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Project	**Hedge Accounting (IFRS 9)**		
Paper topic	Measurement of the hedged item—'hypothetical derivatives': conceptual considerations		
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Introduction

1. This paper addresses conceptual considerations raised by the feedback on the draft hedge accounting requirements regarding hypothetical derivatives.

Feedback received—conceptual considerations

2. Some commentators cited what can broadly be described as 'conceptual' considerations as the basis for their concerns. For example:

   (a) Cash flow hedges and fair value hedges are different concepts. Unlike fair value hedges, cash flow hedges are not based on a valuation concept and therefore do not give rise to hedge ineffectiveness from differences in value changes between the hedging instrument and the hedged item as long as their variable cash flows match (although some concede that credit risk is a source of hedge ineffectiveness even if all variable cash flows are perfectly matched).

   (b) The new hedge accounting model has the objective to align hedge accounting with risk management. Risk management considers cash flow hedges as (fully) effective if the variable cash flows of the

actual derivative match those of the hedged item (ie if the entity uses a 'perfect derivative' to hedge the risk exposure[1]).

(c) The accounting treatment for the effect of the FX basis spread is inconsistent with that for the time value of options and the forward element of forward contracts, ie the notion of 'costs of hedging' that the new hedge accounting model introduces. The FX basis spread is also a cost of hedging and should be treated consistently with the other types of costs of hedging.

Staff analysis

Cash flow hedge versus fair value hedge—difference between concepts

3. At a conceptual level the question arises whether a cash flow hedge is a different concept from a fair value hedge and, if so, in what respect it is different.

'Valuation' versus 'flow' perspective

4. IFRSs have always used a hedge accounting model that is based on a valuation at the reporting date of both the hedging instrument *and the hedged item* (valuation model). Hedge (in)effectiveness is then measured by comparing the changes in the value[2] of the hedging instrument and the hedged item.

5. This is set out in IAS 39 *Financial Instruments: Classification and Measurement*, paragraph 96(a) for cash flow hedges[3] as follows [emphasis added]:

[1] This is in essence the same argument also cited by some in support of existing practice—see paper 4A3.

[2] Either from the previous reporting date or from the inception of the hedging relationship, as applicable (eg depending on when the hedging relationship started or because the 'lower of' test is based on cumulative changes—the 'lower of' test is the requirement cited in paragraph 5).

[3] This was carried over into the new hedge accounting model (see draft IFRS 9 *Financial Instruments*, paragraph 6.5.11(a)).

> the separate component of equity associated with the hedged item is adjusted to the lesser of the following (in absolute amounts):
>
> (i) the cumulative gain or loss on the hedging instrument from inception of the hedge; and
>
> (ii) the cumulative change in fair value (present value) of the expected future cash flows on the hedged item from inception of the hedge;

6. This means that also for determining the effective part of a *cash flow hedge* an entity needs to look at the change in cash flows on a *present value basis*, ie based on a valuation. That also means that simply comparing the cash flow variability of the hedging instrument and the hedged item (ie a pure 'flow perspective' without involving a valuation) is not allowed for that purpose.

7. In addition, IAS 39 does not allow perfect hedge effectiveness to be assumed.[4] This applies even if for a cash flow hedge the critical terms of the hedging instrument and the hedged item perfectly match. One of the Implementation Guidance Q&As (IGs) that accompany IAS 39 (IG F.4.7) includes an explicit reminder in that respect [emphasis added]:

> **F.4.7 Assuming perfect hedge effectiveness**
>
> **If the principal terms of the hedging instrument and of the entire hedged asset or liability or hedged forecast transaction are the same, can an entity assume perfect hedge effectiveness without further effectiveness testing?**
>
> No. IAS 39.88(e) requires an entity to assess hedges on an ongoing basis for hedge effectiveness. It cannot assume hedge effectiveness even if the principal terms of the hedging instrument and the hedged item are the same, since hedge ineffectiveness may arise because of other attributes such as the liquidity of the instruments or their credit risk (IAS 39.AG109). It may, however, designate

[4] See IAS 39.88(e) and AG109.

only certain risks in an overall exposure as being hedged and thereby improve the effectiveness of the hedging relationship. For example, for a fair value hedge of a debt instrument, if the derivative hedging instrument has a credit risk that is equivalent to the AA-rate, it may designate only the risk related to AA-rated interest rate movements as being hedged, in which case changes in credit spreads generally will not affect the effectiveness of the hedge.

8. In particular, differences in *credit risk or liquidity* of the hedging instrument and the hedged item are potential sources of hedge ineffectiveness for both fair value hedges and cash flow hedges. This is only consistent with a hedge accounting model that:

   (a) is a valuation model; and

   (b) one in which the value of the hedged item is measured independently of the value of the hedging instrument.

