

# Effective Hedging Under IAS 39

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## Executive Summary

After a review of the general IAS 39 effectiveness testing rules, including critical terms, this article discusses how to achieve hedge accounting for these common corporate hedges:

1. Interest rate swaps (IRS).
2. Cross-currency interest rate swaps (CCIRS).
3. Forecast interco flows.
4. Foreign currency interco loans.
5. Netting of offsetting cash flow exposures.
6. Options.

## General Effectiveness Testing Rules

IAS 39.AG105 requires that any hedges at inception must be *expected to almost fully offset* changes in expected cash flows or fair value of the hedged item. As explained in IAS 39.BC136 and the Guidance on Implementing IAS 39 (IG F.4.6, deliberate underhedging of the exposure, a FAS 133 technique that can minimize reported ineffectiveness, is disallowed in IAS 39. As with FAS 133, the prospective expectation that the hedge will almost fully offset the hedged item can be justified in any number of ways, including statistical testing, as described at IG F.4.4.

IAS 39.AG108 does state that if the critical terms of the hedge instrument and the hedged item are the same, then the hedging relationship is likely to be an effective hedge. This is also repeated in IAS 39.BC35, which states the Board's opinion that in many cases no ineffectiveness would be recognized for a single currency IRS whose critical terms match the hedged item's. *Thus, critical terms can be used to justify the prospective expectation that the hedge will almost fully offset the hedged item.*

However, unlike FAS 133, if critical terms are the same, one still has to do the retrospective effectiveness test. IAS 39.AG105 requires that *all hedges* must do retrospective testing using the dollar offset ratio method and fall between 80-125%. This is more stringent than FAS 133, which also allows retrospective statistical methods. It seems that the Board feels that testing is necessary due risk of adverse counter-

party credit changes, which could affect the change in the hedge instrument's fair value.

Of course, in the common situation where critical terms remain the same with no counterparty credit deterioration, then the hedge will be 100% effective when the dollar offset ratio is calculated.

## Swap Hedging

IAS 39.76 explicitly allows CCIRS hedging, with an example given in IG F.1.12. However, FAS 133's shortcut treatment for perfect single currency IRS was considered by the Board in IAS 39.BC132-135 and rejected.

This is not really a problem because IG F.5.5 shows the use of the hypothetical derivative method for effectiveness testing. Thus, as with FAS 133, one can justify documenting effectiveness tests in which the changes in the fair value of the hedge item are modeled as if the hedged item were a hypothetical derivative perfectly matching the terms of the hedged item. Then, this proxy calculation is used with the changes in the fair value of the actual hedging instrument in calculating the retrospective dollar offset ratio test and any P&L ineffectiveness.

Putting everything together, perfect cash flow or fair value IRS hedging of debt or investments can be justified as highly effective on a prospective basis because critical terms are the same. Retrospective testing is done in the usual way by calculating the ratio of the change in the fair value of the hedging swap with the change in the fair value of a hypothetical perfect swap modeling the hedged item.

Since the terms of the real swap and the hypothetical swap exactly offset each other by definition, the dollar offset ratio is 100% and there is no ineffectiveness. Please note that this hypothetical derivative methodology can also be used for effectiveness testing of *imperfect* IRS and, as we will see, imperfect CCIRS hedges.

Similarly, the hypothetical derivative method can also be used to show 100% effectiveness for perfect CCIRS hedging from of external debt or investments from fixed to fixed or floating to fixed.

As with FAS 133, if one desires to go from floating loan to floating loan, one should do a floating-to-floating swap, but not designate it as hedge instrument. The mark-to-market on an AA-rated floating-to-floating swap will only have small valuation around zero due to interest rate changes, but will have an FX change in value sufficient to offset the IAS 21 spot-to-spot revaluation on the foreign currency loan. The net P&L impact of both items should be acceptably small.

As we will discuss in more detail below, these same CCIRS hedging rules will also apply to hedging foreign entity interco loans.

### **Hedging Foreign Entity Interco Flows**

Hedging interco flows under IAS 39 requires an understanding of IAS 21, The Effects of Changes in Foreign Exchange Rates. IAS 21 is the counterpart to FAS 52, describing how foreign unit financial statements are consolidated with the parent results into the parent reporting currency.

