the impracticality exception also requires judgement, as management works to determine the earliest period for which restatement is practical.
>
> *Judgement*: Judgement is required to determine if the prior period error is material and to differentiate the correction of prior period errors from changes in accounting estimates and changes in accounting policies. To assess whether or not the correction is material, students can be referred to the Framework to review the definition of materiality included in paragraph QC11 cited above.

Accounting educators can also use enforcement decisions made by European securities regulators and published by the ESMA as examples.[11] When doing so, they should be clear that the ESMA (previously CESR):

> . . . neither approves nor rejects decisions taken by EU National Enforcers who apply their judgement, knowledge and experience to the particular circumstances of the cases that they consider. Relevant factors may include other areas of national law beyond the accounting requirements. Interested parties should therefore consider carefully the individual circumstances when reading the cases. As IFRS are principles based, there can be no one particular way of dealing with numerous situations which may seem similar but in substance are different. Consistent application of IFRS means consistent with the principles and treatments permitted by the standards. (CESR, 2009)

The application of the concept, rules and judgement surrounding the correction of a material prior period error is illustrated in Decision ref.EECS/1209-09, in which the national regulator concluded that a company's consolidated cash flow statement did not comply with *IAS 7, Statement of Cash Flows* (IASB, 2009c) in all material respects. The company in question restated its 2006 cash flow figures and included them as comparative numbers to its 2007 cash flow statement. The 2007 accounts did not, however, include any reference to the corrected 2006 cash flow figures. The national regulator concluded that the restatement of the 2006 cash flow figures constituted a material error as they were not supported by the relevant disclosures as to the nature of the prior period adjustment required by IAS 8, paragraph 42. We highlight that, for all ESMA examples provided in this paper, the enforcement decision and rationale thereof give more detail to assist students in appreciating the judgements of the enforcer.

Key Disclosures

IAS 1 paragraph 122 requires companies to disclose the judgements which management made in applying the company's accounting policies and which have significant effects on the numbers reported in the financial statements. IAS 1 paragraph 125 further requires entities to disclose the major sources of estimation uncertainty that 'have a significant risk of resulting in a material adjustment to the carrying amounts of assets and liabilities within the next financial year'. Individual IFRS also require disclosure of where judgements may affect individual assets and liabilities, including the uncertainty related to the amount or timing of inflows and outflows, assumptions regarding future events when assessing the reported value of provisions and contingencies (IASB, 2005a), and the actuarial assumptions related to defined benefit pension plans (IASB, 2008b).

Key Disclosures: Pensions

Accounting educators interested in illustrating the impact of key judgements and assumptions may want to emphasize various reporting issues related to defined benefit pension plans, an area of accounting where changes in the assumptions about future events can have a significant impact on a company's assets and liabilities. Key judgements required in the application of IAS 19 include the choice of a discount/interest rate, longevity/mortality rate, and benefit/salary trends. The potential impact of even a small change in key actuarial assumptions can be highly material. In their study of how discretionary pension rate choices affect a company's assets and liabilities, Grant, Grant and Ortega (2007) report that a 0.5% increase in the assumed discount rate is associated, on average, with a 12% to 14% decrease in the pension liability. In spite of the importance of the choice of the discount rate and other assumptions used to determine the defined benefit obligation, few IFRS reporting companies historically disclosed a sensitivity analysis of the discount rate (Fasshauer *et al.*, 2008).

Bayer AG is an example of a company which, for several years, has included a discount rate sensitivity analysis in its pensions and other post-employment benefits footnote. In its 2009 Annual Report, Bayer states increasing or decreasing the discount rate by 0.5% would decrease and increase its pension obligations by 938 and 1,046 million euro, respectively.[12] Furthermore, Bayer discloses the impact of a 0.5% change in actuarial assumptions on benefit expense. Until the effective date of the forthcoming revision of IAS 19, accounting educators can utilise Bayer's disclosures and similar disclosures from other companies (see, for example, Unilever's 2007 Annual Report, note 20)[13] as teaching examples to emphasize the impact which judgement has on the values included in the financial statements.

Since the discount rate and demographic assumptions can have a substantial impact on a company's defined benefit obligation and periodic service cost, it is not surprising that some companies inconsistently apply IAS 19 and may even purposely manipulate actuarial assumptions to achieve desired financial statement outcomes (see UBS AB, 2010). In a study of the methods which UK, German and French listed companies use to recognize actuarial gains and losses, Street and Glaum (2010) find that the DAX 30 companies included in their benchmarking analysis of discount rates reported rates clustering relatively close to the mean of 5.78% (with a standard deviation of 0.25%). For their sample of other German listed firms, 10 were deleted from the benchmarking analysis due to reporting discount rate ranges as opposed to specific points as required by IAS 19. Some of the ranges reported were substantial (e.g. 3.5–6.0%, 3.6–5.84%, and 3–10.8%). Of the 103 other (non-DAX) German companies included in their benchmarking analysis, Street and Glaum (2010) found that most discount rates used again clustered around the mean of 5.8%. Exceptions included four companies reporting discount rates of 3.25%, 3.41%, 4.25% and 4.38%, which are considerably below the average (all else being equal, lower rates lead to relatively higher estimations of the companies' defined-benefit pension obligations), and one company reporting a considerably higher discount rate of 8% (thereby leading to a relatively low estimate of the company's pension obligation).

Faculty may want to ask students for their ideas as to the basis for the different judgements which managers (and the entities' independent auditors) may have employed when selecting the appropriate discount rate. Then the students could be assigned to read the report by UBS AB (2010) on 'questioning pension assumptions'. In the report, UBS reviews the pension assumptions of German chemical giant LANXESS, and judges both the discount rate and expected return at the high end. UBS's analysis indicates that the company's expected return on equity is considerably higher than 16%, and that this appears high in a historical context. UBS highlighted that, at the time of its review of LANXESS' pension assumptions, the IASB planned to replace the expected return on pension assets by interest income based on the discount rate for the liability. If the IASB proposals were adopted in 2009, UBS estimated this would have reduced LAXNESS' pre-tax profits that year by more than 50%.

At the time this paper went to press, the IASB planned to issue a revised version of IAS 19 during 2011 which would no longer allow companies to use an expected return on plan assets. Under the revised standard, companies will be required to use the market yields of high quality corporate bonds to arrive at pension financing income (IASB, 2010b). UBS estimates that using the yield on high quality corporate bonds instead of the expected return on plan assets of 9.3% would have reduced LANXESS' net income by €17 million, a 55% reduction in 2009 income before tax.

