STAFF PAPER

29 January – 1 February 2013

IASB Meeting

Project	**Hedge Accounting (IFRS 9)**		
Paper topic	Measurement of the hedged item—'hypothetical derivatives': existing hedge accounting practice		
CONTACT(S)	Martin Friedhoff	mfriedhoff@ifrs.org	+44 (0)20 7246 6410

Introduction

1. This paper addresses the issue regarding implications for existing hedge accounting practice raised by the feedback on the draft hedge accounting requirements regarding hypothetical derivatives.

Feedback received—existing hedge accounting practice

2. Some commentators raised concerns that the application guidance regarding hypothetical derivatives, as drafted, would require changes to existing hedge accounting practice under IAS 39 *Financial Instruments: Recognition and Measurement*. For hedges of FX risk using cross-currency swaps that practice uses hypothetical derivatives to calculate the change in the value of the *hedged item* in cash flow hedges such that it mirrors the change in the fair value of the actual derivative (ie the hedging instrument) that is attributable to the FX basis spread. This mirroring valuation is achieved by including an FX basis spread in the hedged item. This results in those changes in the fair value of the actual derivative being deferred in the cash

flow hedge reserve[1] as part of the *effective part* of the gain or loss on the hedging instrument.

3. The basis for using this approach under IAS 39 often remains vague, but some commentators cite the following rationale:

   (a) US GAAP allows hypothetical derivatives to be constructed in this way; or/and

   (b) the variable cash flows of the actual derivative perfectly match the variable cash flows of the hedged item (ie the entity uses the 'perfect derivative' as the hypothetical derivative, so in essence it is considered 'appropriate' by some not to recognise any ineffectiveness)[2].

Staff analysis

4. As described in the feedback,[3] including an FX basis spread in the measurement of the value of the hedged item is how some apply cash flow hedge accounting under IAS 39 and in that sense is 'existing practice'. That is not to say that this is the only view of how the hedge accounting requirements in IAS 39 should or could be applied—there are different views.

5. From a standard setting perspective, it is not just the practice itself that is relevant, but also on what it is based. The reason is that from a standard setting perspective it matters if and how a practice fits into an accounting model.

6. As mentioned before,[4] the basis for the existing practice that uses a 'hypothetical derivative' that includes an FX basis spread often remains vague but some have cited as a rationale that:

[1] That means as part of accumulated other comprehensive income (AOCI).

[2] This is in essence the same argument also cited by some as a conceptual consideration—see paper 4A2.

[3] See paragraph 2.

[4] See paragraph 3.

(a) US GAAP allows hypothetical derivatives to be constructed in this way; or/and

(b) the cash flows of the actual derivative perfectly match the cash flows of the hedged item (ie the entity uses the 'perfect derivative' as the hypothetical derivative).

Use of hypothetical derivatives under US GAAP

7. Hypothetical derivatives are also used under US GAAP for hedge accounting purposes. The question is whether the use of hypothetical derivatives under US GAAP can be used as the basis for how to use hypothetical derivatives under IFRSs. That is a question about selecting and applying accounting policies[5], which means it is about applying IAS 8 *Accounting Policies, Changes in Accounting Estimates and Errors*.

8. Hedge accounting under US GAAP is not the same as hedge accounting under IFRSs. There are some key differences that are relevant for the question regarding the use of hypothetical derivatives:[6]

(a) Use of a shortcut method: under US GAAP: for those hedging relationships that meet the qualifying criteria, an entity *may assume no hedge ineffectiveness* in a hedging relationship. US GAAP acknowledges that this is a "shortcut version of hedge accounting that does not immediately recognize hedge ineffectiveness".[7] In contrast, IAS 39 does *not* allow assuming no hedge ineffectiveness.[8]

[5] The term "accounting policies" as defined in IAS 8.5 comprises "the specific principles, bases, conventions, rules *and practices* applied by an entity in preparing and presenting financial statements" [*emphasis added*].

[6] In the following analysis references to whether an aspect immediately affects the hedge ineffectiveness that is recognised in profit or loss are used *before* taking into account the effect of the 'lower of' test that applies to the recognition of hedge ineffectiveness for cash flow hedges. The reason is that the relevant aspect of the analysis is whether a potential source of hedge ineffectiveness is part of how hedge ineffectiveness is measured for the purpose of recognising it (in contrast to the assessment of hedge ineffectiveness for the purpose of assessing whether a hedging relationship still qualifies for hedge accounting). Whether existing hedge ineffectiveness is not recognised because of the limit that applies under the 'lower of' test is not relevant for this analysis because it is solely driven by coincidence (ie changes in the relevant circumstance could result in increases or decreases in value).

[7] ASC 815-20-25-102.

[8] See paper 4A2, paragraph 7.