Unlike FAS 52, IAS 21 distinguishes between foreign subs that are “integral to the operations of the reporting enterprise” and those that are “foreign entities.” IAS 39 uses this categorization to allow hedging of only foreign entity interco FX exposures.

Per IAS 21.23, “A foreign operation that is integral to the operations of the reporting enterprise carries on its business as if it were an extension of the reporting enterprise’s operations.”

In such cases, IAS 21.27 requires that “The financial statements of the foreign operation ... should be translated ... as if all its transactions had been entered into by the reporting enterprise itself,” i.e., its functional currency is the parent’s reporting currency.

A foreign entity, as described in IAS 21.27, “... accumulates cash and other monetary items,

incurs expenses, generates income and perhaps arranges borrowings, all substantially in its local currency... the change in the exchange rate affects the reporting enterprise’s net investment in the foreign entity rather than the individual monetary and non-monetary items held by the foreign entity.” Here, the consolidated accounting is identical to FAS 52 in which the functional currency is the local currency.

IAS 21.26 lists five factors for classifying foreign subs. A pure importer of parent products would be integral. A pure local sub with 100% local revenues and costs would be a foreign entity. However, a large manufacturing and importing foreign sub would be a foreign entity.

Regarding interco hedging, IAS 39.80 is inadvertently ambiguous:

“As an exception, the foreign currency *risk* of an *intragroup monetary item* (eg a payable/receivable between two subsidiaries) may qualify as a hedged item in the consolidated financial statements if it results in an exposure to foreign exchange rate gains or losses that are not fully eliminated in consolidation under IAS 21 ...” [author’s emphasis]

This happens between two subs qualifying as foreign entities. The text appears to allow hedging of only *recognized* intragroup monetary items, not *forecast* items. However, the clear intent of the Board is that all *FX risks* associated with such kinds of interco monetary items are hedgeable, including forecasted interco sales, purchases, interest, fees, etc., allowing cash flow hedge accounting. The Board may clarify their intent in the next several months.

Thus, if a foreign subsidiary is a foreign entity, then IAS 39.80 does allow hedging of forecast interco flows, just as FAS 133 does. However, if the foreign sub is an integral or branch operation under IAS 21, then forecast interco flows are not hedgeable. In this case, then all of the *external* foreign currency flows of the integral sub are hedgeable in accordance with the usual rules, just as if the sub’s foreign currency flows were actual flows of the parent.

### **Hedging Interco Loans**

IAS 39 is unequivocal that the interest rate risk of an interco loan is not a hedgeable item. If a Central Treasury wants to lend floating and use an interest rate swap to achieve the economic impact of fixed rate debt, then Central Treasury must identify a suitable external debt to receive hedge accounting on the swap. Please note that there are numerous discussions in IAS 39 and in the IG questions showing acceptable techniques for effectively hedging various kinds of intra-group interest rate risk.

As discussed, for foreign entities per IAS 21, IAS 39.80 allows foreign currency intragroup monetary items as eligible *FX risk* hedge items. Thus, any cross-currency interest rate swap on an interco monetary item must be used as a pure FX hedge, not as a mixed FX and interest rate hedge (see IG F.1.12.).

As discussed with CCIRS hedges of external items, one could achieve a fixed rate interco loan by lending a fixed rate interco loan in one currency and swapping with a fixed-fixed CCIRS into another currency or by lending an interco floating in one currency and swapping into fixed currency in another currency. Floating-to-floating is best done by accepting the net market-to-market on the swap and the interco item without hedge accounting.

### **Netting Offsetting FX Cash Flow Exposures**

Unlike FAS 133, IAS 39 does not allow the netting of eligible offsetting cash flow exposures with internal contracts. However, IG F.1.4, IG F.1.5 and IG F.1.6 show how netting can be effectively achieved with some additional work.

First, any entity in the group can hedge, on an after-tax basis if desired, any other group entity's FX, interest rate, commodity or credit risk. Parenthetically, this is a very useful difference from FAS 133.