In the basis for conclusions of the revision to IAS 19, the IASB states:

> The Board believes that an entity's expectations about the return on plan assets are less relevant than the actual return on plan assets. In addition, the Board sees a possible danger that the subjectivity inherent in determining the expected rate of return could provide entities with an opportunity to manage profit or loss. (IASB, 2010b, paragraph BC 41)

Accounting educators can use LANXESS' results to illustrate how management 'judgement' can significantly alter financial statement outcomes.

Faculty can also have students consider why the IASB did not address the issue of the discount rate in its 2011 revision of IAS 19. The real world example of LANXESS can again be used to encourage students to consider a company's motivation in selecting the discount rate used to determine the defined benefit obligation.

LANXESS' defined benefit obligation is measured periodically by an independent actuary; the discount rates used, according to IAS 19, should correspond to yields on high-quality corporate bonds. Although LANXESS has experienced pension deficits over the past several years, the funding status (the difference between the defined benefit obligation and the fair value of plan assets) of its defined benefit plan improved substantially, from 45% in 2006 to 78% in 2009, driven primarily by an increase in plan assets. However, the discount rate used to determine the defined benefit obligation is also questionable.

Students could be assigned to review LANXESS' pension disclosures between 2007 and 2009 to gain a fuller understanding of the sensitivity of the defined benefit obligation to the chosen discount rate. In its 2007 annual report, the company reported a discount rate of 5.8% (modified to 5.7% in the 2008 report). According to the sensitivity analysis disclosures included in the 2008 annual report:

> … a 0.5 percentage point increase in the discount rate would reduce pension obligations by €57 million.

Students could be asked to consider, based on the sensitivity analysis, what LANXESS' motivation may have been for using a discount rate of 8.0% in 2009, especially within the context of the discount rate benchmarking analysis reported by Street and Glaum (2010) where, in 2009, the mean discount rate utilised by other German listed companies (excluding the DAX 30) was substantially lower at 5.8%.

To further increase awareness of the importance of the judgement made regarding the discount rate, students should also consider Salzgitter's—a DAX 30 company – discussion of the limitations of the iBoxx Index. Salzgitter (pp. 194 and 195[14]) explains:

> Due to the financial market/credit crisis there are a number of market distortions which are affecting the returns on even high-quality corporate bonds and which are therefore having an impact on the actuarial interest rates derived from them, with the result that, as of the balance sheet date, bonds from corporations in the financial sector were still providing disproportionately high market returns. It was against this backdrop that the company decided to eliminate the financial bonds in the iBoxx Index when deriving the yield curve. This resulted in an unchanged actuarial interest rate of 5.25%, compared with the previous year, as of the balance sheet date.

Students could additionally be assigned to read an article by Johnson (2008), which appeared in the *Financial Times* expressing concern regarding use of the iBoxx AA rate by UK companies to discount pension obligations.

When applying the teaching judgements framework to these exercises addressing the discount rate, faculty may want to emphasize the following:

> *Concept*: The Framework includes the concept that financial statements should provide capital providers with information that is useful for decision-making. Underlying attributes include the elements definitions (e.g. liabilities) and representational faithfulness.
>
> *Principle:* IAS 19 explains that actuarial assumptions include demographic assumptions and financial assumptions including the discount rate and the future salary and benefit levels.
>
> *Rule:* The rate used to "discount defined benefit obligations shall be determined by reference to market yields on high quality corporate bonds. In countries where there is no deep market in such bonds, the market yields on government bonds shall be used. The currency and term of the corporate bonds or government bonds shall be consistent with the currency and estimated term of the post-employment benefit obligations" (IASB, 2008b, paragraph 78).
>
> *Judgement:* What is the appropriate discount rate to use when determining the plan assets and defined benefit obligation?

In addition to the required IAS 19 disclosures, companies may also include an explanation of the judgements and estimates included in the pension calculations within their IAS 1 judgement and estimate disclosures. Since IAS 1 does not require a separate section of judgement and estimate disclosures within the notes to the financial statement, disclosures in a separate section indicate an entity's willingness to highlight where key judgements and estimates occur, and often provide information about the sensitivity of the number(s) reported in the balance sheet to different judgements and estimates. For example, KGHM Polska Miedź S.A. included the following information about employee benefit plans in its 2007 annual report:[15]

> 3.2 Estimation of provisions
>
> 1. Provisions for future employee benefits – retirement or disability benefits, jubilee bonuses and post-employment coal equivalent payments are estimated using actuarial methods. A change in the financial factors being the basis for estimation, i.e.

—an increase in the discount rate by 1% in the coal price and wages increase rate would cause an increase in the provision by PLN 3 573 thousand,

—a decrease in the discount rate by 1% and an increase by 1% in the coal price and wages increase rate would cause an increase in the provision by PLN 241 712 thousand,

—an increase in the discount rate by 1% and a decrease by 1% in the coal price and wages increase rate would cause a decrease in the provision by PLN 167 076 thousand,

—a decrease in the discount rate by 1% in the coal price and wages increase rate would cause a decrease in the provision by PLN 3605 thousand.

As another example, Lloyd's TSB included the following in its 2007 IAS 1 disclosure:[16]

Pensions

... The schemes' liabilities are calculated using the projected unit credit method, which takes into account projected earnings increases, using actuarial assumptions that give the best estimate of the future cash flows that will arise under the scheme liabilities. The resulting estimated cash flows are discounted at a rate equivalent to the market yield at the balance sheet date on high quality bonds with a similar duration and currency to the schemes' liabilities. In order to estimate the future cash flows, a number of financial and non-financial assumptions are made by management, changes to which could have a material impact upon the overall deficit or the net cost recognized in the income statement.

Two important assumptions are the rate of inflation and the expected lifetime of the schemes' members. The assumed rate of inflation affects the rate at which salaries are projected to grow and therefore the size of the pension that employees receive upon retirement and also the rate at which pensions in payment increase. Over the longer term rates of inflation can vary significantly; at 31 December 2007 it was assumed that the rate of inflation would be 3.3 per cent per annum (2006: 2.9 per cent), although if this was increased by 0.2 per cent the overall deficit would increase by approximately £550 million and the annual cost by approximately £20 million. A reduction of 0.2 per cent would reduce the overall deficit by approximately £500 million and the annual cost by approximately £40 million.

