IFRS 9 Hedging in Practice
Frequently asked questions

Corporate Treasury Solutions

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Preface

Many companies are now considering IFRS 9, the new accounting standard on financial instruments. IFRS 9 addresses all the relevant aspects on the accounting for financial instruments, including classification and measurement, impairment of financial assets and general hedge accounting. This publication presents a number of frequently asked questions and focuses on just one topic in IFRS 9: general hedge accounting.

IFRS 9 aligns hedge accounting more closely with risk management, establishes a more principle-based approach to hedge accounting and addresses inconsistencies and weaknesses in the hedge accounting model in IAS 39.

The frequently asked questions set out in this publication are not exhaustive. They do not illustrate all of the ways to achieve hedge accounting; nor do they answer all of the questions that may arise in practice. But the pages that follow will answer many of your questions on hedge accounting in a wide range of situations. Each situation should be considered on the basis of the specific facts. We encourage you to discuss the facts and circumstances of your specific situations with your local PwC Corporate Treasury Solutions contact.

We also encourage you to read this publication in combination with the IFRS 9 hedging chapter in our manual of accounting.

The questions and answers are arranged under individual topics. Where questions cover more than one point, they have been classified under the main topic covered. An index of all the questions and answers is provided on the following page.

We hope that you find the publication useful in addressing your own reporting challenges.

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Warning

Hedge accounting can be obtained only if all of the conditions in IFRS 9 are met. While individual questions and answers might focus on only one aspect of a hedge relationship, this does not imply that the other requirements are not important.

It should also be noted that the solutions presented in this document are based on the described facts and circumstances, and so they should not be applied by analogy to a different set of circumstances.

We have not addressed the tax impact of the questions in this document – entities should separately consider the current and deferred tax implications of hedging on transition to IFRS 9 and on an ongoing basis.
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1. Risk management and documentation
1.1 Risk management strategy

Question
Is a risk management strategy required to apply hedge accounting?

Solution
Yes. The objective of hedge accounting is to represent, in the financial statements, the effect of an entity's risk management activities that use financial instruments to manage exposures arising from particular risks that could affect profit or loss (or other comprehensive income in case of investment in equity instruments classified as at fair value through other comprehensive income).

IFRS 9.6.4.1(b) is clear that, among the qualifying criteria, there must be formal designation and documentation of the entity's risk management strategy, as well as the risk management objective for undertaking the hedge. In addition, such a strategy should be approved by key management personnel as defined in IAS 24 (related party disclosures).

The risk management strategy is the highest level at which an entity determines how it manages its risk. The risk management strategy typically identifies the risks to which the entity is exposed and sets out how the entity responds to them. Typical items that may be part of a documented risk management strategy include:

- governance of the risk management activities;
- description of the risks to be hedged;
- risk appetite and/or extent to which a risk could be hedged;
- time period over which a risk is managed;
- list of eligible instruments that could be used to hedge the risk exposures; and
- risk limits.

It should be noted that, whilst the use of hedge accounting in accordance with IFRS 9 requires a risk management strategy, the reverse is not true. Hedge accounting is a management decision and not a requirement.

1.2 Risk management strategy versus objective

Question
What is the difference between a risk management objective and a risk management strategy?

Solution
IFRS 9.6.4.1(b) requires the documentation of an entity's risk management strategy and risk management objective for undertaking a hedge.

An entity's risk management strategy is distinguished from its risk management objectives. The risk management strategy is established at the highest level at which an entity determines how it manages its risk. Risk management strategies typically identify the risk to which the entity is exposed and set out how the entity may respond to them. A risk management strategy is typically in place for a longer period than the risk management objectives, and might include some flexibility to react to changes in circumstances that occur while that strategy is in place (such as different interest rate or commodity price levels that result in a different extent of hedging). It may also describe a number of acceptable approaches that may be used for managing various types of risk exposures. This is normally a general document that is cascaded down through an entity by means of policies containing more specific guidelines.

In contrast, the risk management objective for a hedging relationship applies at the level of a particular hedging relationship. It relates to how the particular hedging instrument that has been designated is used to hedge the particular exposure that has been designated as the hedged item.

A risk management strategy is likely to be executed through more than one risk management objective.

1.3 Changes to risk management objectives

Question
Can risk management objectives change even if the risk management strategy does not?

