Accounting Conservatism under IFRS

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ABSTRACT In a recent discussion paper on an improved conceptual framework (IASB, 2006a), the IASB and the FASB argue that prudence and conservatism are not desirable qualities of financial reporting information (IASB, 2006a, BC2.22). One interpretation of this proposal is that the consistent undervaluation of net assets (consistent conservatism), which used to be common under Continental European GAAPs and to some extent under US GAAP, is not considered to be an adequate way of dealing with uncertainty. Instead, the changes in the business conditions of a firm should be, to a greater extent, reflected in the financial reporting via changes in future-oriented estimates and probabilities. In turn, this should increase the decision relevance to users. However, although the boards suggest that the improved framework will not include prudence or conservatism as desirable qualities, this paper suggests that a more valid description is that consistently conservative accounting treatments will be replaced by accounting methods that leave more opportunities for temporary conservatism (changes in accounting estimates that temporarily understate net assets via the creation of hidden reserves which later may be reversed). From a user perspective, temporary conservatism is demanding because of the increased income-shifting between periods. This is illustrated in the paper by examining three cases concerning loss carryforwards, development costs and construction contracts, related to three different standards (IAS 12, IAS 38 and IAS 11, respectively). Furthermore, the paper illustrates how the mixing of consistent and temporary conservatism may lead to counter-intuitive interpretations of the underlying business activities that, in turn, make the information less relevant to users.

1. Introduction

Conservatism is a much debated concept in accounting. One major argument for conservatism is that it serves the needs of creditors well. With specific reference to German accounting, Haller (2003, p. 92) states:¹

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... the principle of conservatism is not understood as a sub-characteristic as in the USA or the UK but rather as the central principle of accounting which follows logically from the objective of creditor protection.

Even in the USA, where companies to a greater extent turn to the stock market for financing, conservatism has historically been one of the most influential accounting principles (Sterling, 1967). However, the idea of systematically understating assets and overstating liabilities, recognising revenues too late and expenses too early has been interpreted by critics from the Anglo-American tradition as way of reducing the relevance of accounting information. In the words of Hendriksen (1982, p. 83):

Conservatism is, at best, a very poor method of treating the existence of uncertainty in valuation and income. At its worst, it results in a complete distortion of accounting data.

In general terms, the need for conservatism is often linked to a reliable reporting of past events, which implies that stewardship and the feedback function of accounting is emphasised. Over time, the international accounting standards have become increasingly future-oriented, pointing out decision usefulness as the primary or sole objective of accounting (IASB framework;^{2,3} IASB, 2006a), and conservatism seems to have become less of a governing accounting principle. Under the current IASB conceptual framework from 1989, prudence is one of the concepts related to reliability, although there are caveats that this should not lead to a deliberate understatement of assets or income (IASB framework, paragraph 37). However, in the discussion paper on an improved conceptual framework (IASB, 2006a, BC2.22), the boards (IASB and FASB) state that prudence and conservatism are not desirable qualities of financial reporting information. This is a changed view compared with the prevailing IASB framework, but the change is not surprising given the de-emphasis of conservatism in a number of standards issued by the IASC and the IASB during the last decades (see examples below).

The first purpose of this paper is to analyse how the conservatism principle is applied under IFRS. This will be done via an analytical examination of three cases relating to three different IFRSs: (i) judgement related to the recognition of deferred tax receivables pertaining to loss carryforwards (IAS 12); (ii) judgment regarding the capitalisation and impairment of development costs (IAS 38); (iii) judgment regarding the use of the percentage-of-completion method and the zero-profit recognition method during the completion of construction contracts (IAS 11). Examples from annual reports are also provided in order to illustrate that the numerical examples have real-world counterparts. As outlined above, the IASB is aiming to increase the relevance of accounting information. For example, IFRS 3 implies that it is more relevant to users to show separate values for different identifiable intangible assets compared to letting these

values go into the residual (goodwill). However, this increased emphasis on relevance leads to greater reliance on judgement of probabilities and other estimates. With regard to IFRS 3, this will pertain to things like estimating the future economic benefits of customer relations and brands. In the current paper, three standards have been chosen (IAS 12, IAS 38 and IAS 11) in order to illustrate how this increased reliance on judgement of estimates relates to conservatism. These standards are not among the most recent IFRSs, but they are considered to be good examples of less conservative accounting compared with the accounting treatments in many jurisdictions before these standards were adopted.⁴ In essence, the analytical examination of the three standards suggests that IFRS reduces the consistent conservatism (consistent understatement of net assets) that was a prevalent feature of prior accounting treatments; at the same time however, IFRS leaves more opportunities for temporary conservatism, i.e. changes in accounting estimates that temporarily understate net assets, via the creation of hidden reserves, which later may be reversed. From a user perspective, temporary conservatism can be viewed as demanding because of the increased income-shifting between periods.

The second purpose of the paper is to evaluate the user implications of mixing accounting treatments with varying degrees of conservatism. Consider, for example, the treatment of R&D expenditure. A consistently conservative treatment of such expenditure is to expense all of it immediately when incurred. The application of IAS 38 may lead to some part of this R&D expenditure being expensed and some part being capitalised, depending on the preparer's estimates and probability judgments. This implies that the financial statements will reflect a mix of R&D expenditure that is immediately expensed (consistent conservatism) and R&D expenditure that is capitalised and subsequently impaired or amortized, leaving opportunities for temporary conservatism. The second part of the paper evaluates user implications of mixing accounting treatments with varying degrees and forms of conservatism by comparing the user implications in companies choosing different internal accounting solutions regarding the capitalisation of development costs. In sum, the results suggest that the mixing of consistent and temporary conservatism may cause counter-intuitive interpretations of the underlying business activities that, in turn, make the information less relevant to users. The empirical examples indicate that there are behavioural reasons from a management control perspective to choose a consistently conservative treatment in the internal accounts.

The paper is organised as follows. In the next section, the concept of conservatism is described using a historical context, followed by a presentation of the definitions and analytical concepts used in the current paper. Section 3 presents an analytical examination of the impact of conservatism under IFRS in three different cases related to IAS 12, IAS 38 and IAS 11, including examples from annual reports. Section 4 presents three empirical examples concerning the capitalisation of development expenditures in three listed companies. Section 5 includes a discussion of the implications of the results and some concluding remarks.

2. Key Concepts and Prior Research

2.1. Some Historical Background

There is a long tradition of accounting conservatism, particularly in code-law countries. For example, Haller and Eierle (2004, p. 36) suggest that it has been a received wisdom in Germany that conservative accounting is '... the best way to reach the objective of creditor protection'. Creditors' preference for conservatism is explained by Lara and Mora (2004) as a way of protecting the primacy of the creditors' claims over the shareholder claims. Accordingly, the determination of non-restricted equity (funds distributable to shareholders) has been much emphasised in code-law countries. With regard to Sweden, for example, Artsberg and Nilsson (1993) suggest that the view incorporated in Swedish legislation has been that a single good year should not result in dividends, but profits shall be retained as 'reserves for the future' (Artsberg and Nilsson, 1993, p. 37). The strong link between accounting and taxation in code-law countries also tends to work in favour of conservatism, since more prudent valuations of assets and liabilities will also lead to lower taxable income. In addition, auditors may have a conservatism bias, since they are not expected to get sued on the grounds of financial statements being too conservative.