9. In contrast, from a 'flow perspective' for cash flow hedges that only focuses on whether the variable cash flows of the hedging instrument and the hedged item are perfectly matched (flow model), aspects such as credit risk and liquidity would *not* cause hedge ineffectiveness for measurement and recognition purposes of an ongoing hedging relationship. Instead, credit risk would only be used as a separate 'overlay test' to determine if the hedging relationship continues to qualify for hedge accounting[5] but it would not result in recognising hedge ineffectiveness for a hedging relationship that continues to qualify for hedge accounting because it is still highly, but not 'perfectly', effective.[6]

10. In summary, under IFRSs a valuation versus a flow perspective is *not* a differentiator between the concepts of a cash flow hedge and a fair value hedge. That applies under IAS 39 as well as under the new hedge accounting model alike. Both are based on a valuation model.

[5] This is similar to an 'incurred' or 'probable' credit loss model, ie it is a binary yes/no assessment that does not capture changes in the credit risk within each of those two binary outcomes.

[6] This is the accounting under some methods used by US GAAP (see paper 4A3).

Hedged risks that affect the balance sheet versus those that do not

11. The concepts of a fair value hedge and a cash flow hedge differ in one main aspect: whether the *hedged risk* affects the balance sheet or not:

    (a) Those hedged risks that affect the balance sheet can be accounted for by changing the measurement or recognition[7] of assets or liabilities. Those hedged risks result in fair value hedges.[8]

    (b) For those hedged risks that do *not* affect the balance sheet hedge accounting needs a different solution. Because the change in the hedged risk does not represent an asset or a liability (including a measurement adjustment to those), there is no alternative available except to change the timing for recognising the gains and losses on the hedging instrument, ie cash flow hedge accounting. This results in two differences between cash flow hedge accounting and fair value hedge accounting:

        (i) deferral of gains and losses on hedging instruments in accumulated other comprehensive income (AOCI) for cash flow hedges; and

        (ii) application of the 'lower of' test[9] to cash flow hedges.

12. However, this difference between the concepts of fair value hedges and cash flow hedges is something else than a contrast of a valuation versus a flow perspective. Those aspects should not be confused.

Risk management view: the hypothetical derivative as the 'perfect derivative'

13. The risk management view of hedging exposures to cash flow variability is commonly that the exposure is (fully) hedged if the entity receives or pays the same variable cash flows under the hedge contract that it pays or

[7] For example in case of a hedged firm commitment that as a consequence of being a hedged item in a fair value hedge would be recognised (whereas it would not be recognised under normal accounting conventions for executory contracts).

[8] Except for hedges of FX risk when choosing a cash flow hedge designation.

[9] The 'lower of' test means that for a cash flow hedge the amount that is deferred in AOCI as the effective part is capped at the cumulative change in the value of the hedging instrument (see paragraph 5).

receives as a result of the hedged exposure. In other words, the hedge is fully effective if the variable cash flows of the hedging instrument and the hedged item offset. After taking into account the effect of the hedge, all that remains from the entity's perspective are the fixed cash flows paid or received under the hedge contract. Reporting hedge ineffectiveness in this situation does not result in useful information.

14. This risk management view is in substance a 'flow perspective'[10] that focuses only on the variable cash flows. Some commentators then essentially argued that facilitating this view in the accounting would be in the spirit of the new hedge accounting model in that it aligns with a risk management perspective.

15. However, while colloquially and in a broader sense the objective of the new hedge accounting model is often described as 'aligning hedge accounting with risk management', that should not be confused with the accounting 'simply adopting' the risk management view.[11] If the latter was the case then there would be no particular accounting model for hedging activities, ie no qualifying criteria for hedge accounting, in particular no criteria for what exposures qualify for designation as hedged items (eg criteria for eligible risk components or which groupings of items are eligible for designation in hedging relationships), etc.

16. Given that there *is* an accounting model for hedging activities, an approach that would use the criterion of whether the entity uses the 'perfect derivative' (in terms of one whose variable cash flows exactly match those of the hedged exposure) for measuring hedge (in)effectiveness would give rise to conflicts with some aspects of the new hedge accounting model:

    (a) the notion of 'costs of hedging';

    (b) the notion of hedge ineffectiveness; and

    (c) the principle of measuring the value of the hedged item independently of the value of the hedging instrument.

[10] See paragraph 9.

[11] The description in draft IFRS 9.6.1.1 is therefore "...to represent, in the financial statements, the effect of an entity's risk management activities..." instead of 'alignment with risk management'.