The cost of the benefits payable by the schemes will also depend upon the longevity of the members. Assumptions are made regarding the expected lifetime of scheme members based upon recent experience, however given the rate of advance in medical science and increasing levels of obesity, it is uncertain whether they will ultimately reflect actual experience. An increase of one year in the expected lifetime of scheme members would increase the overall deficit by approximately £400 million and the annual cost by approximately £40 million.

The size of the overall deficit is also sensitive to changes in the discount rate, which is affected by market conditions and therefore potentially subject to significant variations. At 31 December 2007 the discount rate used was 5.8 per cent (2006: 5.1 per cent); a reduction of 0.2 per cent would increase the overall deficit by approximately £550 million and the annual cost by approximately £15 million, while an increase of 0.2 per cent would reduce the net deficit by approximately £550 million and the annual cost by approximately £40 million.

In the proposed revisions to IAS 19 (IASB, 2010b),[17] the IASB proposes changes to improve disclosures regarding the 'risk arising from defined benefit plans, including sensitivity analyses of changes in demographic risk'. Paragraph 62 of the Basis for Conclusions supporting the proposed revisions explains that actuarial risk is a significant risk for any entity with a defined benefit plan. Paragraphs 63 to 66 of the Basis for Conclusions explain the proposed expanded disclosure requirements. We highlight the content of BC63 below:

BC 63 The exposure draft proposes that entities should disclose how the effect of reasonably possible changes to significant actuarial assumptions affect the defined benefit obligation and

> service cost. Users of financial statements have consistently emphasized the fundamental importance of sensitivity analyses to their understanding of the risks underlying amounts included in the financial statements.

Lloyd's TSB disclosures presented in the preceding paragraphs provide examples of significant actuarial assumptions included in their pension calculations.

Key Disclosures: Utilize IASB's Basis for Conclusions

As illustrated in the prior example, students should be made aware that the material included in the Basis for Conclusions that accompanies each IFRS can be instructive in understanding the IASB's reasoning for selecting the principles and rules included in the standard, and in understanding why other principles and rules were rejected.[18]

One example of the importance of the Basis for Conclusions is found in Decision ref.EECS/1209-07 pertaining to segmental reporting. The issuer, whose shares are listed and traded on an unregulated market, early adopted IFRS 8, 'Operating Segments', in its December 2007 financial statements as part of its transition to IFRS. The accounts did not disclose certain information required by IFRS 8, including the segmental analysis of revenues from external customers; the operating segments responsible for revenue from major customers; and the measure of profit or loss reported to the chief operating decision-maker on the basis that making the disclosures might affect its competitive position. The auditor believed that the omitted disclosures did not comply with IFRS 8 and issued a qualified audit opinion.

The national regulator agreed with the auditor that the accounts, as filed, did not comply with the requirements of IFRS 8. In its decision, the regulator specifically notes that IFRS 8 does not include a 'competitive harm' exemption. Furthermore, the regulator notes that the Basis for Conclusions for IFRS 8 explains that the IASB concluded that such an exemption would be inappropriate because it would provide a means for broad non-compliance with IFRS. Hence, what the issuer deemed to be 'judgement' when omitting the disclosures indeed resulted in non-compliance, given the issuer's failure to review the Basis for Conclusions and obtain an awareness that there was no opportunity to apply judgement in the disclosure.

Sir David Tweedie (2007) emphasized the importance of reviewing the basis for conclusions when forming judgements in a speech before the US Senate, as shown below:

> A shift to less rules-based principles will increase the need for judgment: A principle-based standard relies on judgments. Disclosure of the choices made and the rationale for these choices would be essential. If in doubt about how to deal with a particular issue, preparers and auditors should relate back to the core principles. The basis for conclusions (the rationale underlying a particular standard and published with it) should also include, in particular, the question of whether there is only a single view to tackle the economics of the situation. Often there are competing views—is one regarded as more relevant? If so, the reasons for choosing that particular view should be explained in the basis for conclusions and the reasons for rejecting the others clearly outlined.

Moreover, in an interview with *CFO Magazine*, Sir David spoke candidly about professional judgement, and teaching IFRS based on the Framework:[19]

> I don't think you should teach the standards. I think you should teach the conceptual framework and then discuss why certain standards have not followed the framework. Ultimately, students will face something they haven't seen before, and they either will request a ruling—which is why you've got thousands and thousands of pages of US GAAP—or they will use judgment. I think it should be the latter. (Leone, 2011, p. 13)

Classification Judgements

There are numerous opportunities for accounting educators to illustrate situations in which preparers must exercise judgement in classifying transactions. These include: investments; property, plant and equipment; inventory; debt or equity; and an entity's functional currency. For example, classification judgements are involved in determining: whether or not one entity controls another entity; whether a present obligation is a provision or a contingent liability; whether a complex financial instrument issued by the entity is debt or equity; identifying the functional currency of an entity; and determining whether the functional currency is the currency of a hyperinflationary country. We address teaching points for two of these topics in the following paragraphs, relying on examples from the ESMA database to illustrate the nature of the judgements.

Classification Judgements: Business Combinations

The issue of determining whether one entity controls another provides accounting educators with an opportunity to encourage students to focus first on the Framework's core concepts, next consider the principles, then consider the rules, and finally consider where judgement may be required in determining control. For example:

> *Concept*: The statement of financial position should reflect an entity's assets and liabilities (i.e. economic resources controlled by the entity and claims to those resources).
>
> *Principle*: Per IFRS 3, 'Business Combinations', paragraph 7 (IASB, 2008c), the acquirer is the entity that obtains control of the acquiree.
>
> *Rule:* Assess control based on indicators included in IAS 27, 'Consolidated and Separate Financial Statements', (IASB, 2008d). If there is no clear indication of the acquirer, the guidance included in BC14–16 of IFRS 3 should be used.
>
> *Judgement*: Does the acquirer control the acquiree?

Determining whether or not one entity controls another requires a careful review of the relevant international accounting standards and a clear understanding of the nature of the relationship. IAS 27 paragraph 4 defines control as 'the power to govern the financial and operating policies of an entity so as to obtain benefits from its activities'. Control is further defined in Paragraph 13:

> Control is presumed to exist when the parent owns, directly or indirectly through subsidiaries, more than half of the voting power of an entity unless, in exceptional circumstances, it can be clearly demonstrated that such ownership does not constitute control. Control also exists when the parent owns half or less of the voting power of an entity when there is: (a) power over more than half of the voting rights by virtue of an agreement with other investors; (b) power to govern the financial and operating policies of the entity under a statute or an agreement; (c) power to appoint or remove the majority of the members of the board of directors or equivalent governing body and control of the entity is by that board or body; or (d) power to cast the majority of votes at meetings of the board of directors or equivalent governing body and control of the entity is by that board or body.