Although the concept of conservatism plays an important role in accounting, many scholars have found it difficult to incorporate it fully in normative accounting theory. In the early days, conservatism was a primary principle for German advocates of the balance sheet approach, referred to as 'statists' (Forrester, 1993, Chapter V). However, from 1908 and onwards, the German theorist Schmalenbach put forward a different view (Schmalenbach, 1959; Quire, 1965), emphasising the matching of flows of production and consumption in order to measure profit, i.e. an income statement approach. Although Schmalenbach disagreed with the static theory, he agreed with the statists with regard to the primary role of conservatism. Schmalenbach (1959, p. 82) argued that an overstated profit is far more dangerous than an understated one. However, at the same time, he acknowledged that conservatism can be exaggerated and that understated profits can do harm. It is not clearcut from reading Schmalenbach (1959) how the appropriate level of conservatism should be determined.⁵ In the USA, Paton and Littleton (1940) started out with the intention to build a framework where accounting theory was 'conceived to be a coherent, coordinated, consistent body of doctrine' (Paton and Littleton, 1940, p. ix). Their view on conservatism was that it should not be part of the framework, but an attitude to be added when interpreting the accounting numbers (Paton and Littleton, 1940, p. 128):

... it may well be noted that conservatism in stating the assets ... is not a principle to guide calculations of net income, but a rule of caution in interpreting the results of accounting measurements made according to a coherent body of doctrine.

However, the Paton and Littleton view that conservatism should only be a 'rule of caution' applied by users for interpretational purposes, was not acknowledged in practice. For example, Sterling (1967) argues that whenever conservatism clashes with a conventional accounting principle (for example, the valuation of inventory at the lower of cost or market or simply at historical cost), there is a preference in practice for the more conservative policy. In sum, the above discussion illustrates the problems of delimiting the use of conservatism to some 'appropriate' level.

For some researchers in the normative accounting tradition, the application of the conservatism principle has been seen as a-theoretical. Hendriksen's (1982, p. 81) view is a good example of this:

The general constraint of uncertainty has served as a basis for the traditional accounting concept of conservatism. As it is generally stated, the concept of conservatism is not a postulate of accounting, nor should it be one of the constraints. But in its operational form, it serves as a constraint to the presentation of data that may otherwise be reliable and relevant.

The normative accounting research tradition went out of fashion in the 1970s, but this critical view on conservatism seems to have been adopted by the US standard setters. Although the Accounting Principles Board (1970) acknowledged conservatism as 'a modifying convention of financial accounting', FASB does not mention conservatism as one of the desirable qualitative characteristics of accounting information in its conceptual framework (FASB, 1980).

2.2. Conservatism under IFRS

In the IASB Framework for the Preparation and Presentation of Financial Statements, originally issued in 1989 by the International Accounting Standards Committee (IASC) and adopted by the IASB in 2001, the balance sheet approach was chosen instead of the income statement approach. The principal concern of accounting was no longer to be '... the periodic matching of costs and revenues' as advocated by Paton and Littleton (1940, p. 7), but to define, recognise and measure assets and liabilities appropriately. In the next step, revenues would be measured as increases in assets (or decreases in liabilities) and expenses as decreases in assets (or increases in liabilities). Especially in Germany, there is a long history of debates between advocates of the (static) balance sheet approach and the (dynamic) income statement approach (Forrester, 1993). However, the reasons for both FASB and IASC/IASB to adopt the balance sheet approach instead of the income statement approach are not well understood. Ernst & Young (2005, p. 1) suggests that the widespread use of conservatism in accounting practice, in terms of income smoothing and the creation of hidden reserves, probably played a major role as a rationale for IASC when choosing the balance sheet approach.

It was not possible to fully implement the balance sheet approach in the first conceptual framework, issued by the IASC 1989, but parts of the income statement approach remained. This may be illustrated by the following statement regarding the matching concept:

... the application of the matching concept under this *Framework* does not allow the recognition of items in the balance sheet which do not meet the definition of assets or liabilities. (IASB Framework, paragraph 95)

This statement illustrates that although the IASB framework is based on a *definition – recognition – measurement* logic, the matching concept, which is logically related to the income statement approach, is also maintained. With regard to conservatism, a similar ambiguity can be observed in the IASB framework from 1989. Prudence is mentioned as one of the qualitative characteristics that makes financial statement information useful to users, but a reservation is added, which makes the paragraph difficult to interpret:⁶

The preparers of financial statements do, however, have to contend with the uncertainties that inevitably surround many events and circumstances, such as the collectability of doubtful receivables, the probable useful life of plant and equipment and the number of warranty claims that may occur. Such uncertainties are recognised by the disclosure of their nature and extent and by the exercise of prudence in the preparation of the financial statements. Prudence is the inclusion of a degree of caution in the exercise of the judgements needed in making the estimates required under conditions of uncertainty, such that assets or income are not overstated and liabilities or expenses are not understated. However, the exercise of prudence does not allow, for example, the creation of hidden reserves or excessive provisions, the deliberate understatement of assets or income, or the deliberate overstatement of liabilities or expenses, because the financial statements would not be neutral and, therefore, not have the quality of reliability. (IASB Framework, paragraph 37)

According to the view on conservatism presented in this paragraph, less conservatism can be justified by increased disclosure. Secondly, preparers should include a degree of caution in the *exercise of judgement* under conditions of uncertainty. In the standards, the latter will often be expressed in terms of particular probability judgements and other specific accounting estimates. Overall, paragraph 37 implies a more restrictive use of the conservatism principle compared to, for example, the German view referred to earlier.

The prevailing IASB Framework has been criticised and the IASB and the FASB have initiated a joint conceptual framework improvement project. ⁸ As a part of this joint project, a discussion paper was published by the IASB in July

2006 (IASB, 2006a), where conservatism is excluded from the desirable qualities of accounting information:

... the boards concluded that describing prudence or conservatism as a desirable quality or response to uncertainty would conflict with the quality of neutrality. Even with the proscriptions of deliberate misstatement that appear in the existing frameworks, an admonition to be prudent is likely to lead to a bias in reported financial position and financial performance ... Accordingly, the proposed framework does not include prudence or conservatism as desirable qualities of financial reporting information. (IASB, 2006a, BC2.22, emphasis added)

Interpreting this quotation, the argument for excluding conservatism seems to be that preparers should not at all be encouraged to be conservative when dealing with uncertainty since this could lead to a conservatism bias. Instead, preparers shall take a neutral standpoint when dealing with uncertainty.

2.3. Consistent and Temporary Conservatism: Some Conceptual Issues

In the current paper, accounting conservatism is defined on the basis of balance sheet valuation, i.e. the lower the net asset value (net of assets and liabilities), the higher the degree of conservatism. A definition of conservatism on the basis of balance sheet valuation was presented by Feltham and Ohlson (1995), who suggested that conservative accounting can be viewed as the case where reported net assets are expected to be lower than market value in the long run. This is a general view, which implies that historical cost accounting will be characterised as conservative since positive net-present-value investments will be reported on the balance sheet at less than their fair values. Penman and Zhang (2002) advocate a more restrictive view, suggesting that conservative accounting denotes a biased application of historical cost accounting (balance sheet values are below unbiased historical cost-carrying values); for example, the immediate expensing of R&D costs. Penman and Zhang (2002, p. 238) describes conservatism by referring to the balance sheet, as follows:

By conservative accounting we mean choosing accounting methods and estimates that keep the book values of net assets relatively low.

This quotation also points to the definition of the conservatism principle. For the purposes of the current paper, conservatism will be examined in a relative sense (see Penman and Zhang, 2002, p. 240). That is, when comparing two accounting treatments, the treatment that generates a lower value of net assets will be classified as more conservative, and vice versa. The conservatism principle is defined as choosing the most conservative treatment when several possible accounting treatments are available (see Sterling, 1967).

On the basis of the above definitions, and inspired by the discussion in Penman and Zhang (2002), two concepts have been developed that will be used for analytical purposes in the current paper: *consistent conservatism* and *temporary conservatism*.