Conflict with the notion of 'costs of hedging'

17. The new hedge accounting model introduces the notion of 'costs of hedging'.[12] For example, an entity that uses an option that perfectly matches its hedged risk exposure[13] could not measure its hedged item using a 'hypothetical derivative' that mirrors the actual option that it uses as the hedging instrument—even though that option is the 'perfect derivative' for that purpose. The entity incurs an unavoidable cost (the option's time value) for hedging its risk, which means under the new hedge accounting model it can apply the accounting for the option's time value as 'costs of hedging'. But the entity could *not alternatively* measure its hedged item using a 'hypothetical option' (ie project the costs of hedging onto the measurement of the hedged item instead).[14]

18. Taking the example of the FX basis spread[15], a cross-currency interest rate swap (CCIRS[16]) that is a hedge of the FX risk (and the interest rate risk) of a debt instrument includes a pricing element that reflects that the instrument results in the exchange of two currencies[17]. The question then is whether there is a similar feature or characteristic in the *hedged item* that would offset the effect of the FX basis spread on the CCIRS's value. The hedged debt instrument is a *single-currency* instrument, ie unlike the CCIRS the hedged instrument itself does not involve the exchange of two currencies. Instead, the exchange of the debt's currency of denomination for another

[12] This is a colloquial reference to the accounting for the time value of options and the forward element of forward contracts in draft IFRS 9.6.5.15-6.5.16.

[13] This assumes that the hedged exposure is not itself actually an option (which can be the case but does not apply in the most common situations in which the hedged risk is a forecast transaction or firm commitment, etc., ie it does not include contractual optionality).

[14] Which is the reason why under IAS 39 (which does not include the notion of 'costs of hedging') the changes in the option's time value affect profit or loss as they happen (either because the time value is excluded from the designation of the option as the hedging instrument or because there is no offsetting value change in the hedged item).

[15] This paper uses the reference to "FX basis spread" in the meaning that is explained in Appendix A. This is also the example that draft IFRS 9.B6.5.5 refers to and which triggered the comments on the draft hedge accounting requirements that are addressed in this paper.

[16] Because this paper addresses comments on the draft IFRS 9 requirements it uses the same example as in draft IFRS 9.B6.5.5. The same issue arises on cross-currency swaps (CCSs) that do not at the same time involve a hedge of interest rate risk. CCSs involve an FX basis spread as well.

[17] See Appendix A for a description of the nature of the FX basis spread.

currency is a circumstance of the holder or issuer of the instrument instead of a characteristic or feature of the instrument itself.

19. This becomes apparent when looking at a situation in which an entity has the same FX risk exposure from debt denominated in a foreign currency but does *not* hedge it—in that case the measurement of the debt instrument can be seen in isolation. In that case no FX basis spread is involved: the entity remains exposed to the FX risk and exchanges each cash flow at the spot FX rate on the date of payment. That spot FX rate does not involve the pricing elements that give rise to the FX basis spread, such as the credit risk of the main market participants in the market for CCIRSs or the supply and demand in that market.

20. This also becomes apparent when the CCIRS is used in a *fair value hedge*, eg if it is used to hedge fixed rate debt denominated in a foreign currency. In that case, the value of the hedged item is determined as the carrying amount of the hedged debt (after revaluation for the hedged interest rate risk) in the foreign currency translated at the spot FX rate into the functional currency of the hedging entity. That means in a first step the present value of the debt instrument is calculated in the foreign currency using the discount rate that applies in that currency[18] and then in a second step translated at the spot FX rate into an amount in the entity's functional currency. This measurement of the value of the hedged item does *not* involve an FX basis spread—it is not a feature of the instrument being measured. In contrast, the fair value of the CCIRS *includes* an FX basis spread, which means that the FX basis spread related fair value changes of the CCIRS *result in hedge ineffectiveness* because there is no offsetting effect in the valuation of the hedged debt.

21. The question is why the result should be different if the hedging relationship is a *cash flow hedge* instead of a fair value hedge. The question becomes even more relevant when considering that for fixed rate debt (ie in the example used in the previous paragraph) denominated in a foreign currency

[18] Consistent with the designation of the hedged risk, which could be a benchmark rate or the risk-free rate.

an entity could designate the hedge of the FX risk as a cash flow hedge[19] instead of a fair value hedge. *Economically* though, nothing has changed in that:

(a) there is a series of cash flows on the debt instrument that arise in a foreign currency; and

(b) the *hedging entity* is exposed to the FX risk arising from changes in the FX rate between the foreign currency and its functional currency.

22. In this context, some commentators have pointed to the fact that the market forward FX rates reflected in the CCIRS, ie including the FX basis spread, are the market price (or rate) for converting the debt's cash flows from the foreign currency to the entity's functional currency. Consequently, the measurement of the hedged item should reflect that market price. Thus, for the purpose of measuring the value of the hedged item, the foreign currency cash flows should be measured using that market forward FX rate, which would mean using a hypothetical derivative that includes the same FX basis spread as the actual CCIRS.