Little judgement may be required when the parent has power over more than half of the voting shares. However, management must rely on judgement to determine if control exists under the other three criteria. For instance, judgement is required when the parent has latent control, via convertible instruments and or other arrangements, which constitute potential voting rights (see IASB, 2008d, paragraph 14). The case of Nokia Siemens Networks may be used to illustrate control under these circumstances.[20] First, students can be referred to statements throughout Nokia's 2009 annual report which state 'Nokia Siemens

Networks is a company jointly owned by Nokia and Siemens and consolidated by Nokia'. Then the question can be posed to students as to *why* Nokia consolidates an entity when it owns approximately 50% of the voting shares and another company owns approximately the same.

Students can find the 'answer' in footnote 8 on acquisitions. Regarding acquisitions completed in 2007, Nokia explains:

> The Group and Siemens AG ("Siemens") completed a transaction to form Nokia Siemens Networks on April 1, 2007. Nokia and Siemens contributed to Nokia Siemens Networks certain tangible and intangible assets and certain business interests that comprised Nokia's networks business and Siemens' carrier related operations. ... Nokia and Siemens each own approximately 50% of Nokia Siemens Networks. *Nokia has the ability to appoint key officers and the majority of the members of the Board of Directors*. Accordingly, for accounting purposes, Nokia is deemed to have control and thus consolidates the results of Nokia Siemens Networks in its financial statements. (Emphasis added)

The ESMA database also provides examples which may be used to illustrate the judgement required to determine if control exists. For example, Decision ref. EECS/0910-06 provides an opportunity to build on the Nokia Siemens example. In this case, the issuer sold 50% of a previously fully-owned subsidiary (A) in the interest of 'industrial collaboration'. The issuer continued to consolidate A primarily because, under the agreement with B, the issuer would exercise general control over A's operating and financial policies. However, the agreement also indicated that several important decisions required consensus by the two shareholders (the issuer and B). The issuer had appointed three of the four members of A's board of directors yet, under the shareholder agreement, consensus was required for several criteria which are provided on the ESMA website. The national regulator judged that, based on IAS 27, the issuer must de-consolidate A, because it did not control the entity. Specifically, the agreement contained so many significant restrictions with respect to operating and financial decisions that the issuer does not control A.

On the ESMA website, Decision ref.EECS/0407-02 illustrates that judgement is also required when determining whether an entity controls another when the holding is passive. In this decision, the issuer's accounting treatment is described as follows:

> The issuer has control over the composition of the board of directors of entity C which is composed of seven members. Of the seven directors, four were appointed by the issuer and three by another entity (B). However, given that one of the directors appointed by the issuer rarely attends board meetings, decisions are taken by majority vote among the remaining directors.

In this case, management determined that it did not control C. However, the national regulator judged that the issuer controlled C, and stated as justification that 'control is presumed to exist, *inter alia*, where an issuer has the power to cast the majority of votes at meetings of the board of directors and control of the issuer is by that board or body (IAS 27 paragraph 13 (d))... regardless of whether the issuer rarely exercises control over entity C...'.

The identification of the acquirer in a business combination is another issue that often requires judgement. From the ESMA website, ref.EECS/1209-15 illustrates a case in which the issuer's judgement and that of the regulator differ. The decision is based on a case in which the issuer acquired 100% of the shares and voting rights of A. Prior to the acquisition, 100% of the shares of A were owned by C, which controls 63% of the issuer's capital following the acquisition of A. The issuer is identified as the acquirer in the purchase agreement. In addition, under the terms of the agreement, five directors and the Board Chairman are appointed by B which controls 17% of the issuer's stock, and five members by C. The five members appointed by C have a right of veto on certain key decisions.

Based on its assessment of the transaction, the issuer determined it was the acquirer of A, as it has the power to appoint the majority (six) of the Board, consistent with IFRS 3, paragraph 19b. It is important for students to understand that, although the purchase agreement identifies the issuer as the legal acquirer, under IFRS the substance of economic transactions overrides legal form. The national regulator did not support the issuer's opinion and instead deemed the transaction to be a reverse acquisition in which A should be considered to be the acquirer in accordance with IFRS 3, paragraph 21, as the former shareholders of A (i.e. C) obtained control through their majority voting rights. The regulator also called attention to IFRS 3, paragraph 20 which lists certain factors which might help in determining the identity of the acquirer. Specifically, the regulator noted that the fair value of A was significantly greater than the fair value of the issuer.

Other ESMA cases concerning the assessment of control which accounting educators might find useful include:

- Decision ref.EECS/1209-16 *Identification of the acquirer in business combination.*
- Decision ref.EECS/0209-04 *Control.*
- Decision ref.EECS/0209-05 *Business combinations, reverse acquisitions.*

Classification Judgements: Debt/Equity Classification

Whether or not complex financial instruments issued by the entity should be classified as debt requires judgement. Students may struggle to understand the nature of complex, hybrid financial instruments, thereby complicating their understanding of the judgements required when determining if their appropriate classification is debt or equity. Faculty may want to remind students that issuers have an incentive to categorise complex instruments as equity, as such classification improves the debt-to-equity position of the issuer. We provide two examples from the ESMA database in which the national regulator found that the issuer's classification of hybrid instruments as equity rather than debt did not comply with IAS 32, 'Financial Instruments: Presentation', (IASB, 2009d). The short examples should help students in gaining an understanding of the nature of the judgements.

In Decision ref.EECS/1208-08, the issuer has an operating subsidiary B which issued a series of A-shares with voting rights. The issuer owns 70% of the A-shares; the other 30% are held by external parties. Under an agreement with its shareholders, B is required to pay an annual cumulative dividend of 5%. The issuer consolidates B as a subsidiary, and reported the 30% of the A-shares owned by external parties as a minority interest. The issuer determined that the instruments were equity; the regulator disagreed with that judgement.

In Decision ref.EECS/0209-10, the issuer presented non-redeemable preference shares as equity instruments in its balance sheet. The terms of the issue give the holders a contractual right to an annual fixed net cash dividend and the entitlement to a participating dividend based on any dividends paid on ordinary shares. Both the fixed and participating dividends were presented as dividends, below profit after taxation, in the income statement. The issuer invoked IAS 1 paragraph 17, explaining that presentation of the preference shares with a liability component in compliance with IAS 32, would be so misleading it would conflict with the objectives of financial statements set out in the IASB Framework. As in the prior example, the regulator disagreed with the issuer's judgement.