Consistent conservatism refers to a consistent application of the conservatism principle, i.e. the more conservative accounting treatment always leads to lower valuation of net assets compared to the less conservative accounting treatment. For example, consider the investment in a brand via advertising. A conservative accounting treatment will be to expense the advertising expenditure as it is incurred. This will lead to a consistent understatement of net assets, compared to a less conservative accounting treatment (capitalising the expenditure). Note that this reasoning is based on the assumption that a particular accounting treatment is applied in the same way for every period.

Temporary conservatism refers to a temporary application of the conservatism principle, i.e. changes in accounting estimates which temporarily leads to a lower valuation of net assets. For example, the decision to restructure a firm may initially increase the value of liabilities (provision for restructuring), which reduces the value of net assets. Recognising such a restructuring provision is thus a more conservative treatment compared with expensing the restructuring expenditures as they are incurred. However, this lower valuation of net assets will only be temporary, if the firm changes its original estimate regarding the future restructuring payments so that the value of the restructuring provision decreases. In general terms, temporary conservatism concerns the creation of hidden (off-balance) reserves or excessive provisions that may later be reversed due to changes in accounting estimates.

The above descriptions of consistent and temporary conservatism are made with reference to the balance sheet. This follows from the applied definition of conservatism, based on balance sheet valuation. One advantage of this approach is that it allows for clear-cut statements of whether an accounting treatment is more or less conservative. Profits will of course also be affected by conservatism, but the effects on profits will vary depending on the circumstances. The basic effect of conservatism on profits was acknowledged already by Paton and Littleton (1940), with regard to the use of the lower of cost or market rule:

The focal point in conservatism is dividend policy, and there is no evidence that use of the 'cost-or-market' is an effective means of insuring proper care and caution, year by year, in the declaration of dividends. This need not be surprising when it is recalled that the amount by which income is understated in one year through the application of 'cost-or-market', as compared to the use of cost, is in effect added to the showing of income in the following period. (Paton and Littleton, 1940, p.128)

Thus, since conservatism will sometimes decrease profits, sometimes increase profits and sometimes leave them unchanged, it is difficult to define the impact

of conservatism on profits. This makes profit less suitable as a basis for defining conservatism. 10

The impact of consistent conservatism on profits may be described as follows. Consider, for example, R&D expenditures that are always charged directly to expenses as incurred instead of being capitalised and amortised. Net assets will be consistently understated, while profits will be understated at the beginning of the project and overstated during the subsequent years (for a single project). For a balanced portfolio of projects, profits will be the same as if the R&D expenditures had been capitalised and amortised. The temporary conservatism case refers to when changes in accounting estimates temporarily reduce profits and creates hidden (off-balance) reserves or excessive provisions which later may be reversed. This could refer to, for example, restructuring reserves or depreciation estimates. The impact of temporary conservatism on profits implies that changes in accounting estimates can be used for the purpose of income-shifting over time. Note that all applications of the conservatism principle, both consistent and temporary, may lead to income-shifting between periods. However, the concept of temporary conservatism only refers to the income-shifting caused by changes in accounting estimates.

Conservatism is a very established and much used concept in accounting and, accordingly, neither the above reasoning, nor the examples, can be considered novel. For example, changes in accounting estimates that lead to initial understatements of profit, followed by subsequent overstatement of profits in later periods, have been much examined in research on the quality of earnings (see Healy and Wahlen, 1999). However, the use of the concepts of consistent and temporary conservatism allows for a new way of analysing accounting conservatism under IFRS. This analysis indicates, although it only covers three standards, that IFRS reduces the consistent conservatism (consistent understatement of net assets) that was a prevalent feature of prior accounting treatments in many Continental European countries, but, at the same time, leaves more opportunities for temporary conservatism. This is considered interesting against the background that IASB and FASB proposes to leave out conservatism as a desirable quality of financial reporting information (IASB, 2006a).

Analytical Examination and Empirical Examples

This section includes an analytical examination of how the conservatism principle is applied under IFRS, using the concepts described in Section 2. This will be done by analysing three cases concerning loss carryforwards (Section 3.1), capitalisation and impairment of development costs (Section 3.2) and the use of the percentage-of-completion method and the zero-profit recognition method during the completion of construction contracts (Section 3.3). The cases are related to three different IFRSs (IAS 12, IAS 38 and IAS 11, respectively). Each case is analysed by using a numerical example and illustrated by using an annual report example. It should be noted that the examined cases do not refer to changes in accounting policies according to IAS 8.

3.1. Loss Carryforwards (IAS 12)

IAS 12 became effective on 1 January 1998. Paragraph 34 in IAS 12 states that:

A deferred tax asset shall be recognised for the carryforward of unused tax losses ... to the extent that it is probable that future taxable profit will be available against which the unused tax losses ... can be utilised.

In many Continental European jurisdictions, deferred tax assets pertaining to loss carryforwards were not recognised on the balance sheet before the issuing of IAS 12, due to the uncertainty of whether or not future taxable profit would be earned. The IAS 12 accounting method for loss carryforwards will increase net assets and thus represents a less conservative accounting treatment compared to not recognising the deferred tax receivable as an asset.

One of the words used in paragraph 34 is *probable*, which is further explained in paragraph 36, saying that the probability assessment should be based on the consideration of four criteria: (i) whether the entity has *sufficient taxable temporary differences* relating to the same taxation authority and the same taxable entity that can be used against the loss carryforwards; (ii) whether it is *probable* that the entity will have *taxable profits* before the unused tax losses expire; (iii) whether the unused tax losses result from *identifiable causes which are unlikely to recur*; and (iv) whether *tax planning opportunities* are available to the entity that will create taxable profit in the period in which the unused tax losses can be utilised. In paragraph 35, it is also emphasised that an entity that has a history of recent losses must be particularly cautious to recognise deferred tax assets and must provide additional disclosures. In sum, the probability criteria are qualitative criteria that will be subject to judgement.¹²

Paragraph 34 also prescribes that deferred tax assets should be recognised to the extent that it is probable that future taxable income will occur. This may, at first sight, be interpreted as an expected-value calculation, but it refers in fact to a binary outcome. Thus, if the loss carryforward amount is 100 and the probability of future taxable income is 5%, the book value of the deferred tax asset will be zero, not 5. However, if the probability of future taxable income is 95%, the book value of the deferred tax asset will be 100, not 95. Finally, paragraph 37 states that entity shall reassess unrecognised deferred tax assets at each balance sheet date.

Numerical example

A company has assets of 300, liabilities of 200 and equity of 100 as the opening balance year 1. The profit before tax year 1 is -50. The expected profit year 2 is

zero and +50 year 3. The tax rate is 30%. Assume that the profit before tax equals cash flows and that apart from that, all assets and liabilities except those related to the loss carryforwards in the example, stay the same over the three years.