23. However, that reasoning does not answer the question of why the outcome regarding whether the FX basis spread is a part of the hedged item or instead reflects a circumstance of the hedging entity should be different for cash flow hedges versus fair value hedges (despite being the same issue economically).

24. Instead, that reasoning reflects the view that using the 'perfect derivative' should not result in hedge ineffectiveness. But that is a different issue: the same rationale would support the view that the market prices the protection against a one-sided risk by including time value as a pricing element in the hedging instrument—ie an option. But as explained earlier[20], even though there is no doubt that an option is the 'perfect derivative' to hedge a one-sided risk that does not mean the market price for hedging that risk was

[19] In that case the hedge of the interest rate risk would be a fair value hedge and the hedge of the FX risk a cash flow hedge, resulting in two different hedging relationships being designated (one for each of the two hedged risks).

[20] See paragraph 17.

therefore a feature of the hedged item—and that applies irrespective of whether it is a fair value hedge or a cash flow hedge. Consequently, the value changes attributable to an option's time value can only be recognised in OCI by using the notion of 'costs of hedging' (but not by using a 'hypothetical option' to measure the change in the value of the hedged risk because an entity uses a 'perfect derivative').

25. In that sense, the comparison with the accounting for the time value of the option illustrates the conflict between an approach that uses a 'perfect derivative' as a criterion for measuring hedge (in)effectiveness and the new hedge accounting model's notion of 'costs of hedging'.

Conflict with the notion of hedge ineffectiveness

26. An approach that would use the criterion of whether the entity uses the 'perfect derivative' for measuring hedge (in)effectiveness would also give rise to a conflict with the notion of hedge ineffectiveness. This issue is related to the previous one, ie the notion of 'costs of hedging'.

27. In the new hedge accounting model the notion of 'costs of hedging' is limited to the two exceptions for partially designating a derivative as the hedging instrument by either excluding:

    (a) the time value of an option; or

    (b) the forward element of a forward contract.

28. Consequently, other types of 'costs of hedging' cannot be excluded from the designation of a derivative as the hedging instrument. This means in the hedge accounting model they are part of the comparison between the change in the value of the hedging instrument and that of the hedged item, which is how hedge (in)effectiveness is determined. Consequently, costs of hedging that are a characteristic of the hedging instrument but that are not also a characteristic of the hedged item create a mismatch between the two changes in value, which results in hedge ineffectiveness.

29. For example, if an option that is used to hedge a one-sided risk[21] is designated as a hedging instrument in its entirety (ie *including* its time value changes), the notion of 'costs of hedging' does *not* apply. Consequently, the change in the option's fair value that is attributable to its time value would give rise to hedge ineffectiveness because there is not a similar change in the value of the hedged item.

30. The same considerations apply to the example of the FX basis spread[22]. As explained in the previous section, the FX basis spread is a characteristic of the CCIRS but not of the debt instrument denominated in a foreign currency. Given that the FX basis spread cannot be excluded from the CCIRS and accounted for as 'costs of hedging', it results in a mismatch in the change of the value of the hedging instrument and the hedged item. This gives rise to hedge ineffectiveness.

31. In that sense, an approach using a 'perfect derivative' as a criterion for measuring hedge (in)effectiveness would conflict with the notion of hedge ineffectiveness under hedge accounting.

Conflict with the principle of measuring the value of the hedged item independently of the value of the hedging instrument

32. In developing the new hedge accounting model the Board has emphasised that the value of the hedged item has to be measured independently of the value of the hedging instrument. This was an important aspect of the discussion of risk components, which emphasised that if the hedged item is a risk component it has to be identified (and assessed against the criteria for designating risk components) without projecting characteristics or features of the hedging instrument onto the hedged item. The same aspect was also an important part of the discussions of accounting for aggregated exposures (explaining that and why it is not 'synthetic accounting').

33. In that sense, an approach using a 'perfect derivative' as a criterion for measuring hedge (in)effectiveness would conflict with the principle of

[21] Again, this assumes that the hedged exposure is not itself actually an option.

[22] See paragraph 18.

measuring the value of the hedged item independently of the value of the hedging instrument. Such an approach is based on a perspective that infers from the side of the *hedging instrument* (albeit that it should be a 'perfect' one) whether there is hedge ineffectiveness instead of establishing the value of the hedged item (and the changes therein) independently of any hedging instrument. That would be inconsistent with the new hedge accounting model as well as IAS 39.