(b) Use of the "change-in-variable-cash-flows method": as one of three methods for assessing the hedge ineffectiveness of particular cash flow hedges,[9] US GAAP includes the use of the change-in-variable-cash-flows method, which measures hedge ineffectiveness by comparing:[10]

(i) the *variable* leg of the hedging instrument (which is an interest rate swap); and

(ii) the *variable*-rate cash flows of the hedged item (ie the hedged cash flows on an asset or a liability).

Also for this method, US GAAP acknowledges that it does not require all hedge ineffectiveness to be immediately recognised in profit or loss.[11] Only comparing the variable cash flows but excluding the fixed leg of the interest rate swap reflects the view that "any change in the interest rate swap's fair value attributable to the fixed-rate leg is not relevant to the variability of the hedged interest payments (receipts) on the floating-rate liability (asset)."[12] In contrast, IAS 39 does *not* allow hedge ineffectiveness to be measured by only comparing the variable cash flows thereby excluding the fixed leg of the interest rate swap.[13]

(c) Use of the "hypothetical-derivative method": as one of three methods for assessing the hedge ineffectiveness of particular cash flow hedges, US GAAP includes the use of the hypothetical-

[9] See ASC 815-30-35-10. The cash flow hedges those methods apply to are hedges involving interest rate risk that involve particular types of hedging instruments and/or exposures relating to variable interest payments.

[10] See ASC 815-30-35-16.

[11] See ASC 815-30-35-14. Therefore, this method is not eligible if the fair value of the hedging instrument is not "somewhat near zero".

[12] ASC 815-30-35-18.

[13] See IAS 39.74 in conjunction with IAS 39.88(b), (d) and (e) and IAS 39.96(a)(i). In addition, one of the Implementation Guidance Q&As (IGs) that accompany IAS 39 (IG F.5.5) includes an explicit reminder that "it would be inappropriate to compare only the variable cash flows on the interest rate swap with the interest cash flows in the debt that would be generated by the forward interest rates. That methodology has the effect of measuring ineffectiveness only on a portion of the derivative, and IAS 39 does not permit the bifurcation of a derivative for the purposes of assessing effectiveness in this situation (IAS 39.74)."

derivative method, which measures hedge ineffectiveness by comparing:[14]

(i) the change in fair value of the actual hedging instrument (which is an interest rate swap); and

(ii) the change in fair value of a hypothetical derivative (which is an interest rate swap with terms that perfectly match the critical terms of the variable rate debt instrument on which the hedged cash flows arise).

For this method, US GAAP states that "[t]he change in the fair value of the perfect hypothetical interest rate swap can be regarded as a proxy for the present value of the cumulative change in expected future cash flows on the hedged transaction..."[15] Using *a proxy* means that not all hedge ineffectiveness is immediately recognised in profit or loss.[16] In contrast, IAS 39 does *not* allow hedge ineffectiveness to be measured by using a proxy that could affect that measurement but instead requires all hedge ineffectiveness to be measured and recognised.[17]

(d) Use of the "change-in-fair-value method": as one of three methods for assessing the hedge ineffectiveness of particular cash flow hedges, US GAAP includes the use of the change-in-fair-value method, which measures hedge ineffectiveness by comparing:[18]

(i) the cumulative change in fair value of the actual hedging instrument (which is an interest rate swap); and

[14] See ASC 815-30-35-25.

[15] ASC 815-30-35-27.

[16] Under the hypothetical-derivative method "the fair value of both the perfect hypothetical interest rate swap and the actual interest rate swap shall use discount rates based on the relevant interest rate swap curves" (ASC 815-30-35-29). This means that both derivatives are valued using the same discount curve (including adjustments for credit risk). Consequently, as long as the hedging relationship qualifies for hedge accounting, changes in the credit risk of the actual hedging instrument do *not* immediately affect the hedge ineffectiveness that is recognised in profit or loss (see also ASC 815-20-35-14 through 35-17).

[17] See IAS 39.AG109. In addition, one of the IGs that accompany IAS 39 (IG F.5.2) includes an explicit reminder that hedge ineffectiveness arises from credit risk related changes in the fair value of the hedging instrument also for cash flow hedges that continue to qualify for hedge accounting because they are highly effective, and that this hedge ineffectiveness must be recognised (as applicable under the 'lower of' test).

[18] See ASC 815-30-35-31.

(ii) the present value of the cumulative change in expected variable-rate cash flows of the hedged item (ie the hedged cash flows on an asset or a liability).