The numerical example (Table 1) shows that when the conservative accounting practice is applied (case 1A), the book value of equity will be understated, assuming that the loss carryforward has a positive value. With regard to profits, they will be understated in year 1 (overstated loss in this case), but overstated in year 3, i.e. in accordance with the common impact of conservatism on profits over time (see Section 2.3). In case 1B, IFRS is applied under the assumption that it is probable from year 1 and onwards that future taxable profits will be earned. In that case, the conservative bias in case 1A disappears and net assets are valued higher on the balance sheet. Accordingly, profits are not understated in year 1 and not overstated in year 3. However, the interesting cases, with regard to use of the conservatism principle under IFRS, are the cases 1C and 1D, where the probability judgements change over time. Case 1C shows that

Table 1. Numerical example concerning loss carryforwards

1	U	,		
	O.B.	Year 1	Year 2	Year 3
1A. Conventional accounting (no recognition of deferred tax asset)				
Assets	300	250	250	300
Liabilities	200	200	200	200
Equity	100	50	50	100
Net profit		-50	0	50
1B. IFRS (probable year 1 that loss carryforwards can be used)				
Assets	300	265	265	300
Liabilities	200	200	200	200
Equity	100	65	65	100
Net profit		-35	0	35
1C. IFRS (probable year 1 that loss carryforwards can be used, not probable year 2, but actually used year 3)				
Assets	300	265	250	300
Liabilities	200	200	200	200
Equity	100	65	50	100
Net profit		-35	-15	50
1D. IFRS (not probable year 1 that loss carryforwards can be used, but probable year 2 and actually used year 3)				
Assets	300	250	260	300
Liabilities	200	200	200	200
Equity	100	50	65	100
Net profit		-50	15	35

the changes of probability assessments will make net assets vary over time, sometimes in accordance with case 1B (year 1) and sometimes in accordance with case 1A (year 2). With regard to profits, case 1C shows one year in accordance with case 1B (year 1), one year in accordance with case 1A (year 3) and one year where there is no underlying profit and thus only the changed assumption is reflected (year 2). The interpretation is exactly the same regarding case 1D, except that year 1 corresponds with case 1A and year 3 corresponds with case 1B. In sum, cases 1C and 1D reflect temporary applications of the conservatism principle (see Section 2.3), where a changed estimate year 2 either generates a hidden reserve (case 1C) or reverses a hidden reserve (case 1D). An empirical example of this is provided below.

Empirical example of Case 1C – Telecom operator '3' (the Swedish subsidiary)

The telecom operator '3' started its investments in a Swedish 3G network in 2000, and has reported increasing net losses each year during the period 2000 to 2005. In 2004, the 3G services were launched on the market leading to the recognition of revenues of 1.75 billion SEK (about 0.19 billion euros), but the net profit was -1.3 billion SEK (about 0.14 billion euros). Up to 2004, deferred tax assets were recognised with regard to the loss carryforwards, but in 2005 the probability judgement changed and the deferred tax asset was derecognised, increasing the reported loss of 2005. Figure 1 shows an excerpt from Hi3G's annual report 2005:

The example from the telecom operator '3' (Figure 1) shows the impact of conservatism under IFRS during a year when the probability assumption changed

In previous years, "probable" was generally interpreted as more-than-50% likelihood. With effect from 1 January 2005, the Company has adopted the current interpretation of "probable" which requires a higher hurdle for the recognition of deferred tax assets for the carry forward of unused tax losses. This change has been applied retrospectively.

The effect of this change is an increase in the net loss of the year of 1.018.197 (712.545). The effect on equity is a decrease of

1.939.726.(921.529).

Figure 1. Excerpt from Hi3G's annual report 2005 (p. 27)

(corresponding to year 2 in case 1C). If '3' eventually succeeds in Sweden and generates future taxable profits, the company now has a hidden reserve of loss carryforwards. If the previous, more conservative, Swedish accounting treatment had been applied (before IAS 12 was adopted), these loss carryforwards would overstate net profits as the loss carryforwards are actually used (year 3 in case 1C), but under IAS 12 it is more likely that the loss carryforwards will be reassessed earlier (paragraph 37), leading to an earlier positive impact on profits (year 2 in case 1D).

3.2. Capitalisation of Development Costs (IAS 38)

IAS 38 was first issued in 1998, followed by a revised version of the standard that applies from 31 March 2004. According to IAS 38 (Paragraph 57), intangible assets arising from development shall be recognised as assets given that a number of specific recognition criteria are met. For example, the company must show that it has the technical feasibility of completing the intangible asset so that it will be available for use or sale. ¹⁵ From the date when all criteria are met (including also the definition criteria regarding intangible assets) the entity shall begin to capitalise the development expenditures incurred (paragraph 65).

Before the issuing of IAS 38, the benchmark treatment of development costs under many accounting regimes was to charge them to expenses directly when incurred. In comparison with immediate expensing, IAS 38 will increase net assets and thus represents a less conservative accounting treatment.

After recognition, the entity can choose either the cost model or the revaluation model. In the example below, the cost model will be applied. ¹⁶ The cost model prescribes that (paragraph 74): 'after initial recognition, an intangible asset shall be carried at its cost less any accumulated amortisation and any accumulated impairment losses'. Thus, during the period when, for example, a new product is developed, the development project will be tested for impairment according to IAS 36 and amortization will start when the new product is launched. The impairment test will include estimates of the future cash flows related to the development project (paragraph 33 in IAS 36).

Numerical example

A company starts capitalising a development project on January 1, year 1. The development expenditures amount to 25 each year during three years. Year 4, the new product is launched and the intangible asset is amortized over 5 years (the amortization thus amounts to 15 per year). Assume that the company has assets of 200, liabilities of 70 and equity of 130 on the opening balance sheet year 1. The net profit, excluding the impact of the development project, is 25 (per year) years 1 to 3 and 50 year 4. Tax effects are disregarded. Assume that the net profits equal cash flows and that, apart from that, all assets and liabilities

except those related to the development project in the example stay the same over the four years.

The numerical example (Table 2) shows that when a more conservative accounting treatment is consistently applied (case 2A), equity will be consistently understated compared with the less conservative treatment under IFRS (case 2B). Profits in case 2A will be understated during the development phase and overstated after the product launch (applies to a single project). However, in case 2C, where the estimates regarding the future benefits of the project changes, leading to impairment and impairment reversals, the impairment year 2 creates a hidden reserve that is reversed later on if the estimates improve. There is room for this temporary application of the conservatism principle when applying the cost model in IAS 38.

Empirical example of Case 2C - Biacore

Biacore is a global supplier of instruments used for the generation of data on protein interactions. Its customers include all of the global leading pharmaceutical companies. As from 2002, product development expenditures are capitalised in accordance with IAS 38. Before that, all development expenditures were charged directly to expenses. From 2005, Biacore applies IFRS, but that

Table 2. Numerical example concerning development expenditures

	O.B.	Year 1	Year 2	Year 3	Year 4
2A. Conventional accounting					
(immediate expensing)					
Assets	200	200	200	200	250
Liabilities	70	70	70	70	70
Equity	130	130	130	130	180
Net profit		0	0	0	50
2B. IFRS (recognition of asset over the whole period, amortization year 4)					
Assets	200	225	250	275	310
Liabilities	70	70	70	70	70
Equity	130	155	180	205	240
Net profit		25	25	25	35
2C. IFRS (recognition of asset year 1, impairment year 2, reversal of impairment year 3, amortization year 4)					
Assets	200	225	200	275	310
Liabilities	70	70	70	70	70
Equity	130	155	130	205	240
Net profit		25	-25	75	35

does not have any effect with regard to the treatment of development expenditures, since IAS 38 was implemented already in 2002. 17 Figure 2 shows an excerpt from Biacore's annual report 2003.

When IAS 38 was applied for the first time during 2002, Biacore capitalised only a small part of its total R&D expenditures (see Figure 2). 18 The capitalised product development was not amortized at all, since the products were not vet ready for launching (similar to year 1 in case 2C). During 2003, a much larger amount was capitalised (see Figure 2), but still very little was amortized (still corresponding with year 1 in case 2C). ¹⁹ Figure 3 provides an annual report excerpt that illustrates what happened during 2004 and 2005.