Accounting for FX basis spread is inconsistent with the notion of 'costs of hedging'

34. Another conceptual question is whether the accounting treatment for the effect of the FX basis spread constitutes an inconsistency with the new hedge accounting model. This depends on whether the FX basis spread is regarded as a cost of hedging.[23] If so, not being able to account for the FX basis spread under the notion of 'costs of hedging' would be inconsistent with the new hedge accounting model.

35. However, that could be argued for all types of costs of hedging that are not covered by the two exceptions for which the special accounting for the 'costs of hedging' is available (ie the time value of options and the forward element of forward contracts).

36. Obviously, this type of consistency debate applies to every kind of exception that an accounting model uses (and exceptions are a common feature of accounting models, eg scope exceptions, which are a part of most accounting standards).

37. In that sense, this type of consistency debate reflects the judgement of which items warrant an exception versus those that do not. Consequently, in essence, it is about revisiting the considerations and judgements that resulted in the exceptions originally decided upon.

38. The staff have considered this aspect in developing the staff recommendation.

[23] See Appendix A for a description of the nature of the FX basis spread.

Accounting arbitrage by type of hedge

39. Another conceptual consideration is the accounting arbitrage that the use of hypothetical derivatives could create between fair value hedge and cash flow hedge designations (ie by type of hedge).

40. As explained in the discussion of a conflict with the notion of 'costs of hedging',[24] a hypothetical derivative that would allow characteristics that are specific to the hedging instrument to be included in the hedged item would result in the same economic phenomenon—incurring the FX basis spread for exchanging currencies—being characterised as

    (a) hedge ineffectiveness in a fair value hedge;

    (b) but as a part of hedge effectiveness in a cash flow hedge.

41. Therefore, if a hypothetical derivative could be used to include characteristics of the hedging instrument in the hedged item that in a fair value hedge result in a mismatch between the valuation of the hedging instrument and the hedged item, an arbitrage incentive arises for entities to designate hedging relationships as much as possible as cash flow hedges (instead of as fair value hedges). Even though the economic situation is identical, simply by using a cash flow hedge designation instead of a fair value hedge designation, that mismatch could be avoided thereby reducing the amount of hedge ineffectiveness. Such arbitrage opportunities can undermine the design of an accounting model that differentiates between types of hedges.

42. In fact, this arbitrage already occurs in practice under IAS 39. Over the past years the designation of hedging relationships in practice has changed in a way that CCIRSs hedging fixed rate debt denominated in a foreign currency are *for accounting purposes* increasingly split into several different hedging

[24] See paragraph 21.

relationships. There are different ways to designate those hedging relationships[25] but the common denominator is that:

(a) at least one of the hedging relationships must *technically* be a cash flow hedge;

(b) that type of hedge is then used as the basis for using a 'hypothetical derivative' to measure the changes in the value of the hedged item when calculating hedge (in)effectiveness;

(c) the 'hypothetical derivative' is then used as the basis for including an FX basis spread in the fair value calculation, like for the actual derivative (ie the CCIRS);

(d) as a consequence, the valuation of the 'hypothetical derivative' becomes a mirror image of the valuation of the (relevant part of the) actual derivative (ie no hedge ineffectiveness arises from changes in the FX basis spread[26]).

43. Therefore, the question for the design of the new hedge accounting model is whether:

(a) such an arbitrage is acceptable (or even desired); or whether

(b) the model should be designed in a way that mitigates the arbitrage, which could be addressed by reducing the incentive for the arbitrage or by an explicit prohibition.

[25] Appendix B illustrates how different ways of designating affect the type of hedge involved and how that under current practice results in avoiding that hedge ineffectiveness arises from the effect of the FX basis spread on the fair value of the hedging instrument.

[26] This assumes the cash flows on the fixed rate debt match those on the fixed leg of the CCIRS. If those were not matched hedge ineffectiveness would arise—but still at a much lower level compared to a hedge designation without a 'hypothetical derivative' that includes an FX basis spread (be it a fair value hedge designation or a cash flow hedge designation with a hypothetical derivative that does not include an FX basis spread).

Appendix A—Nature of FX basis spreads

A1. This appendix gives a concise overview of the nature of currency basis *spreads*[27] (FX basis spreads) and the factors that influence them.

A2. FX basis spreads are an economic phenomenon that in a *perfect* market would *not* exist because the existence of such spread creates economic arbitrage opportunities that would result in its reduction to zero.

A3. However, in the actual markets for cross-currency swaps the FX basis spread is not zero because of factors that prevent perfect arbitrage. Those factors include for example:

(a) The credit risk embedded in the underlying reference rates of the currencies. This effect arises because of differences in the (perceived) credit quality and the liquidity associated with particular reference rates (and sometimes including country-risk type aspects), and the credit standing of the main players in the respective markets (which relates to their actual ability to obtain funding at the reference rates in their respective currency). Therefore, this factor includes aspects other than mere currency risk[28].