For this method, US GAAP does not use a proxy but a comparison like that used for determining the hedge effectiveness of a cash flow hedge under IAS 39[19]. However, even when using the change-in-fair-value method US GAAP requires that the discount rates used to measure the fair value of the actual hedging instrument are *also* used for measuring the present value regarding the hedged item.[20] In contrast, IAS 39 does *not* allow the effect of changes in credit risk that could affect the measurement of hedge ineffectiveness to be ignored but instead requires all hedge ineffectiveness to be measured and recognised.[21]

9. More generally, as explained in paper 4A2[22], the measurement of hedge ineffectiveness under IAS 39 *never allows* perfect hedge effectiveness *to be assumed*, which results in an effectiveness measurement model in which the value of the hedged item is required to be measured independently of the value of the hedging instrument. Consequently, hedge effectiveness

[19] See IAS 39.96(a).

[20] Under the change-in-fair-value method "[t]he discount rates applicable to determining the fair value of the interest rate swap designated as the hedging instrument shall also be applied to the computation of present values of the cumulative changes in the hedged cash flows" (ASC 815-30-35-32). This means that the hedged item is valued using the same adjustments for credit risk as the hedging instrument. Even though US GAAP states that "[a] change in the creditworthiness of the derivative instrument's counterparty in a cash flow hedge of interest rate risk would also have an immediate impact if ineffectiveness were measured under the change-in-fair-value method" (ASC 815-20-35-17), that does *not* mean that the credit risk of the hedging instrument and the hedged item are measured independently of each other (ie would be consistent with the respective item being measured). Instead, the immediate effect on hedge ineffectiveness results from a technical aspect of how the comparison between the value changes of the hedging instrument and the hedged item are computed: the fair value change of the hedging instrument is calculated by comparing the fair values at the beginning and at the end of the period whereas the calculation for the hedged item is based on the present value of the cumulative change. This has been applied under US GAAP (at least as one way of applying the requirement) in a way that the calculation for the fair value change of the hedging instrument includes the credit risk that affected the fair value at the beginning and at the end of the period. In contrast, the calculation for the change in the value of the hedged item *only* includes the credit risk that affects that present value *at the end* of the period. However, because the discount rates used for the present value calculation regarding the hedged item are those used for the fair value measurement of the actual hedging instrument, even under the change-in-fair-value method the effect of differences in the changes in credit risk of the hedging instrument and the hedged item remain largely unrecognised in measuring hedge ineffectiveness (as long as the hedging relationship qualifies for hedge accounting).

[21] See footnote 17.

[22] See paper 4A2, paragraphs 7-8.

requirements that are based on simply using the discount rates of the actual hedging instrument as the discount rates for the hedged item are inconsistent with IAS 39.[23] Doing so would mean for example that aspects such as the liquidity of the hedging instrument would not affect the measurement of hedge ineffectiveness.

10. This fundamental approach under IAS 39 has not changed under the new hedge accounting model.

11. What do those differences between hedge effectiveness measurement under US GAAP and IAS 39 mean for the question regarding how to select and apply IFRS accounting policies for the use of hypothetical derivatives?

12. There are several considerations for applying IAS 8:

    (a) preconditions for using analogies; and

    (b) appropriate analogies.

13. Using the pronouncements of other standard-setting bodies in developing accounting policies under IFRSs is *only* allowed "*[i]n the absence* of an IFRS that specifically applies to a transaction, other event or condition"[24]. Given the IFRS requirements included in the analysis above that are contrasted with US GAAP, the 'absence of an IFRS that specifically applies' appears difficult to demonstrate. The fact that requirements may be less (or more) detailed is *not the same* as the absence (or existence) of a requirement. For example, if IFRSs use a principle whereas the pronouncements of another standard-setting body use detailed rules for different situations that under IFRSs are governed by the principle, it would be inappropriate to argue that there was an 'absence of an IFRS that specifically applies' because the concrete situation addressed by a detailed rule was not addressed in the same level of detail by the principle. Instead, the principle *applies* to that situation and IFRS accounting policies must be an application of the IFRS principle.

[23] That is not to say the discount rates would always have to be different—but that would the outcome of an assessment of the appropriate inputs for each valuation (hedging instrument and hedged item) instead of imputing or projecting valuation inputs of the actual hedging instrument onto the valuation of the hedged item.

[24] IAS 8.10 in conjunction with IAS 8.12 [*emphasis added*].

14. IAS 8 also still requires that any accounting policy an entity develops (including the consideration of pronouncements of other standard-setting bodies) does *not* conflict with:[25]

> (a) the requirements in IFRSs dealing with similar and related issues; and
>
> (b) the definitions, recognition criteria and measurement concepts for assets, liabilities, income and expenses in the *Framework*.

15. So even if there was an 'absence of an IFRS that specifically applies' to the measurement of hedge ineffectiveness and the measurement of the hedged item (which includes how to use hypothetical derivatives), the requirements of IAS 39 would at the very least have to be considered as 'dealing with similar and related issues'. But again, given the contrast between the IFRS requirements included in the analysis above and US GAAP, using US GAAP guidance for this issue would create a conflict with higher ranking literature that would violate IAS 8.