Judgements Related to Business Combinations

Paragraph IN4 of IFRS 3, as revised in 2008, explains the objectives of the standard and how they are achieved:

> The objective of the IFRS is to enhance the relevance, reliability and comparability of the information that an entity provides in its financial statements about a business combination and its effects. IFRS 3 achieves this by establishing principles and requirements for how an acquirer:

(a) recognizes and measures in its financial statements the identifiable assets acquired, the liabilities assumed and any non-controlling interest in the acquiree;
(b) recognizes and measures the goodwill acquired in the business combination or a gain from a bargain purchase; and
(c) determines what information to disclose to enable users of the financial statements to evaluate the nature and financial effects of the business combination. (IASB, 2008c)

The framework recommended in this paper can be used to identify and address the judgements required by the standard. For example:

> *Concepts:* Include the qualitative characteristics of relevance, reliability, comparability, and representational faithfulness.
>
> *Principles:* An acquirer of a business must include within its consolidated financial statements the "assets acquired and liabilities assumed at their acquisition-date fair values" and provide disclosures that enable "users to evaluate the nature and financial effects of the acquisition" (IASB, 2008c, paragraph IN5).
>
> *Rules:* The standard includes exceptions to the measurement principle (paragraphs 29–31); exceptions to both the measurement and recognition principles (24–28); and specific disclosures (paragraphs 59–63).
>
> *Judgment:* Determining the fair value of the acquired assets in the absence of an active market.

For an example of how the issuer's and regulator's judgements may differ on the appropriate way to determine the fair value of intangible assets acquired via a business combination, instructors may wish to review Decision ref.EECS/1209-13. In this case, the issuer determined the fair value of the assets based upon how much it was willing to pay for them. For this reason, it determined the value of acquired customer relationships to be zero as the issuer already had relationships with these customers. The fair value of the other intangible assets was determined to be 23% of the acquisition price. The regulator noted that IFRS 3 requires that assets acquired (including intangible assets) should be measured at their fair value, determined as the amount that would be paid in an arm's-length transaction between knowledgeable parties, not an amount specific to the acquirer.

Judgements Related to Revenue Recognition

Judgement is frequently required to determine when revenue should be recognized from the sale of goods. Revenue should be recognized only when all of the following conditions are met:

(a) the entity has transferred to the buyer the significant risks and rewards of ownership of the goods;

(b) the entity retains neither continuing managerial involvement to the degree usually associated with ownership nor effective control over the goods sold;
(c) the amount of revenue can be measured reliably;
(d) it is probable that the economic benefits associated with the transaction will flow to the entity; and
(e) the costs incurred or to be incurred in respect of the transaction can be measured reliably (IASB, 2008e, paragraph 14).

The following is an example of disclosure related to revenue recognition. It is one of multiple paragraphs excerpted from the IAS 1 judgements and estimates disclosures included in the Glaxo Smith Kline 2007 Annual Report:[21]

> Turnover
>
> Revenue is recognized when title and risk of loss is passed to the customer and reliable estimates can be made of relevant deductions. Gross turnover is reduced by rebates, discounts, allowances and product returns given or expected to be given, which vary by product arrangements and buying groups. These arrangements with purchasing organizations are dependent upon the submission of claims sometime after the initial recognition of the sale. Accruals are made at the time of sale for the estimated rebates, discounts or allowances payable or returns to be made, based on available market information and historical experience. Because the amounts are estimated they may not fully reflect the final outcome, and the amounts are subject to change dependent upon, amongst other things, the types of buying group and product sales mix. . ..

After reviewing the example, students should be aware that being able to estimate the future deductions (including anticipated product returns), determines whether or not revenue may be recognized from a sale. As such, judgement is a key determinant to revenue recognition.

A case study provided by Grant Thornton's UK office further illustrates applying appropriate professional scrutiny to determine when to recognize revenue where the legal form of a transaction differs from its economic substance. In the case study, Ruby manufactures port. The production process involves maturing the wine in containers for three years before bottling. The port is generally sold to customers at cost plus a mark-up of 200%. On the first day of its accounting period, Ruby sold 100 000 litres of one-year old port to a bank for €500 000 its cost. In addition, Ruby has a call option to repurchase the port at any time over the next two years at cost plus a mark-up based on an annual interest rate of 12%, and the bank has a put option to sell the port to Ruby in two years' time at a price based on the same formula as the call option.

This case can be used as the basis for a classroom discussion as to whether or not a sale should be recognized at the beginning of the year. Students should consider the following factors: the sale is unusual as it is recorded at cost and the 'customer' is a bank; the offsetting put and call options indicate the repurchase is bound to occur; the bank will not take possession of the inventory; and Ruby is expected to pay a mark-up based upon a stated interest rate. As such, the facts indicate this is a financing transaction rather than a sale. Accounting educators may also refer students to IAS 18 Appendix paragraph 5 specific to sale and repurchase agreements.

Given that, in substance, the transaction described in Ruby is clearly not a sale, educators may ask students to consider why standard setters have deemed it necessary to issue 'rules' or guidance to guarantee the appropriate classification of sale and repurchase agreements. One example is the above-noted guidance in the Appendix to IAS 18. Another example is the US Financial Accounting Standards Board's 'Accounting for Product Financing Arrangements' published in 1981 as SFAS 49 (FASB, 2008).

The ESMA database also includes examples addressing revenue recognition. For example, in Decision ref.EECS/1209-05 the issuer designs and manages IT infrastructures and business solutions for its customers. The issuer's service department also enters into maintenance agreements with the customers. The issuer enters into contracts with suppliers who provide new releases and updates to the software provided to the clients.

Until 2006, the issuer recognized both the revenue (and related costs) on the maintenance contracts at the beginning of the contract period when the customer was invoiced. Beginning in 2007, the issuer recognized both the revenue (and related costs) on a straight-line basis over the contract term. The issuer presented the change as a change in an accounting estimate. In the third quarter of 2007, the change in estimate reduced revenue and cost of sales by €1.8 million and €1.2 million, respectively, and the profits for that year-to-date by about €600 000.

The national enforcer determined the change in accounting should have been reported as a correction of an error, citing paragraph 20 of IAS 18.