Illustration
Company X's risk management strategy is to fix the interest rate of a proportion of its debt in a range between 60% and 90%. The level of hedging will depend on market conditions, but the company's currently documented risk management objective is to have 80% of total debt bearing fixed interest.

Due to changes in market conditions, company X decides to modify its risk management objective to reduce the proportion of fixed-rate debt from 80% to 70% of total debt. In this case, the risk management objective has changed while the risk management strategy remains unchanged.
Solution
Yes. In certain situations, risk management objectives can change while the risk management strategy does not. IFRS 9 requires discontinuation of hedge accounting if the hedge relationship no longer meets the risk management objective.

As a result of the change in risk management objective, company X is required to discontinue its hedge accounting. The discontinuation of hedge accounting applies to the extent to which the risk management objective has changed (that is, 10%).

If the de-designated portion of the original hedging instruments is retained, it can be designated in another hedging relationship or measured at fair value through profit or loss.

1.4 De-designation of hedge relationship

Question
Is it possible to de-designate a hedge relationship?

Illustration
Company X’s risk management strategy is to hedge a proportion of its highly probable forecast sales in foreign currency in a range between 40% and 80% of such foreign currency exposure. The level of hedging will depend on market conditions, but the company’s currently designated risk management objective is 70% of its foreign currency exposure.

Due to changes in market conditions, company X decides to modify its risk management objectives and therefore reduces the hedged level from 70% to 50% of the forecast foreign currency denominated sales (the sales forecast has not changed). The hedging instruments are foreign currency forward contracts.

Following this change to its objectives, company X’s management enters into a new forward contract with the same maturity as the original hedge, partially offsetting the original hedging instrument, so that the combination of the two forward contracts reflects its new position (that is, a hedge of 50% of forecast foreign currency denominated sales instead of 70%).

Solution
De-designation is permitted if and only if certain criteria are met. However, if the risk management objective changes, the entity is required to discontinue hedge accounting. The discontinuation of hedge accounting applies to the extent to which the risk management objective has changed.

In this situation, as a result of the change in the risk management objective (from 70% of hedge to 50%), company X’s management must discontinue its hedge accounting for 20% of the forecast foreign currency denominated sales even though the risk management strategy remains unchanged.

The effective portion of the cumulative change in the fair value of the forward contract recognised in Other Comprehensive Income (up to the date of de-designation) will remain until the occurrence of the forecast foreign currency denominated sales or until they are no longer expected to occur.

1.5 Hedge documentation

Question
How should hedge relationships be documented?

Solution
Documentation should be established at the inception of the hedge relationship and include the following:

- Risk management strategy.
- Risk management objective.
- Identification of the nature of the hedged risk.
- Identification of the hedged item.
- Identification of the hedging instrument.
- How the hedge ratio is determined.
- Analysis of sources of expected ineffectiveness.
- How effectiveness requirements will be met. These include:
  - the economic relationship;
  - an assessment of whether credit risk dominates the economic relationship; and
  - an assessment of whether the hedge ratio is the same used for risk management purposes.

The documentation will need to be updated if the hedge ratio is rebalanced, when sources of expected ineffectiveness change and for changes to the effectiveness methods used.
2. Hedge effectiveness
2.1 Hedge ratio

**Question**
How is the hedge ratio determined?

**Solution**
IFRS 9 requires the hedge ratio (that is, the quantity of hedging instrument per quantity of hedged item) to be the same as that used for risk management purposes. A deliberate imbalance is not permitted where that would be inconsistent with the purpose of hedge accounting.

The appropriate hedge ratio is primarily a risk management decision rather than an accounting decision. When determining the appropriate hedge ratio, management should take into consideration, among other things, the following factors:

- availability of hedging instruments and nature of the underlying of those hedging instruments (and, as a consequence, the risk of differences in value changes between the hedged item and the hedging instrument);
- tolerance levels in relation to expected sources of hedge ineffectiveness (which determine when the hedging relationship is adjusted for risk management purposes); and
- costs of hedging (including the costs of adjusting an existing hedging relationship).

The determination of the hedge ratio will depend on specific facts and circumstances. It could, for example, be based either on a statistical method, a physical component (such as the volume of raw material that is needed to produce a given volume of product), or, in the case of a contractually specified formula, on the volume that is defined by the formula.