During 2004, Biacore continues to capitalise a significant share of its development expenditures, but Biacore also makes a major write-down (impairment charge) of the previously capitalised development costs (see Figure 3). The amortization is still very small (in sum, 2004 corresponds with year 2 in case 2C). The company includes the write-down among its other R&D expenses in the income statement (not reported as a 'one-off' expense) and reports a net loss for 2004 of 4 MSEK.²⁰ During 2005, Biacore reverses some of the write-downs made in 2004 (corresponds with year 3 in case 2C) and launches some of the products developed in earlier years, leading to a significant amortization amount (see Figure 3; corresponds with year 4 in case 2C). In 2005, when Biacore made a reversal of a write-down instead of a write-down, there was a substantial increase in net profit compared with 2004 (+195 MSEK). 21 The empirical example illustrates that as a company updates its estimates regarding future cash flows from capitalised development, there may be temporary effects of conservatism leading to the creation of hidden reserves that may later be reversed.

Capitalized product	Acquisition	Amor-	Write-	
development	value	tization	downs	Total
December 31, 2001	-	-	-	-
Acquisition	4,994	-	-	4,994
Currency translation difference	es 76	-	-	76
December 31, 2002	5,070	-	-	5,070
Acquisition	44,925	-	-	44,925
Amortization	-	-608	-	-608
Write-downs	-	-	-939	-939
Disposals	1,071	132	939	-
Currency translation difference	es 1,723	15	-	-1,708
December 31, 2003	47,201	-461	-	46,740

Figure 2. Excerpt from Biacore's annual report 2003 (p. 33)

3.3. Zero-profit Recognition for Fixed-price Contracts (IAS 11) The current version of IAS 11 was implemented in 1995. Paragraph 22 in IAS 11

states that

When the outcome of a construction contract can be estimated reliably, contract revenue and contract costs associated with the construction contract

Capitalized product	Acquisition	Amor-	Write-	
development	value	tization	downs	Total
January 1, 2004	47,201	-461	-	46,740
Acquisition	56,800	-	-	56,800
Amortization	-	-2,975	-	-2,975
Write-downs	-	-	-44,540	-44,540
Currency translation difference	es -792	41	612	-139
December 31, 2004	103,209	-3,395	-43,928	55,886
Acquisition	6,629	-	-	6,629
Amortization	-	-21,318	-	-21,318
Reversal of Write-downs	-	-	8,237	8,237
Currency translation difference	es 1,899	33	-861	1,071
December 31, 2005	111,737	-24,680	-36,552	50,505

Figure 3. Excerpt from Biacore's annual report 2005 (p. 42)

shall be recognised as revenue and expenses respectively by reference to the stage of completion of the contract activity at the balance sheet date.

In short, the quotation states that the percentage-of-completion (POC) method should be applied. In earlier Continental European GAAPs, construction contracts have been treated in accordance with the completed-contract (CC) method, where costs are viewed as assets and customer billing as liabilities until the contract is completed. Because the application of the POC method requires the company to make estimates, IAS 11 has also set up a number of criteria regarding how to handle the uncertainty. The focus here will be on the zeroprofit recognition case, described in paragraph 32:

When the outcome of a construction contract cannot be estimated reliably ... revenue shall be recognised only to the extent of contract costs incurred that it is probable will be recoverable.

This method is further discussed in paragraph 33:

During the early stages of a contract it is often the case that the outcome of the contract cannot be estimated reliably. Nevertheless, it may be probable that the entity will recover the contract costs incurred. Therefore, contract revenue is recognised only to the extent of costs incurred that are expected to be recoverable. As the outcome of the contract cannot be estimated reliably, no profit is recognised ...

Under the CC-method, the uncertainty related to the fixed-price construction contracts is consistently conservatively handled. The POC method provides more timely information regarding the work performed during the period. However, the uncertainty must still be handled and so IAS 11 prescribes that another method should be applied during the early phase of a contract if the uncertainty level is high, e.g. the zero-profit recognition (ZPR) method. The CC method is more conservative than the POC method in that net assets will

be lower during the contract period (equal at the end of the contract). Under the CC method, profits will be understated during the contract period and overstated in the period when the contract is completed. The ZPR method is as conservative as the CC method in that it generates lower net assets compared with the POC method and understates profits. However, the ZPR method is never used for a whole project, but only for some early part of the project. When the uncertainty regarding the future outcome of the project is reduced, the POC method must be applied (paragraph 35). The numerical example below shows how this works.

Numerical example

A construction company signs a construction contract on January 1, year 1. The progress billings are 45 (year 1), 50 (year 2) and 15 (year 3), while the incurred costs are 40 (year 1), 40 (year 2) and 20 (year 3). Assume that the company has no assets, no liabilities and no equity as opening balance year 1. Tax effects are disregarded. Assume that the progress billings and the incurred costs equal cash flow.

Table 3. Numerical example concerning construction contracts

Tuble 3. Pullionear examp				
	O.B.	Year 1	Year 2	Year 3
3A. Conventional accounting (CC				
method)				
Assets	0	45	95	10
Liabilities	0	45	95	0
Equity	0	0	0	10
Revenues		0	0	110
Expenses		0	0	-100
Net profit		0	0	10
Profit margin		0.0%	0.0%	9.1%
3B. IFRS (POC method)				
Assets	0	5	15	10
Liabilities	0	1	7	0
Equity	0	4	8	10
Revenues		44	44	22
Expenses		-40	-40	-20
Net profit		4	4	2
Profit margin		9.1%	9.1%	9.1%
3C. IFRS (ZPR method year 1, POC method year 2 and year 3)				
Assets	0	5	15	10
Liabilities	0	5	7	0
Equity	0	0	8	10
Revenues	O	40	48	22
Expenses		-40	-40	-20
Net profit		0	8	20
Profit margin		0.0%	16.7%	9.1%
1 10110 11101 5111		0.070	10.770).1 /C

The numerical example (Table 3) shows that when the more conservative method is consistently applied (case 3A), equity will be consistently understated compared with the less conservative practice under IFRS (case 3B) until the contract is completed in year 3. Profits in case 3A will be understated during the first phase of the contract (years 1 and 2) and overstated during the year when the contract is completed (year 3). However, in case 3C, where the uncertainty of the contract outcome is assumed to be high in year 1, the company applies the ZPR method in year 1 whereafter it switches to the POC method in year 2 when the outcome is more certain. This is in line with the CC method year 1, as regards net assets and profits, and thus the ZPR method as such is more conservative than the POC method.²² However, since the ZPR method is only applied temporarily, there will be a hidden reserve that is reversed when the transition from the ZPR method to the POC method is made (case 3C, year 2). This is an example where temporary conservatism has been incorporated in an IFRS. In this particular case, the temporary conservatism also has much impact on the interpretation of profit margins, since much of the revenues are still recorded early (see note 22).

> The fundamental condition for income recognition based on percentage of completion is that project revenues and costs can be quantified reliably.

> For projects whose revenues and costs cannot be reliably calculated when the final accounts are being prepared, zero recognition is applied. In such cases the project is reported as revenue corresponding to the worked up costs; that is, zero income is reported until such time as the actual income can be determined. As soon as this is possible the project switches to the percentage of completion method.

Excerpt from NCC's annual report 2005 (p. 66)

For all projects exceeding SEK 100 M, NCC applies zero recognition as long as the work-up rate for the project corresponds to a degree of completion of less than 50 percent.

Excerpt from NCC's annual report 2004 (p. 59)

Figure 4. Excerpts from NCC's annual reports 2004 and 2005

Empirical example of Case 3C - NCC

NCC is a Nordic construction company with its major operations in Sweden, Finland, Norway and Denmark. Since 1998, NCC has applied the POC method for construction contracts in its consolidated accounts. Prior to 1998, the CC method was applied. Figure 4 shows excerpts from NCC's annual reports 2005 and 2004 regarding its use of the ZPR method.²³

The excerpts in Figure 4 show that case 3C in the numerical example is a case with real-world counterparts. Moreover, Figure 4 illustrates that IAS 11 provides management with some flexibility regarding when to apply the ZPR method and when to make the switch from the ZPR method to the POC method. Using the ZPR method gives an opportunity to increase profits and margins at a later point in time, provided that the project outcome turns out to be good.