16. So in summary, the staff are of the view that US GAAP is not a basis for using hypothetical derivatives that mirror features of the hedging instrument instead of independently measuring the hedged item under IFRSs.

The hypothetical derivative is the 'perfect derivative'

17. As noted above, supporting the practice of including an FX basis spread in the hypothetical derivative with the argument that the cash flows of the actual derivative perfectly match the cash flows of the hedged item in substance reflects a 'flow perspective'. The implications of such a flow perspective and its interaction with hedge accounting were analysed in paper 4A2.[26] That analysis demonstrated that a flow perspective has aspects that are inconsistent with the hedge accounting model of IAS 39 and the new model.

[25] IAS 8.12 in conjunction with IAS 8.11.

[26] See paper 4A2, paragraph 9 and the section "Risk management view: the hypothetical derivative as the 'perfect derivative'" in that paper.

18. In addition, if an approach were applied based on using the 'perfect derivative', another question from a practical perspective would be what hedging instrument would be 'perfect'.

19. Assume two entities have the same hedged item[27] that is an exposure to variability in cash flows. Both entities hedge their hedged item with a hedging instrument that is a derivative. Assume that each hedging instrument has one leg that exactly offsets the cash flow variability of the hedged item (variable leg) but the fixed legs are not the same. Could both entities claim to have a 'perfect derivative'?

20. **If the answer was yes**, it would raise the question of how two *different* hedging instruments can be '*equally* perfect' in hedging the *same* hedged item. In effect, this view would ignore differences in the pricing for the hedging instrument that can result from various factors such as the supply and demand in the derivatives market, liquidity and competition among providers of financial products, which includes aspects such as the effect of 'cross-product pricing', pricing discounts, etc. In addition, the pricing of derivatives often depends on the already existing overall exposure between the two counterparties and credit risk[28] more generally.

21. In that sense, 'perfect' is a misnomer—unless the objective was using 'synthetic accounting' for the effect of hedging on profit or loss. That form of 'synthetic accounting', while recognising in the balance sheet the hedging instrument and the hedged item separately, would recognise in profit or loss the actual cash flows that result from the combination of the hedging instrument and the hedged item like on an accrual or 'as you go' basis (ie without hedge ineffectiveness that could result from independently measuring the hedged item).[29]

---

[27] This could for example be the case for cash flow variability that results from forecast purchases that are denominated in a foreign currency.

[28] In practice, entities that capture hedge ineffectiveness from changes in the credit risk of the hedging instrument and the hedged item would exclude the credit risk aspect from the 'perfect' hedge assumption used when the variable cash flows of the hedging instrument and the hedged item offset.

[29] This is a different issue from the notion of 'aggregated exposures' that the new hedge accounting model introduces. That notion is about using two different risk management strategies whereby one builds on the effect of the other. It does not involve an exception to measuring hedge (in)effectiveness.

22. Also, a comparison of only the variable legs raises another question: whether fixed spreads built into the variable leg[30] would have to be included in the assessment of what 'matches perfectly' or not. If those aspects are relevant for accounting purposes it creates an incentive for structuring:

    (a) financial instruments (eg building an equivalent spread into another leg instead of including it in the variable leg); or

    (b) hedge designations (eg in the earlier example[31] of designating a hedging relationship, the splitting into different hedging relationships can involve a swap that includes or excludes a spread on a variable benchmark cash flow).

23. **If the answer was no,**[32] it would raise the question of how to identify the 'perfect' hedging instrument given there can only be one. This would give rise to the same problems and concerns that were associated with the ED's proposed requirement that a hedging relationship needed to "minimise" expected hedge ineffectiveness.[33] The feedback received on that proposal was that it would have the effect of sending entities on a wild goose chase and that there was no way of ascertaining that 'minimisation' was actually achieved. Consequently, we received feedback that the proposed condition was not operational and the Board in its redeliberations changed the requirement to address those concerns.

24. Similarly, ascertaining whether an entity would have actually entered into the hedging instrument that is 'perfect' would be as non-operational. There is not a way to find out whether an instrument with better fitting terms[34] might have been available. Therefore, the staff are of the view that a

[30] This depends on the type of financial product but some products (eg some swaps) include a fixed spread as an adjustment to the variable leg (eg variable 3m LIBOR plus 150 basis points).

[31] See paper 4A2, paragraph 42.

[32] This would go beyond the argument cited in the feedback that the cash flows of the actual derivative perfectly match the cash flows of the hedged item (which would allow different derivatives to be 'equally perfect' if their respective variable legs are the same). But the alternative of a stringent application of the 'perfect' criterion is analysed in this paper for completeness purposes.

[33] See ED.B29.

[34] See paragraph 20 for some aspects that would affect this assessment.

stringent application of a ‘perfect’ criterion (ie looking beyond the mere aspect whether the variable cash flows offset) is not operational.