IFRS 9 requires that, for the purpose of hedge accounting, an entity should not designate a hedging relationship in a manner that reflects an imbalance between the weighting of the hedged item and the hedging instrument that would create hedge ineffectiveness. As a result, for purposes of designating a hedging relationship an entity must adjust the hedge ratio that results from the quantities of the hedged item and the hedging instrument that the entity actually uses (if needed) to avoid such an imbalance. So, a careful assessment of the risk management strategy, the economic relationship between the hedged item and the hedging instrument and the factors noted above should be performed to avoid such an imbalance.

2.2 Rebalancing

**Question**
When must a hedging relationship be rebalanced?

**Illustration**
Company X produces an industrial gas. The production process requires 2 units of power to produce 1 unit of industrial gas. In view of highly probable forecast sales of 1,000 units of industrial gas over a certain period, company X forecasts highly probable purchases of 2,000 units of power that it hedges this by purchasing a futures contract on the power price for 2,000 units of power. Company X designates the power future and the forecast purchase in a cash flow hedge.

During the time in which the hedge is outstanding, company X modifies its industrial processes and improves the efficiency of the production of industrial gas, so that it now only requires 1.75 units of power to produce 1 unit of industrial gas.

**Solution**
Rebalancing refers to adjustments to the designated quantities of either the hedged item or the hedging instrument of an existing hedging relationship for the purpose of maintaining a hedge ratio that complies with the requirements of the hedge effectiveness assessment. Rebalancing does not apply if the risk management objective for a hedge relationship has changed, that is, it does not apply when the entity decides to hedge more or less than it did originally.

Rebalancing is accounted for as a continuation of hedge accounting. However, hedge ineffectiveness is determined and recognised immediately in the income statement before adjusting the hedging relationship. In addition, an entity must update its analysis and documentation of sources of ineffectiveness.

Company X therefore adjusts the hedging instrument in order to match the new hedge ratio, which has gone from 2:1 to 1.75:1. This adjustment is accounted for as a rebalancing (that is, there is no discontinuance of the hedging relationship). But the income statement reflects the ineffectiveness existing at the time of rebalancing; in other words, the gain or loss on the hedge of the excess 250 units of power is immediately recognised in the income statement.
2.3 Economic relationship

Question
Is a quantitative test sufficient to prove an economic relationship?

Solution
No. An economic relationship exists when the hedging instrument and the hedged item have values that generally move in the opposite direction because of the same risk (that is, the hedged risk). IFRS 9 specifies that the mere existence of a statistical correlation between two variables does not, by itself, support a valid conclusion that an economic relationship exists. As a result, entities should always perform a qualitative analysis of the nature of the economic relationship between the hedged item and the hedging instrument. Certain situations might only require a qualitative assessment. For example, where the critical terms of the hedged item and hedging instrument are closely aligned and the offsetting nature of the underlying economic relationship is readily apparent, it might be possible for an entity to conclude on the appropriateness of applying hedge accounting based on a qualitative assessment. This would be the case where a currency exposure associated with a forecast sale denominated in a foreign currency is hedged with a forward contract for the same currency, with the same amount and maturing on approximately the same date as the forecast foreign currency denominated sale.

Where the strength of the economic relationship is not obvious, entities may have to also include in their assessment a quantitative analysis of the possible behaviour of the hedging instrument and the hedged item during their respective terms, in order to demonstrate that there is an economic relationship. For example, if there is an exposure to risk of a foreign currency that is pegged to another currency, a forward contract that is perfectly matched to the forecast foreign currency transaction, other than it is denominated in the pegged currency, might be used because there is greater liquidity in that currency. In this situation, the hedge documentation should include a qualitative assessment explaining the manner in which the two currencies are pegged and the resulting economic relationship. Depending on the rigor of the currency controls used to peg the two currencies, the hedge documentation may need to be supplemented with a quantitative analysis of the historical exchange rates of the two currencies to further support the existence of the economic relationship.

Another instance would be where there is a common underlying between the hedged item and the hedging instrument, but there is also a location difference (that is, a location difference or a quality difference associated with the price of the commodity). Because movements in the price of the common underlying may be offset by the movements in the basis difference, a quantitative analysis of historical total price movements may be necessary to support the presence of an economic relationship between the hedged item and the hedging instrument.