(b) The demand and supply for the particular financial product (eg CCIRSs[29]). This relates to specific situations of FX (product) markets, eg relative weightings of the volume of foreign entities issuing debt in the local currency and domestic investors investing in foreign assets

[27] **Usage note**: this paper uses the term "spread" because that most accurately describes the economic phenomenon (ie a pricing element that is charged to one party to the contract for the benefit of the other, which then also affects the discount curve derived from rates that include that charge). When discussing this issue some use the term FX basis *risk* synonymously. However, "basis risk" in the context of a hedge accounting debate typically refers to differences in the underlying of the hedging instrument and the hedged item, which is an *entirely different issue*. To illustrate, hedging USD denominated debt with a CCIRS that converts the USD exposure to an AUD exposure does involve an FX basis spread in the CCIRS. However, there is no basis risk involved in the hedging relationship because the CCIRS converts the exact same currency that the debt is denominated in. Basis risk would exist if the debt was denominated in another currency than USD or if the functional currency of the hedging entity was not AUD. The existence of a basis spread exposes an entity to the risk of changes in the market spread, which gives rise to opportunity gains or losses that in turn affect the fair value of the cross-currency swap. However, for the reasons explained earlier, in order to avoid confusion in the discussion of this issue for hedge accounting purposes that risk should not be called "basis risk".

[28] From a spot FX rate perspective, which does not involve credit risk.

[29] CCIRSs are one type of cross-currency swap.

(which creates demand for cross-currency swaps with an FX pay leg) versus domestic entities issuing debt in the foreign currency and foreign investors in domestic assets (which creates demand for cross-currency swaps with an FX receive leg). Those demand and supply conditions can result in FX (product) markets having their own dynamics that can drive the actual forward rates of those financial products away from other market segments and the synthetic[30] forward rate.

(c) Sometimes the interaction between the spot and the forward FX markets can also have an effect, although it is less than that of the previous factors and tends to have a greater effect on the shorter end of the tenor of cross-currency swaps.

A4. Those types of factors also explain why the phenomenon of the FX basis spread become much more significant when the severe economic crisis began in 2007 whereas previously it had often been immaterial. It is apparent that as the FX basis spread has become more significant, entities have changed designations from fair value hedges to cash flow hedges in order to deal with the increased volatility in profit or loss that would have otherwise arisen as a result of the (real) increased volatility in FX basis spreads.

A5. The phenomenon of an FX basis spread as such is inherent in all financial products that involve a forward exchange of currencies. However, the factors that affect the FX basis spread[31] can have a different effect on the derivatives markets for different types of products, for example:

(a) the main players in the different markets are not the same and the time horizon covered by the products is very different, which affects credit and liquidity aspects;

(b) the demand and supply conditions differ between the markets; for example, the short-term FX forward market is more driven by cash management and speculative FX positions whereas the longer terms are

[30] The 'synthetic' forward rate is the one that results from adjusting the spot FX rate solely for the interest differential between the two respective currencies that are exchanged. That is the rate that would prevail in a perfect FX market (see paragraph A2).

[31] See paragraph A3.

more driven by borrowers and investors using derivatives to change the currency of their funding or investments (including interest cash flows), respectively, into their functional currency;

(c) the interaction between the spot and the forward FX markets affects different maturities differently.

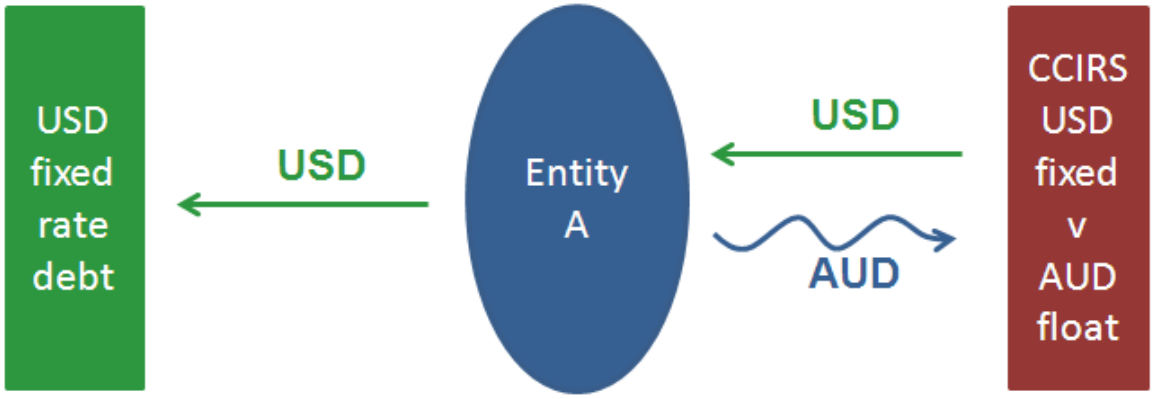
A6. As a result, compared to 'normal' FX forward contracts, the FX basis spread in cross-currency swaps is much more significant reflecting a structural difference between the different derivatives markets. That has also resulted in a difference in that there are explicit separate quotations for the FX basis spread of cross-currency swaps. The quotes for the FX basis spread of cross-currency swaps has become a type of financial information that has become available from data services providers, similarly to information about various discount rates, security prices etc.