4. User Implications of Conservatism – Three Empirical Examples

It has been argued above that the handling of uncertainty via estimates and probabilities, which is quite common in IASs and IFRSs, leads to increased opportunities for temporary conservatism. However, it must also be acknowledged that much consistent conservatism also remains under IFRS, for example with regard to investments in research and advertising. This section deals with a situation where there is a mix of accounting treatments with varying degrees and forms (consistent and temporary) of conservatism. The empirical examples concern development costs and the varying degree of conservatism refers to two different ways of treating the development expenditure: immediate expensing (more conservative) versus capitalisation and subsequent amortisation (less conservative). Both these treatments, with different degrees of conservatism, can be consistently applied (Section 3.2). However, a company may use both treatments contemporaneously for different parts of the total development expenditure. In addition, a particular treatment may not be consistently applied over time, but changes in judgement over time may lead to changes from capitalisation to immediate expensing and vice versa. This leads to a mix of consistent and temporary conservatism.

The empirical data are from three listed European companies (denoted Company X, Company Y and Company Z). Two of the companies (X and Y) are listed both in Europe and in the United States. With regard to the first company, Company X, the data were collected within the limits of an executive education programme for senior controllers, where the participants were asked to send in examples of accounting issues that caused internal communication problems, to be dealt with in a forthcoming module of the programme. In the other two companies, the data were collected via research interviews with the chief accounting officer of Company Y and with the financial director of Company Z.

Company X: mixed applications of the conservatism principle

One of the senior controllers at Company X described an issue that caused much trouble in the organisation where he worked. It concerned software capitalisation. Put in somewhat simplified terms, the entity started to develop a software product in 2001 which was launched in 2003. In 2002, the entity began to develop the second version of the product, to be launched in 2004. In 2003, the entity began to develop the third version of the product, to be launched in

2005. In 2004, the entity began to develop the fourth and final version of the product, to be launched in 2006. The amortisation period is 5 years and commences when the development project is finished and the product is launched. In 2006, the people in the R&D unit still worked with product development, but their work did no longer fulfil the criteria for capitalisation. At the same time, all of the four prior projects were amortized during 2006.²⁵ The effects are described in the numerical example below.

Numerical example

Assume that each investment in development cost is 50, distributed over two years and capitalised and amortised in accordance with the above description. Further assume that the yearly expensed development expenditure is 25 during 2005 and 50 each year from 2006 and onwards. Tax effects are disregarded. Further assume that the company has assets of 200, liabilities of 70 and equity of 130 as opening balance year 1. The net profit, excluding the impact on expenses of the development projects, is 50 year 2001, 70 during 2002–2004, 80 during 2005–2008, 70 during 2009–2010 and 50 year 2011. Assume that the net profits equal cash flows and that, apart from that, all assets and liabilities except those related to the development project in the example, stay the same over the whole period (see Table 4).²⁶

The numerical example (Table 4) illustrates the problem that Company X experienced (case 4B). During 2005 and 2006, the underlying performance improved (more sales of the software products), but according to the financial statements, profits decreased and the entity reported a loss during 2006. Neither the operating managers nor the employees could understand why this happened and it was very difficult for the controllers to explain, since the profit trend was counterintuitive. This situation occurs because neither the conservative principle (immediate expensing) nor the less conservative method (capitalisation and subsequent amortisation) is consistently applied. Thus, the judgement of whether or not a project is to be capitalised may have important implications for management interpretations in a real-world context. Expressed somewhat differently, the idea of applying the conservatism principle in a more flexible way (frequent judgements of probabilities and estimates during a long period of time), rather than in a consistent way, can have undesirable management control consequences.

Company Y: consistent application of the conservatism principle

Company Y invested much money in software development. Some of its basic ideas regarding performance measurement in the entities responsible for development activities were described as follows by the chief accounting officer.

Table 4. Numerical example concerning software development

O.B.	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
	50	70	70	70	80	80	80	80	70	70	50
	25	50	50	50	50	50	50	50	50	50	50
	-25	-50	-50	-50	-50	-50	-50	-50	-50	-50	-50
	_	_	_	_	_	_	_	_	_	_	_
200	225	245	265	285	315	345	375	405	425	445	445
70	70	70	70	70	70	70	70	70	70	70	70
130	155	175	195	215	245	275	305	335	355	375	375
200	225	245	265	285	315	345	375	405	425	445	445
	25	20	20	20	30	30	30	30	20	20	0
	200 70 130	50 -25 - 200 225 70 70 130 155 200 225	50 70 -25 -50 200 225 245 70 70 70 130 155 175 200 225 245	50 70 70 -25 -50 -50 200 225 245 265 70 70 70 70 130 155 175 195 200 225 245 265	50 70 70 70 -25 -50 -50 -50 - - - - 200 225 245 265 285 70 70 70 70 130 155 175 195 215 200 225 245 265 285	50 70 70 70 80 -25 -50 -50 -50 -50 - - - - - 200 225 245 265 285 315 70 70 70 70 70 130 155 175 195 215 245 200 225 245 265 285 315	50 70 70 70 80 80 -25 -50 -50 -50 -50 -50 - - - - - - 200 225 245 265 285 315 345 70 70 70 70 70 70 130 155 175 195 215 245 275 200 225 245 265 285 315 345	50 70 70 70 80 80 80 -25 -50 -50 -50 -50 -50 -50 - - - - - - - 200 225 245 265 285 315 345 375 70 70 70 70 70 70 70 130 155 175 195 215 245 275 305 200 225 245 265 285 315 345 375	50 70 70 70 80 80 80 80 -25 -50 -50 -50 -50 -50 -50 -50 - - - - - - - - 200 225 245 265 285 315 345 375 405 70 70 70 70 70 70 70 70 130 155 175 195 215 245 275 305 335 200 225 245 265 285 315 345 375 405	50 70 70 70 80 80 80 80 70 -25 -50 -50 -50 -50 -50 -50 -50 -50 - - - - - - - - - 200 225 245 265 285 315 345 375 405 425 70 70 70 70 70 70 70 70 130 155 175 195 215 245 275 305 335 355 200 225 245 265 285 315 345 375 405 425	50 70 70 70 80 80 80 80 70 70 -25 -50 -50 -50 -50 -50 -50 -50 -50 -50 -50 - - - - - - - - - - - 200 225 245 265 285 315 345 375 405 425 445 70 70 70 70 70 70 70 70 70 70 130 155 175 195 215 245 275 305 335 355 375 200 225 245 265 285 315 345 375 405 425 445

(Table continued)

			T	able 4.	Continue	ed						
	O.B.	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
4B. Capitalisation followed by expensing (capitalisation of four projects with investments of 50 over two years, beginning 2001, 2002, 2003 and 2004 and amortized for 5 years following product launches 2003, 2004, 2005 and 2006. Thereafter, development expenditures are charged to expenses as incurred)												
Net profit excluding the impact of the software development projects		50	70	70	70	80	80	80	80	70	70	50
Development expenditures - expensed		-	_	_	-	-25	-50	-50	-50	-50	-50	-50
Development expenditures - capitalised		-25	-50	-50	-50	-25	_	_	_	_	_	_
Sum of Assets	200	250	320	380	430	455	445	435	435	435	445	445
Thereof, Capitalised development expenditures	_	25	75	115	145	140	100	60	30	10	0	_
Liabilities	70	70	70	70	70	70	70	70	70	70	70	70
Equity	130	180	250	310	360	385	375	365	365	365	375	375
Sum of Liabilities & Equity	200	250	320	380	430	455	445	435	435	435	445	445
Net profit Thereof, Depreciation		50 -	70 -	60 -10	50 -20	25 - <i>30</i>	$-10 \\ -40$	$-10 \\ -40$	$0 \\ -30$	$0 \\ -20$	$-10 \\ -10$	_0

With regard to development, the different [technical] system standards have much in common and there is [certain hardware] that all technologies must use. So you have to make a certain amount of cost allocation, which means that when you then look at an entity after such allocations and conclude that it is underperforming you cannot just close it down because then the whole company is less well off... Thus, the model involves a number of levels, where you must think about what basis to measure people on. We have people formally responsible for the R&D related to particular products and to them, the product life cycle calculations are important. And then we have about 80 managers responsible for development projects and they have project targets related to time and cost. (Quotation from an interview with the chief accounting officer of Company Y, March, 2002, translated from Swedish)

When IAS 38 was implemented, Company Y had to decide whether to use this standard in its internal accounting system as well. The chief accountant commented on this, as follows.