Judgement, moreover, is the key in applying the core principle of the forthcoming revenue recognition standard proposed in the Revenue Recognition Exposure Draft (IASB, 2010c).[22] The Exposure Draft *specifies:*

> the principles that an entity would apply to report useful information about the amount, timing and uncertainty of revenue and cash flows arising from its contracts to provide goods or services to customers. … The core principle would require an entity to recognize revenue to depict the transfer of goods or services to customers in an amount that reflects the consideration that it receives, or expects to receive in exchange for those goods or services. (ED/2010/6 paragraph IN 8)

In applying the core principle, entities must identify contracts with customers, determine the separate performance obligations in each contract, determine the transaction price, then allocate the transaction price to the individual performance obligations, and recognize revenue at the time each performance obligation is satisfied (ED/2010/6 paragraph IN9).

Based on the IASB's proposed revenue recognition standard, judgement will be required to: determine if separate contracts are interdependent and should be combined; separate the parts of a contract when prices are interdependent; identify the separate performance obligations included in a contract; determine the transaction price (which must be adjusted for contingent amounts, credit risk and implicit financing); estimate the selling price of the individual performance obligations; and determine the time when the customer gains control of the product or service.

Faculty may want to consult the examples included in the Revenue Recognition Exposure Draft Basis for Conclusion to illustrate the judgements and estimates required by the new standard. The examples include issues related to contract segmentation, contract modifications, right of return, warranties, and the sale of a product with future sales considerations.

Derecognition Judgements: Investment Property

Investment property is derecognized when it is removed from the statement of financial position, either through disposal (sold or transferred) or retirement (permanently removed with no benefits from its disposal). Considerable judgement may be required if the fair market value method has been used; if part of the investment property is replaced, its fair value must be determined and the property's fair value adjusted accordingly. Even if the cost method is used to value the investment property, the fair value of the property must be disclosed. The fair value estimate may require managers to exercise judgement as to the fair value. Judgement is also required to determine when the contractual rights to the cash flows expire or have been transferred, when substantially all the risks and rewards of ownership have transferred, and when the entity ceases to control the asset.

Measurement Uncertainty

Measurement uncertainty is a cross-cutting issue that requires judgement in the application of many IFRSs, including: fair-value measurement (*IAS 39, Financial Instruments: Recognition and Measurement*) (IASB, 2005b); choice of depreciation and amortization methods (*IAS 38, Intangible Assets*) (IASB, 2005c); defined benefit plans (IAS 19); and impairment of assets (*IAS 36, Impairment of Assets* (IASB, 2005d) and IAS 39). We discuss below the various judgements that must be made in each of these areas.

Measurement Uncertainty: Fair Value

Fair value is defined in IAS 39, paragraph 48 as 'the amount for which an asset could be exchanged, or a liability settled between knowledgeable, willing parties in an arm's length transaction'. Generally speaking, quoted prices in an active market provide the best evidence of fair value. Measurement uncertainty may result when markets are inactive or when market data is not available and an entity must use a valuation technique to determine fair value. We suggest using the following recent regulatory decisions to illustrate fair value measurement judgements:[23]

- ESMA's EEC database of enforcement decisions
- IASB Exposure Draft *Fair Value Measurement Guidance*[24]
- IASB Expert Advisory Panel report on measuring fair value in illiquid markets[25]
- IAASB Staff Audit Practice Alert, *Challenges in Auditing Fair Value Accounting Estimates in the Current Market Environment*[26]
- International Standard of Auditing (ISA) 540 *Auditing Accounting Estimates*[27]

We provide a summary of Decision ref.EECS/0407-11 from the ESMA website to illustrate the judgement required in determining when fair value should be used and the measurement uncertainty present in fair value measures. In the case, the issuer farmed salmon and valued slaughtered salmon (which exceeded four kilograms ungutted) using observed prices in an active market. It valued immature salmon at cost. The national regulator determined an observable market also existed for immature salmon, and concluded that they should also be valued at fair value, not cost. The regulator relied on the following:

> Industry organizations publish weekly price reports, summarizing trades of slaughtered and gutted superior quality salmon specified by weight classes.... Approximately 20–30% of all salmon sold weigh less than 4 kg. These markets for salmon weighing less than 4 kg are not scrap markets, but markets where superior quality salmon is sold for human consumption.

The national regulator's decision was upheld upon its appeal to the Ministry of Finance. The Ministry added comments relating to how the term 'adjustments to reflect differences' in IAS 41, 'Agriculture', paragraph 18b was to be applied:

> The adjustments should reflect the differences between the price of slaughtered immature salmon and the hypothetical market price in an active market for live immature salmon.

> These adjustments should be consistent with the assessments that would be expected to be made by market participants to set the price of live salmon in an arm's length transaction, given its present location and condition.

Measurement Uncertainty: Depreciation/Amortization Method

The choice of depreciation or amortization method is another issue in the application of IFRS where judgement is often required. With regard to intangible assets, companies can choose the model they wish to apply to account for these assets after initial recognition. IAS 38 allows for the cost method (where intangibles are carried at cost less any accumulated amortization and accumulated impairment) or the revaluation model (fair value at revaluation date less subsequent accumulated amortization and subsequent accumulated impairment). In practice, use of the revaluation model is severely restricted because the fair value measure must be determined in an active market. Although far less restrictive, the cost model may none the less be used to illustrate the application of judgement in the choice of depreciation/amortization method.

Accounting educators may use Decision ref.EECS/1207-08 from the ESMA website to illustrate the difficulties in choosing an amortization method that would be considered valid. Under IAS 38, the amortization method in respect of an intangible asset with a finite useful life must reflect the pattern in which that asset is consumed by the entity. IAS 38 further states that if that pattern cannot be determined reliably, the straight-line method must be used, and that rarely, if ever, can the argument be made in favour of a method which results in a lower amount of accumulated amortization than under the straight-line method (IAS 38 paragraphs 97–98). In this case, a telecommunications company chose to amortise licenses it had acquired to provide telephony services on the basis of revenues obtained as a proportion of the total estimated revenues over the license period.

The issuer argued that this approach would best reflect the consumption of the licenses' future economic benefits. Owing to the nature of the telephone business, this method could lead to a form of rising balance amortization, as the revenues generated by such services also increase progressively. Thus, the issuer argued that this amortization method was valid under IAS 38 on the basis that it constitutes one of those rare cases (tacitly allowed by the standard) in which the amortization method results in a lower amount of accumulated amortization than if the straight-line method had been used.