A7. In contrast, for the 'normal' FX forward contracts there is no explicit separate quotation but only an implicit FX basis spread, which is an integral part of the bid/offer spread of those derivatives.

Appendix B—Designation of hedging relationships for fixed rate debt denominated in a foreign currency in practice

B1. In practice, different ways of designating hedging relationships have evolved for situations in which fixed rate debt denominated in a foreign currency is hedged using a CCIRS. This purpose of this appendix is *not* to give a comprehensive overview of all variations or go into their intricacies but to illustrate how different ways of designating affect the type of hedge involved and how that under current practice results in avoiding that hedge ineffectiveness arises from the effect of the FX basis spread on the fair value of the hedging instrument.

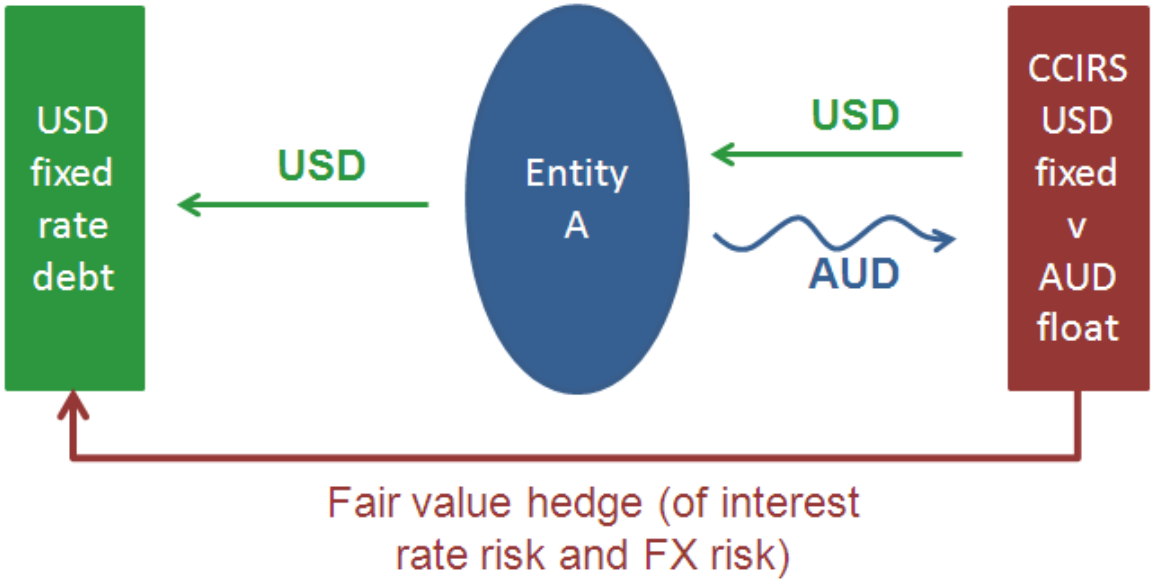
B2. The fact pattern is as follows: Entity A has AUD as its functional currency and issues fixed rate debt in USD. In order to hedge its FX risk and interest rate risk associated with its USD debt, Entity A enters into a CCIRS under which it receives the USD cash flows that it pays on its USD debt and in return pays AUD variable cash flows.[32]



B3. Possible hedge designations are:

(a) Designate the CCIRS as the hedging instrument in one hedging relationship as a fair value hedge of both interest rate risk and FX risk.