Different scenarios may need to be analysed in order to demonstrate that the behaviour of the hedging instrument is in line with those of the hedged item. In any case, the hedging documentation should identify and explain the economic relationship, especially in the case when the underlying of the hedging instrument is not the same as the risk being hedged.

2.4 Economic relationship and the effect of credit risk

Question
What factors should be considered when assessing whether credit risk dominates the economic relationship?

Illustration
An entity hedges an exposure to commodity price risk using an uncollateralised derivative. The counterparty to that derivative experiences deterioration in its credit standing at a time when the risk in the commodity price has not moved significantly.

Solution
One of the hedge effectiveness requirements is that the effect of credit risk does not dominate the value changes that result from the economic relationship. Although IFRS 9 does not define what ‘dominate’ means, it is clear that the effect of credit risk (for example, measured through credit or debit valuation adjustments) should be considered on both the hedged item and the hedging instrument.

If the effects of changes in credit risk significantly outweigh the effect of changes in commodity prices on the fair value of the hedging instrument, the credit risk could be viewed to dominate the economic relationship.
However, where the credit risk appears to dominate because the fair value changes in a given period are relatively small, this does not necessarily mean that credit risk dominates the overall hedging relationship.

As part of the effectiveness testing, entities should assess at each reporting date whether past credit changes have dominated and whether future credit changes are likely to dominate the hedge relationship. This assessment should be for the remaining term of the hedging relationship and not only for the period immediately prior to the reporting date. This assessment should also take into consideration the entity’s risk management policies, to the extent they are part of the hedge documentation. For example, an entity’s risk management policy might be to mitigate the significance of credit risk by requiring the replacement of counterparties when they are downgraded and/or experience a severe deterioration in their financial condition. When such a replacement of counterparty is included in the hedge documentation (or when it complies with the criteria for novation of derivatives) it does not result in the extinguishment of the hedge relationship.

If any credit deterioration is not severe and the change in value of the hedging instrument is still largely dependent on the variation in commodity price, the hedge accounting relationship continues, but ineffectiveness has to be recorded in the financial statements.

### 2.5 Hypothetical derivative and rebalancing

**Question**

Should the terms of a hypothetical derivative be reset to have a zero fair value after rebalancing?

**Solution**

No. Rebalancing differs from discontinuation and re-designation of a hedging relationship, because it is considered a continuation of the hedging relationship. Rebalancing refers to the quantity of either the hedging instrument or the hedged item and not to their characteristics. As such, any hypothetical derivatives that have been created in order to perform effectiveness testing would not be reset to have a zero fair value. However, they would need to be adjusted for changes in the hedged quantity (that is, due to changes in the revised hedge ratio).

### 2.6 Delta-neutral hedging strategies

**Question**

How are delta-neutral hedging strategies accounted for under the IFRS 9 general hedge accounting model?

**Illustration**

An entity with a delta-neutral strategy adjusts the hedging instrument to ensure matching between:

- a hedged item whose value changes with the change of the underlying hedged risk, for example, a monetary item of CU100 in foreign currency has a delta of 100%, meaning that, if the foreign exchange rate moves 1% against the functional currency of the entity, the value of this monetary item will change by 1%; and
- a hedging instrument, for example, a portfolio of options in which the notional is periodically adjusted so that the change in the full fair value of the hedging instrument matches the change in value of the hedged item.

To match the items above, assuming the option portfolio has an average delta of 50% (that is, the change in the full fair value of the portfolio is 0.5% for a change of 1% of the underlying hedged risk), the notional of the option portfolio should be CU200. If the delta then moves to 40% because the foreign exchange rate moves further out of the money, the notional of the option portfolio should be adjusted to CU250 (that is, CU250*40% = CU100).

**Solution**

In a delta-neutral hedging strategy an entity periodically adjusts its hedging instrument in order to maintain a desired hedge ratio.

It is clear that IFRS 9 does not allow a hedging relationship to be de-designated and re-designated each time the hedging instrument is adjusted, if there is still an economic relationship and the risk management objective is still the same. However, it can be considered that amendments to the hedged ratio constitute ‘rebalancing’ as defined by IFRS 9. By rebalancing, it is possible to avoid any de-designation and re-designation that would otherwise be required when the hedging instrument is adjusted and can therefore be considered as a continuation of an existing hedge relationship.