The national securities regulator found that the method of amortization proposed was not acceptable and that the straight-line method should be applied. It was determined that a method of amortization based on attainment of revenue was not acceptable, as the sales price component was unrelated to the pattern in which the asset was consumed. According to the regulator, the issuer could not demonstrate that demand—as represented by revenues generated from the licenses—represented the best pattern under which the assets (licenses) were consumed. In its published decision the regulator notes that IAS 38, paragraph 98 indicates that there is 'rarely, if ever' persuasive evidence that would support a method of amortization which results in accumulated amortization that is less than would result using the straight-line method. The regulator concluded that the issuer did not possess sufficient industry-specific knowledge to determine that customer demand provided the best pattern of the consumption of the intangible asset, nor was the regulator convinced that the issuer could effectively estimate future demand required by its proposed amortization method.

The above example also provides an excellent opportunity for accounting educators to remind students that 'matching' is *not* part of the IASB Framework. Indeed, this is one of several 'misunderstandings' frequently addressed by Wells (2010, slide 27) and others in the IFRS Foundation and IAAER IFRS Teaching Workshops. In addition to *not* including matching as a concept, the Framework does *not* include prudence/conservatism as a concept (neutrality is the concept), an element 'other comprehensive income' or a concept for OCI (the elements defined in the Framework include asset, liability, equity, income and expense), or mention management intent or business model.

Determining the useful life of tangible and intangible assets also requires management's judgement. The following example taken from the AGFA 2007 Annual Report identifies the factors which the company considers when determining the useful lives of its intangible assets:[28]

> Useful lives of intangible assets with finite useful lives
>
> For acquired technology, the estimation of the remaining useful life is based on the analysis of factors such as typical product life cycles in the industry and technological and commercial obsolescence arising mainly from expected actions by competitors or potential competitors. . .. Shorter than expected product life cycles as well as higher than expected technological and commercial obsolescence may lead to a reduction in the useful life and an increase in amortization expense.

The example should remind students that judgement often relies on facts and circumstances internal *and* external to the reporting entity.

Measurement Uncertainty: Impairment

Considerable judgement may be required when measuring and recognizing an impairment loss for an individual asset. Impairment losses result when the recoverable amount of an asset is determined to be less than its carrying amount. The recognition of the impairment loss reduces the asset's carrying amount (or book value) down to its recoverable amount. The accounting treatment for the impairment of non-financial assets (property, plant, equipment, intangible assets and goodwill) and financial assets (receivables, loans, and debt securities) is prescribed by IAS 36 and IAS 39, respectively.

Judgements related to the application of the IAS 36 impairment model include the following:

- *Identifying an asset that may be impaired:* Judgement is required when evaluating impairment indicators; both external and internal sources of information may be used to determine if an asset is impaired. If the recoverable amount of an individual asset cannot be determined separately from other assets in a cash generating unit,[29] a company must calculate the recoverable amount of the cash generating unit to which the asset belongs. Judgement is required when allocating assets to cash generating units.
- *Measuring the recoverable amount:* The recoverable amount of an individual asset or a cash generating unit is the greater of its fair value less costs to sell and its value in use. Determining these two amounts requires judgement.
- *Goodwill:* Goodwill represents the future economic benefits a company expects from assets acquired in a business combination. Goodwill is assigned to a cash generating unit or to a group of cash generating units. Goodwill is not allocated arbitrarily and thus the allocation requires judgement. Judgement is also required if part of a cash generating unit is sold and goodwill must be allocated between the part sold and the remaining cash generating unit.
- *Reversing an impairment loss:* A previously recognized impairment loss may be reversed if it is determined that the estimates used to determine the asset's recoverable amount have

changed. The reversal in most cases is limited to an increase in the asset's carrying amount back to what it would have been if the impairment loss had never been recognized.

Judgement is also required in the application of the IAS 39 impairment model. IAS 39 paragraph 58 states:

> An entity shall assess at the end of each reporting period whether there is any objective evidence that a financial asset or group of financial assets measured at amortised cost is impaired.

When looking for objective evidence that a financial asset is impaired, IAS 39 focuses on the existence of 'loss events', such as significant financial difficulty on the part of the issuer, the probability that the borrower will enter bankruptcy, and the disappearance of an active market for the asset. IAS 39 paragraph 63 states:

> If there is objective evidence that an impairment loss on financial assets measured at amortised cost has been incurred, the amount of the loss is measured as the difference between the asset's carrying amount and the present value of estimated future cash flows (excluding credit losses that have not been incurred) discounted at the financial asset's original effective interest rate.

IFRS 7, 'Financial Instruments: Disclosures', paragraph 37 (IASB, 2009b) further states that:

> An entity shall disclose by class of financial asset an analysis of financial assets that are individually determined to be impaired as at the end of the reporting period, including the factors the entity considered in determining that they are impaired.

The Committee of European Securities Regulators' (now ESMA) *Activity Report on IFRS Enforcement 2009* (CESR/10–917) may be used to discuss recurring issues surrounding the impairment of financial assets.

Measurement Uncertainty: Property, Plant, and Equipment

The IFRS Foundation's SME training materials provide the following example of measurement uncertainty of property, plant and equipment:

> At initial recognition, property, plant and equipment is measured at its cost. Significant judgements in measuring the cost of an item of property, plant and equipment at initial recognition include:

- If payment for the item is deferred beyond normal credit terms—determining the discount rate at which to discount all future payments to arrive at the present value that will be included in the cost of the property.
- If the item is acquired in an exchange for a non-monetary asset—estimating the fair value of the non-monetary asset.
- If applicable—estimating the costs of dismantling and removing the item and restoring the site on which it is located, the obligation for which an entity incurs when the item is acquired.[30]

Conclusion

The principles-based nature of IFRS requires accounting practitioners to exercise considerable judgement in the development of accounting systems and the presentation of financial reports. For example, judgement is required in determining the presentation and disclosure, classification, recognition/derecognition, and the measurement of transactions and accounts within the financial statements. To best prepare future accounting professionals, accounting educators need to insure that accounting students are aware of the pervasiveness and importance of judgement in the application of IFRS. Teaching students to use judgement is best accomplished by relating concepts in the IASB Framework to specific IFRS requirements. In this paper, we provide suggestions for helping students develop an awareness of the importance of judgement and illustrate a three-step instructional model to help them learn to make the judgements required in the application of IFRS. We also provide numerous examples from EU company annual report footnote disclosures and regulatory enforcement decisions published by ESMA.