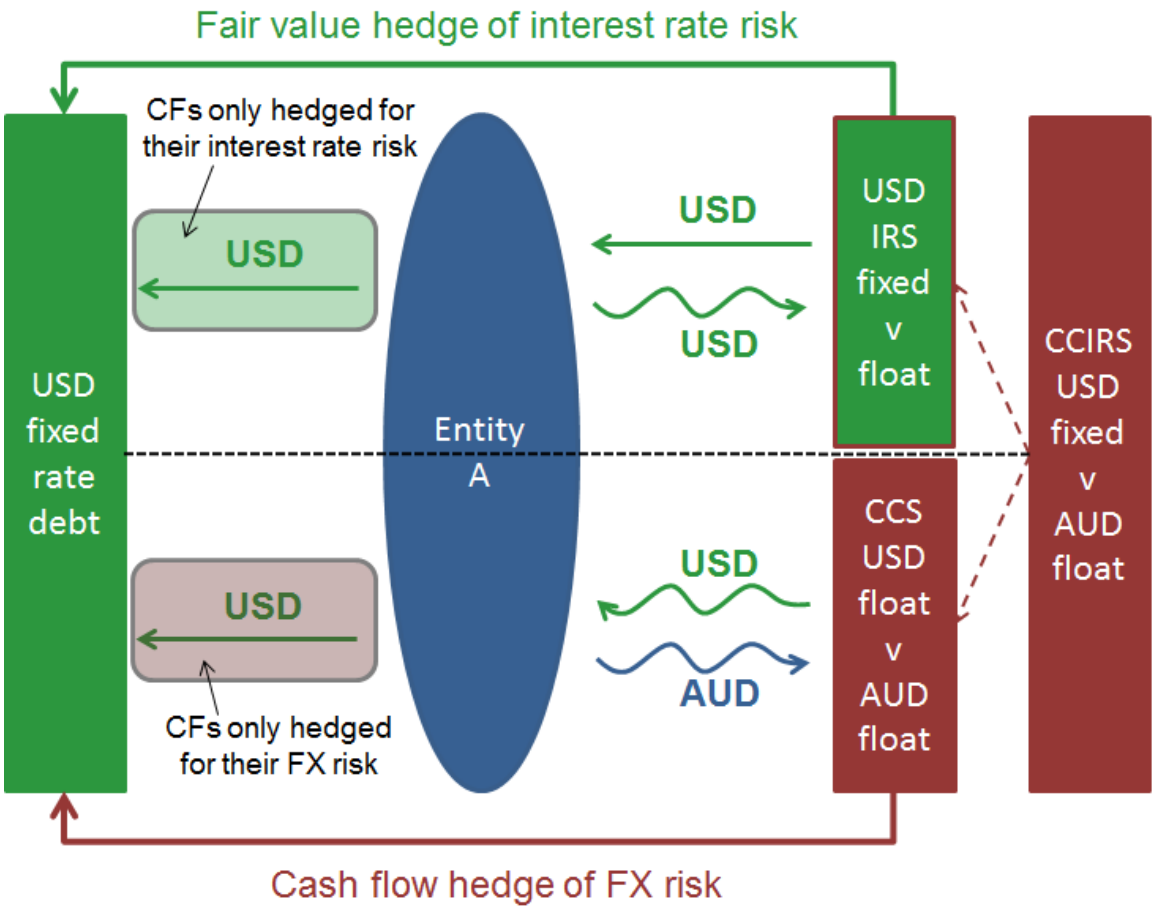
[32] The transaction also involves the exchange of the principal amounts in USD and AUD at inception and at maturity of the CCIRS.



(b) Designate the CCIRS as the hedging instrument in two hedging relationships:

(i) as a fair value hedge of the interest rate risk; and

(ii) as a *cash flow hedge* of the FX risk.



B4. Designating the CCIRS into two separate hedging relationships allows a cash flow hedge type designation[33] to be chosen for one of the hedging relationships—as the one that relates to FX risk. This in turn provides the opportunity to use a 'hypothetical derivative' to measure the change in the cash flows attributable to the hedged risk. In practice, entities then include an FX basis spread in the valuation of the 'hypothetical derivative', which thereby affects the measurement of the hedged item. That results in value changes for the hedged item in the FX risk hedge that offset the fair value changes of the CCIRS that result from the FX basis spread.

B5. Conversely, when only using a designation as a single fair value hedge, the measurement of the changes in the hedged item does *not* include an aspect that would provide an offset for the fair value changes of the CCIRS that result from the FX basis spread. This is because the debt denominated in a foreign currency is valued using the 'normal' market curve for the respective currency, which does not include an FX basis spread (because it relates to single-currency instruments—which is what the debt is). So in this case hedge ineffectiveness arises as a result of the actual hedging instrument being measured including the effect of the FX basis spread whereas the debt denominated in a foreign currency is measured excluding that effect. So simply by changing the designation regarding the type of hedge, the hedge ineffectiveness from the effect of the same FX basis spread is changed.

[33] Alternatively, this could also be designated as a fair value hedge of the FX risk but then the hedged risk could not be measured using a 'hypothetical derivative' that includes an FX basis spread and hence there would be no benefit from splitting the designation among two hedging relationships.