[The issuing of new financial reporting standards] is something that we had to *react* to. The question is really if we can stop [the standard setters] from destroying the management control system. What is the most important starting point - is it the management control system or the accounting system? They are linked together because if we change the accounting system, it affects the [management control system]. A good example of this is the new rule to capitalise development expenditures [IAS 38 was adopted in Sweden 2002], which we do not have to do in the individual accounts, but must do in the consolidated accounts. And we have thought about this and chosen not to capitalise development expenditures in operating entities, but letting them expense all their development expenditures each period. We then make an adjustment in the consolidated accounts in order to comply with what is externally required. We have made this choice, [in order] not to let our R&D units start thinking about capitalisations. (Quotation from an interview with the chief accounting officer of Company Y, March, 2002, translated from Swedish)

The quotation shows that company Y capitalised software development costs in accordance with IAS 38 in its consolidated accounts, but in the internal accounts it charged all development expenditure directly to expenses. This corresponds with case 4A in the numerical example and it should be noted that a consistent application of immediate expensing in this example generates an interpretation of the financial performance that is in line with the underlying profit development. It should also be noted from the quotation above that company Y faced a problem when a new standard was issued, with regard to whether or not the new standard should be allowed to influence the internal measurement system and thus the management control system. Differences between external and internal measurement systems may cause difficulties for executives who must use the external numbers when communicating with the stock market and other external parties. On the other hand, the mixed application of the conservatism principle may generate information that is difficult to interpret (case 4B). Company Y did not perceive any internal use of the capitalisation for the measurement of performance. For that purpose it was considered better to account for all the expenditures as expenses in order to facilitate the profitability measurement from a product life cycle perspective. All development expenditures were internally considered to be investments, and capitalisation at a certain point in time would not be of any internal use. It was easier to keep track of these investments if they were all expensed.

Company Z: consistent application of the conservatism principle

Company Z also invested a lot of money in development and some of the expenditures were capitalised according to IAS 38. The capitalisation corresponded to a significant amount for Company Z, commented on as follows by the financial director (FD).²⁷

We have a big item in our balance sheet of capitalized development expenditure ... We have the valuation discussion [concerning this item] with the auditors [and] ... in the board of directors every quarter. I don't think anyone is particularly happy about this or fully understands it. I can understand the [underlying] logic ... but it involves very difficult judgment.

HOW DO YOU FOLLOW UP ON THIS?

We make a sort of impairment test, but it is based on parameters that the auditors cannot really understand . . . we would prefer to charge everything directly to expenses. (Quotation from an interview with the financial director of Company Z, June, 2004, translated from Swedish)

The quotation shows that the capitalisation of development expenditures was viewed as a problem by the FD. To some extent this problem seemed to relate to the financial analysts' views on the issue. The FD continued:

I can tell you that analysts, the first thing they do is to put this [amortization] back. Therefore, we also report the gross R&D expenses [shows a paper with numbers in two colours]. The blue numbers are gross amounts, 'the spending'. The yellow is what is reported in the income statement. The difference is in the balance sheet. (Quotation from an interview

with the financial director of Company Z, June, 2004, translated from Swedish)

The quotation shows that the FD believed that the financial analysts preferred a consistently conservative treatment of the development expenditures. The FD also commented on the internal treatment of the expenditure costs, as follows.

[The analysts] have no idea how much of our future development expenditures that will be capitalized and we don't really know ourselves. Internally, we manage on the basis of the gross amounts. You can't say that you have achieved your EBIT because you put all R&D in the balance sheet. Forget it - you won't get any bonus for doing that! (Quotation from an interview with the financial director of Company Z, June, 2004, translated from Swedish)

The quotation illustrates that, just as in company Y, direct expensing was applied in the internal accounts, despite the application of IAS 38 in the external accounts. From a management control perspective, the FD argued that the capitalisation was difficult to forecast and that the company wanted to keep managers from influencing their results via development expenditure capitalisation judgements.

Discussion and Concluding Remarks

Conservatism used to be a primary accounting principle in countries such as Germany and Sweden and it still appears to be a concept that is often referred to in connection with practical discussions regarding the accounting treatment of specific items and events. In meetings with preparers, users and auditors, you will often hear a discussion framed by how the conservatism principle has been applied, i.e. whether a specific accounting treatment is considered conservative enough. 28 However, the IASB and FASB have not assigned such an important role to the conservatism concept, and in their joint discussion paper on an improved conceptual framework (IASB, 2006a), they argue that conservatism is not a desirable quality of financial reporting information.

However, even if conservatism is de-emphasised by the IASB, the standards will still have to deal with the uncertainty that the company faces when preparing the accounts. The current paper aims to investigate how the conservatism principle is applied under IFRS, by examining cases related to three different standards (IAS 12, IAS 38 and IAS 11). In order to evaluate the impact of conservatism under IFRS, an analytical distinction is made, with reference to a discussion in Penman and Zhang (2002), between consistent conservatism and temporary conservatism. The former refers to the case where an accounting treatment leads to a consistent understatement of net assets, for example if R&D expenditures are always charged directly to expenses when incurred, instead of being capitalised and amortised. The latter refers to when changes in accounting estimates temporarily understate net assets via the creation of hidden (off-balance) reserves or excessive provisions, which later may be reversed.

The examination of the cases related to loss carryforwards (IAS 12), development costs (IAS 38) and construction contracts (IAS 11) pointed at the need for making judgements regarding probabilities and other estimates under these standards. This increases the opportunities for temporary conservatism in comparison with the more consistently conservative accounting treatments that were applied in many jurisdictions before IAS/IFRS (see Note 4). These increased opportunities for temporary conservatism should be viewed against the background that the prevailing IASB framework holds a restrictive view on conservatism and that the proposed improvement of the framework exclude prudence or conservatism as desirable qualities of financial reporting information.

A potential critique against the analysis in this paper, both the reasoning and the examples, is that the arguments are based on the idea that conservatism is an accounting tool for dealing with uncertainty. IFRS, on the other hand, seems to be based on the idea that changes in uncertainty can be handled in a neutral way, i.e. without either an optimistic or a conservative bias. Put somewhat differently, the idea is that a change in uncertainty can 'objectively' be transformed into a changed estimate without any bias. However, from an accounting practice point of view, this is a questionable idea. Both the negative profit effects of creating hidden reserves and the corresponding positive profit effects from the reversal of such hidden reserves (the mechanisms of temporary conservatism) have been known and used since before Paton and Littleton (1940). It seems naïve to believe that preparers will become *less* conservative if the standards leave increased opportunities for temporary conservatism.