Accounting educators need to emphasize that numerous individual IFRSs require exercising judgement. In this paper we cite 15 specific international standards and the IASB Framework. This, of course, does not represent a complete listing of the international accounting standards which necessitate the use of considerable professional judgement; however, this paper does provide educators with numerous examples which they may use in the classroom. Educators should also remind students that IFRS are not static. This is illustrated by our discussion of the 2011 anticipated changes in the reporting of both defined benefit pension plans and revenue recognition. Future changes and new standards require that students learn *how* to identify the need for judgements and the appropriate steps to form judgements, rather than simply memorising how judgements have been formed in the past.

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Notes

[1] Deloitte's IASPlus identifies 91 countries for which IFRS or its full equivalent is or will be required for all public filings by 2012, six countries for which IFRS is required for some companies, and 26 countries which allow, but do not require, the use of IFRS. See http://www.iasplus.com/country/useias.htm (accessed 30 December 2010).

[2] The most recent pronouncements of other standard setting bodies may be consulted as long as they use a similar conceptual framework and do not conflict with any of the IASB's pronouncements.

[3] European Securities and Markets Authority (ESMA). Available at http://www.esma.europa.eu/index.php?page=groups&id=58 (accessed 3 January 2011). ESMA was previously known as the Committee of European Securities Regulators (CESR) until 1 January 2011.

[4] Available at http://www.ifrs.org/IFRS+for+SMEs/Training+material.htm (accessed 30 December 2010).

[5] The IASB is in the process of updating the Board's Framework. Chapters 1 and 3 addressing the Objectives of Financial Reporting and The Qualitative Characteristics were issued in September 2010. The text of these two updated chapters is available at http://eifrs.ifrs.org/eifrs/files/136/conceptual%20fw%202010_130.pdf (accessed 3 January 2011). An eIFRS subscription is required to access this site. Chapter 4 remains as included in the 1989 version of the Framework. Please note that the normal annual cost of eIFRS access is £200; full time students and academics receive a discount of 45%. We recommend, however, that accounting educators and students consider joining IAAER as one of the membership benefits is free access to eIFRS. Annual membership in IAAER is US $25 for individual members and US $20 for students (visit www.iaaer.org for more information). To learn more about eIFRS, a free preview is provided at: http://eifrs.iasb.org/eifrs/Preview

(accessed 2 January 2011). See also Larson and Street (2011) in this issue of *Accounting Education: an international journal* to learn more about eIFRS.

[6]Available at http://www.austrianairlines.ag/InvestorRelations/FinancialReports/~/media/Austrian%20Airlines/Corporate%20Site/Investor%20Relations/Other%20Formats/2008/Konzern%20GB08%20englisch-s.ashx#selected. (accessed 30 December 2011).

[7]Available at http://corporate.bbg.co.uk/en/~/media/Files/B/Bradford-And-Bingley-Corporate/pdf/results-and-publications/year-2008/ar2008_03_04_09.pdf (accessed 30 December 2010).

[8]Available at http://www.hyporealestate.com/eng/pdf/AR2008_09_04_24_final_GL.pdf (accessed 30 December 2010).

[9]Company Watch—Austrian Airlines, 1 September 2008. Available at http://www.allbusiness.com/company-activities-management/company-structures-ownership/12833072-1.html (accessed 30 December 2010).

[10]Well's 2010 presentation contains a discussion of the difference between changes in estimates versus correction of errors.

[11]Educators need to select cases carefully from the ESMA database for classroom use. Some 'decisions' are no longer applicable as the relevant international financial reporting standard has been revised.

[12]Available at http://www.annualreport2009.bayer.com/en/Bayer-Annual-Report-2009.pdfx (accessed 31 December 2010).

[13]http://annualreport07.unilever.com/ (accessed 31 December 2010).

[14]Available at http://www.salzgitter-ag.de/MDB/Investor_Relations/Downloads_english/Financial_Reports/2009/szag_ar_2008.pdf (accessed 31 December 2010).

[15]Available at http://www.kghm.pl/index.dhtml?category_id=324&year=2007 (accessed 2 January 2011).

[16]Available at http://www.lloydstsb-annualreport.com/ (accessed 30 December 2010).

[17]At the time this paper went to press, the expected release date of the final standard on defined benefit plans was by the middle of 2011.

[18]Free versions of IFRS including those available on the websites of the IASB and European Union do not include the basis for conclusions. However, the basis for conclusions is available through an annual subscription to the IFRS Foundation's eIFRS. See footnote 5 to learn more about accessing eIFRS at a low cost (i.e. US $25 for faculty and US $20 for students, annually).

[19]See also Street (2002).

[20]See Schipper (2009). Available at http://www.iasb.org/NR/rdonlyres/650900EB-1B71-4DD1-A1D9-BF30702E6B73/0/IFRSteachingresearchAAAhandout.pdf (accessed 30 December 2010).

[21]Available at: http://www.gsk.com/investors/annual-reports-archive.htm (accessed 30 December 2010).

[22]At the time this paper went to press, the IASB anticipates the standard *Revenue from Contracts with Customers* will be issued in the second quarter of 2011.

[23]The authors wish to thank Mike Wells for suggesting these teaching resources.

[24]Available at http://www.ifrs.org/Current+Projects/IASB+Projects/Fair+Value+Measurement/ed0610/ed.htm (accessed 30 December 2010).

[25]Available at http://www.iasb.org/NR/rdonlyres/0E37D59C-1C74-4D61-A984-8FAC61915010/0/IASB_Expert_Advisory_Panel_October_2008.pdf (accessed 30 December 2010).

[26]Available at http://web.ifac.org/download/Staff_Audit_Practice_Alert.pdf (accessed 30 December 2010).

[27]Available at http://web.ifac.org/download/a028-2010-iaasb-handbook-isa-540.pdf (accessed 30 December 2010).

[28]Available at http://www.agfa.com/co/en/binaries/AG2007_UK_tcm222-37510.pdf (accessed 30 December 2010).

[29]A CGU (cash generating unit) is the smallest identifiable group of assets that generates cash inflows that are largely independent of the cash inflows from other assets or groups of assets (IAS 36.6).

[30]Module 17 of the Training Material for the *IFRS® for SMEs*—Property, Plant and Equipment is available at http://www.ifrs.org/NR/rdonlyres/2882F652-B451-4159-A514-5ED3BADD5AC2/0/Module17_version2010_1.pdf (accessed 3 January 2011).

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