Hedge documentation needs to be adjusted contemporaneously, and ineffectiveness is recognised at the time of each rebalancing.
3. Accounting
3.1 Time value of options

Question
How should the time value of options be determined?

Solution
The fair value of an option can be divided into two portions: the intrinsic value and the time value. The time value of an option is the remaining value after deducting the intrinsic value.

Intrinsic value is the difference between the strike price and the current market price of the option’s underlying. IFRS 9 does not provide specific guidance on how this is calculated. As a result the intrinsic value is calculated either as:

- the difference between the strike price of the option and the spot price of the underlying multiplied by the notional amount of the option (that is, the ‘spot intrinsic value’); or
- the difference between the strike price of the option and the forward price of the underlying multiplied by the notional amount of the option (that is, the ‘forward intrinsic value’).

3.2 Hedging with forwards, options and financial instruments with currency basis spreads

Question
Are forward points, the foreign currency basis spread and the time value of options accounted for in the same way?

Solution
It depends. IFRS 9 introduced changes to hedge accounting when hedging with forward contracts, options and financial instruments with foreign currency basis spreads.

An entity can choose to separate:

- the time value from the intrinsic value of an option;
- the forward points from the spot component of a forward contract; or
- the currency basis spread from the remaining value of a financial instrument (for example, a cross-currency swap).

3.3 Aligned time value of an option

Question
When hedging with options, how should the ‘alignment’ principle be applied?

Illustration
An entity’s risk management objective is to hedge the forecast purchase of 100 tonnes of a commodity on April 15, 20X1 against an increase in price above a specified threshold (that is, a one-sided risk). To meet this objective, the entity purchases a commodity option. The underlying commodity is the same and the option’s strike price matches the specified threshold. However, it matures on April 30, 20X1.

Solution
The entire time value of the option relates to the hedged item if the critical terms (such as the notional amount, strike price, term and underlying) of the option and the hedged item are aligned.

In the above illustration, the entity cannot consider that the time value of the option is aligned with the hedged item because the dates do not match.

When the critical terms of the hedging option are not aligned with the critical terms of the hedged item, the entity determines the aligned time value using the valuation of the option whose critical terms would exactly match the critical terms of the hedged item (that is, in the above example an option that matures on 15 April 20X1).
If, at inception of the hedging relationship, the actual time value is higher than the aligned time value, the entity should:

a. determine the amount that is accumulated in a separate component of equity on the basis of the aligned time value; and
b. account for the differences in the fair value changes between the actual and aligned time values in profit or loss.

If, at inception of the hedging relationship, the actual time value is lower than the aligned time value, the entity should determine the amount that is accumulated in a separate component of equity by reference to the lower of the cumulative change in fair value of the actual and the aligned options. Any differences should be recognised in profit or loss.

The entity may need to use an option pricing model to measure the initial value of an option having characteristics that exactly match the critical terms of the hedged item.

3.4 Measuring ineffectiveness when hedging changes in spot foreign currency rates

Question
When an entity hedges changes in a spot foreign currency rate, how is the time value of money included when measuring ineffectiveness?

Illustration
Entity XYZ whose functional currency is the euro, decides to hedge the foreign currency risk of USD1m highly probable sales in 9 months’ time. In accordance with its risk management policy it designates changes in the spot foreign currency rate as the hedged risk. The designated hedging instrument is the spot component of a three month foreign exchange forward contract, which will be rolled forward until the time the forecast sales occur.

Solution
IFRS 9 requires that entities consider the time value of money when measuring hedge effectiveness. Hence, for the purpose of measuring ineffectiveness the hedged item should be measured on a present value basis (which means the spot foreign currency rate will need to be discounted). This is a change from IAS 39 under which entities often do not discount when hedging changes in the spot rate.

More specifically, when measuring ineffectiveness, the forecast sales are translated at the current spot rate at the date of the effectiveness test and this amount should be discounted over nine months to reflect the present value of the hedged item.

This is compared to the spot component of the forward contract which should be discounted over its three month maturity. This will create ineffectiveness, which must be recorded directly in profit or loss.

It should be noted that for a short term hedge between currencies with limited interest rate volatility the impact of this discounting may not be significant. However it could be more significant for longer term hedges. Entities will therefore need to consider the impact of the IFRS 9 requirements on their risk management strategy and whether to designate the forward or spot rate.