Second, while hedge accounting for internal contracts is not allowed for the consolidated reports, it is allowed for individual unit financial statements and for segment reporting of the consolidated group. However, if done, the hedging entries must be reversed in the final consolidation.

With suitable documentation, a foreign unit can receive hedge accounting for an internal forward with a treasury center (TC) for the foreign unit's own financials. The TC executes an off-setting external contract, and *also* documents it as a hedge of the foreign unit's exposure. Then, the group will receive hedge accounting at the consolidated level. If hedge accounting is not needed at the foreign unit level or for segment reporting, then only the TC's hedge documentation is needed.

As IG F.1.6 describes in some detail, one can achieve the effect of netting offsetting exposures by doing internal contracts and then designating the net residual as a hedge of the larger exposure. For example, Sub A and B are euro functional entities, and Sub A forecasts \$500 in dollar revenues and B forecasts \$300 in dollar expenses. Both do internal contracts with a TC and both do the documentation qualifying for hedge accounting on their own stand-alone financials. The TC sells \$200 forward with an external party and documents this as an IAS 39 cash flow exposure of A's first \$200 in forecast revenue.

A perhaps easier solution is to have the bank write two simultaneous contracts with the TC, one selling \$500 and the other buying \$300, and use both as separate IAS 39 cash flow hedges for Subs A and B, where both will receive hedge accounting at the consolidated level. This "gross basis" hedging is approved in IG F2.15.

### **Option Hedging**

Neither IAS 39 nor the IG explicitly allow FAS 133's G20's 100% effectiveness for perfect European option hedging. IAS 39 does discuss how option hedges can be effective by excluding the option's time value, which will result in unpredictable and often unacceptable P&L volatility since excluded time value goes directly to P&L.

However, IAS 39 specifically does not require any single effectiveness test for any particular hedging instrument. In my opinion, sound theoretical arguments can be made to justify 100% effectiveness with perfect European option hedges using the hypothetical derivative effective method.

## Conclusions

This short paper is not intended to be an exhaustive description of hedging under IAS 39. For example, it does not discuss interest rate portfolio hedging, which has new rules issued in March 2004. Nor does it focus on other differences between IAS 39 and FAS 133, e.g., the acceptable use under IAS 39, subject to certain restrictions, of balance sheet exposures as hedging instruments in cash flow hedging, something that is not allowed under FAS 133. FAS 133 provides for a 60 day “grace period” for forecast error, which is not mentioned anywhere in IAS 39 or the IG, but probably will be acceptable to most auditors for IAS 39.

In my opinion, for common corporate (i.e., non-financial institution) hedging, nearly all reasonable, non-exotic hedges that are effective under FAS 133 will be effective under IAS 39, and vice versa. How one may document these hedges may differ under the two GAAPs, and there may be additional work involved in that documentation, but the IASB has done an admirable job in developing a readable standard that in many ways is more flexible and more reasonable than FAS 133, and generates nearly the same results.

Any person wishing to become more knowledgeable about IAS 39 hedger is advised to order the “FAS 133 Green Book” from the FASB. This 850 page book is the current version of FAS 133 with all amendments, and includes over 175 “DIG Issues,” which answer common questions about how to implement FAS 133. Many of these DIG Issues provide substantial insight and, perhaps, authoritative guidance acceptable to your auditors, for implementing IAS 39.

## About the Author

Jeff Wallace is Managing Director of Greenwich Treasury Advisors LLC, a Greenwich, CT USA treasury consulting firm that he founded in 1992. He is the author of the FAS 133 chapter in the *International Finance and Accounting Handbook* (2003, John Wiley & Sons) as well as of *The Group of 31 Report: Core Principles for Managing Multinational Foreign Exchange Risk* (1999, Association for Finance Professionals). These and other useful treasury articles may be downloaded at: [www.greenwichtreasury.com/articles/](http://www.greenwichtreasury.com/articles/).

His corporate experience includes being Vice President – International Treasury at American Express, and was Assistant Treasurer at both Seagram and Dun & Bradstreet. Jeff was also a CPA at Price Waterhouse.

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