The second purpose of the paper was to evaluate the user implications of mixing accounting treatments with varying degrees and forms of conservatism. The first empirical example (Company X) showed that the mix of consistent and temporary conservatism that followed from first capitalising several development projects, starting to amortise them as sales were generated and then introducing new projects that were immediately expensed, generated a situation with counterintuitive interpretations. The internal users of the financial information could not understand why the reported profits decreased although sales and underlying profits increased. According to the numerical example used for Company X, the counterintuitive profit development would not have occurred if consistent immediate expensing had been applied. The empirical examples from Company Y and Company Z illustrated that such an approach had advantages from an internal user perspective. These companies applied immediate expensing internally and capitalisation in the external accounts (to the extent capitalisation was required by IAS 38). They argued that information based on IAS 38 capitalisation criteria was of little use internally. Company Y argued that this was because capitalisation was not applied to the whole development project, but only for a small part. Company Z argued that the capitalisation was difficult to forecast and that the company wanted to avoid that managers influenced their results via development expenditure capitalisation judgements. In sum, the results pertaining to the second purpose of the paper suggest that the mixing of consistent and temporary conservatism may cause counterintuitive interpretations of the underlying business performance that, in turn, make the information less relevant to users. Furthermore, the empirical examples indicated that there are behavioural reasons from a management control perspective to choose a consistently conservative treatment in the internal accounts.

Notes

¹Haller (2003, p. 108) continues the argument as follows: 'The idea of safeguarding the company as a source of income generation, combined with the function of the balance sheet in calculating taxable income, leads to an emphasis on capital preservation . . . The concept of the preservation of capital . . . (preservation of nominal equity), is also the reason for the importance of the principle of prudence which leads to the use of so-called hidden (or secret) reserves, the feature of German accounting which has long been criticized internationally. Such reserves are counterproductive in an accounting model whose only objective is to give information, because secrecy is the opposite of information. In a model which stresses prudent income calculation with the objective of the preservation of capital and an underlying concept of creditor protection, however, it is a very logical approach.'

²The following abbreviations will be used throughout the paper: IASB (International Accounting Standards Board), IASC (International Accounting Standards Committee), IAS (International Accounting Standard), IFRS (International Financial Reporting Standard), FASB (Financial Accounting Standards Board).

³Quotations from the IASB framework and from IAS 11, IAS 12, IAS 36 and IAS 38 refer to the IFRS 2006 Bound Volume (IASB, 2006b).

⁴More specifically, the earlier, more conservative, accounting treatments referred to are the completed contract method for construction contracts, no recognition of deferred tax receivables related to loss carryforwards and immediate expensing of R&D expenditure.

⁵A similar view on conservatism can be found in the Swedish accounting literature (Sillén and Västhagen, 1962, pp. 69–70). They argue that, on the one hand, managers have a responsibility to create reserves in order to protect their companies against downturns in the business cycle and against short-term-oriented shareholders. However, on the other hand, Sillén and Västhagen acknowledge that the understatement of profit via hidden reserves may lead to unfair treatment of shareholders and people entitled to bonuses. The authors do not discuss how to determine an appropriate level of conservatism, but basically argue that the level of conservatism should be high.

⁶In the IASB 1989 framework, prudence is part of the reliability characteristic together with faithful representation, substance over form, neutrality and completeness.

⁷The analytical examination in Section 3 focuses on 'such exercise of judgement'.

⁸The inconsistencies in current conceptual frameworks are dealt with in this IASB and FASB joint project (see McGregor and Street, 2007).

⁹Penman and Zhang (2002, p. 238) makes a distinction between a conservatism effect that is 'temporary, and so reverses later' and the application of 'conservative accounting principles consistently without any change in accounting methods or estimates'.

¹⁰In capital markets research, the balance sheet effect of conservatism and the income statement effect of conservatism are referred to as unconditional and conditional conservatism, respectively. This is due to the work by Basu (1997), where what was later to become known as conditional conservatism was described as the practice of reducing profits in response to 'bad news', but not increasing profits in response to 'good news' (see Ryan, 2006, for a recent literature review). The definition of conditional conservatism has proved to fit the purposes of empirical capital market studies well, but in these studies conservatism needs to be proxied by variables such as non-operating accruals (Givoly and Hayn, 2000), an earnings-return metric (Basu, 1997) or the market-to-book ratio (Beaver and Ryan, 2000). These proxies will include more than just conservatism.

¹¹Current examples concern things like overestimating restructuring reserves (Moehrle, 2002) or temporarily lowering the estimates of bad debts or depreciation (Teoh *et al.*, 1998).

¹²The International Financial Reporting Interpretation Committee (IFRIC) has considered whether to provide guidance on how to apply the probability criterion for the recognition of deferred tax assets arising from the carryforward of unused tax losses (and unused tax credits), but has decided not to (decision not to add: June 2005).

¹³The company (Hi3G Holdings AB) is owned by Hutchison Whampoa Ltd (60%) and Investor AB (40%).

¹⁴Hi3G applies the Swedish adoption of IAS 12, named RR 9 and issued by the Swedish Financial Accounting Standards Council (Redovisningsrådet).

¹⁵The other criteria in paragraph 57 are the intention to complete the intangible asset and use or sell it, the ability to use or sell the intangible asset, to show how the intangible asset will generate probable future economic benefits, the availability of adequate technical, financial and other resources to complete the development and to use or sell the intangible asset and the ability to measure reliably the expenditure attributable to the intangible asset during its development.

¹⁶Ernst & Young (2006) presents some observations from a study of 65 large European companies implementing IFRS in 2005. Only one company in their sample used the revaluation model for any class of property, plant and equipment or class of intangible assets.

¹⁷Biacore applies the Swedish adoption of IAS 38 valid from 2002, named RR 15 and issued by the Swedish Financial Accounting Standards Council (Redovisningsrådet).

¹⁸The total R&D expenditure in 2002 was about 109 MSEK, but most of the expenditure was charged directly to expenses (about 104 MSEK) and only about 5 MSEK was capitalised.

¹⁹The total R&D investment in 2003 was about 120 MSEK and about 65% of this expenditure was charged directly to expenses. The amortization period for developed products varied between 3 and 4 years, according to the annual report 2003.

²⁰Before 2004, Biacore had reported positive net profits every year since 1994.

²¹It should be noted that there was a public bid offer for Biacore's shares in 2005. The company was later acquired by GE Healthcare.

²²If one would assume that the company has additional revenues, expenses, and profits, profit margins will actually be lower under the ZPR method during year 1 than under the CC method. Assume, for example, that the company had revenues, expenses and net profit from other operations amounting to 100, 95 and 5, respectively (profit margin = 5.0%). Adding the construction project would not change these numbers under the CC method, but under the ZPR method the revenues, expenses and net profit would change to 140, 135 and 5, respectively, lowering the profit margin to 3.6%.

²³The numerical information regarding the application of the ZPR method that was included in the annual report 2004 is no longer included in the 2005 annual report. Apart from that, the text is unchanged compared to 2004.

²⁴The senior controller in company X who provided the information that the below example is based on has read the text in this article, including the numerical example, and has confirmed that it is an accurate description of what happened.

25 It should be noted that the company referred to applies US GAAP, not IFRS, but with regard to the capitalisation of software, the rules are similar, and the situation might just as well have taken place under IFRS.

²⁶Please note that the numbers in the numerical example are fictive, but reflect the situation perceived by the entity in 2006.

²⁷Capital letters are used to denote words spoken by the interviewer.

²⁸Sterling (1967) observed that many academics and accountants are only moderately conservative, or anti-conservative, when it concerns a theoretical discussion regarding accounting principles, but when it comes to the valuation of a specific asset, '... the recurrent phrase that something 'is or is not conservative' is almost inevitable' (Sterling, 1967, p. 110).

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