3.5 Hedging with non-zero fair value derivatives

Question
What is the impact of hedging with a swap whose fair value is not nil at the inception of the hedge?

Illustration
Entity A enters into a new variable rate borrowing. In accordance with its risk management strategy, it wants to fix the interest rate of the debt. In order to do so, entity A designates as the hedging instrument an existing receive variable/pay fixed interest rate swap (that is, the interest rate swap was originated well before the issuance of the new borrowing) having the same or similar maturity, same or similar payment dates, same variable interest rate and same nominal amount as this new borrowing.

Solution
The fair value of an existing hedging instrument at the time of its designation is normally not nil. The entity would therefore expect that the changes in the fair value of the hedging instrument will not perfectly offset the changes in the fair value of the hedged item (a hypothetical derivative created to represent this hedged item would have a nil fair value at the time of designation).

Consequently, over the remaining life of the hedging instrument, the financing element associated with the off-market value of the swap will create ineffectiveness.

Unlike IAS 39, IFRS 9 does not require the 80-125% ‘highly effective’ bright-line for the application of hedge accounting. Therefore, if using a non-zero fair value swap complies with the entity’s risk management strategy and the IFRS 9 criteria for using hedge accounting are met (including the proper determination of the hedge ratio), hedge accounting can be applied. Ineffectiveness will however need to be calculated and accounted for in profit or loss.
3.6 Foreign currency basis spread

**Question**
Does foreign currency basis spread result in ineffectiveness in a hedge relationship?

**Illustration**
Company K, a Euro functional currency entity, issues a USD variable rate debt. Company K’s risk management strategy is to hedge the variability in both interest rates and foreign exchange rates. To meet its risk management strategy, entity K enters into a floating-to-fixed cross-currency interest rate swap with matching critical terms (that is, matching currencies, payment dates, re-pricing dates, and interest basis on the variable leg).

**Solution**
Yes, foreign currency basis will result in ineffectiveness if not excluded from the designation of the hedging instrument.

A cross-currency interest rate swap or currency forward contract includes a pricing element (liquidity charge or credit) that reflects the fact that the derivative instrument results in the exchange of two currencies in the future. This pricing element is usually referred to as ‘foreign currency basis spread’. On the other hand, a hedged item (for example, a fixed or variable interest rate debt denominated in foreign currency) is usually a single currency instrument that, unlike the cross-currency interest rate swap, does not involve the exchange of two currencies. Hence its value does not include a foreign currency basis spread.

As the foreign currency basis spread is a feature in the hedging instrument that is not included in the hedged item, it results in ineffectiveness in the hedging relationship.

In order to better depict this ineffectiveness, IFRS 9 allows separation of the initial foreign currency basis spread. If so separated, it is accounted for as a cost of hedging in a way similar to the forward points in a forward contract.

In the specific fact pattern described above, the cost of hedging relates to a time-period-related hedged item (that is, the duration of the debt issued), and the critical terms of the hedged item and the hedging instrument fully match. So the full changes in the foreign currency basis spread can be recognised in other comprehensive income and accumulated in a separate component of equity. The initial value of the foreign currency basis spread will be amortised to profit or loss over the related hedging period.

3.7 Inter-company derivatives

**Question**
How should a group present the impact of inter-company derivatives?

**Illustration**
Group E hedges forecast purchases and sales denominated in foreign currencies arising from some of its subsidiaries whose functional currency is the same as that of the parent. Group E hedges on a net basis in its consolidated accounts using external derivatives (foreign currency forward contracts) entered into centrally by group E’s treasury.

Internal derivative agreements are contracted between each subsidiary and group E’s treasury function to provide a hedge on a gross basis at a subsidiary level.

**Solution**
Although, hedge relationships with internal derivatives do not qualify for hedge accounting under IFRS in the group’s financial statements, hedge accounting could be applied in the separate financial statements of the subsidiaries.

Disclosure on segmental reporting under IFRS 8 is through the eyes of management. Therefore, provided the effects of hedge accounting associated with internal derivatives are included in the internal financial information reported to the Chief Operating Decision Maker, group E reflects the effects of the underlying hedges in its segmental reporting disclosures.

3.8 Cash flow hedge of the foreign currency risk of a forecast business combination

**Question**
Can a hedge of the foreign currency risk on a forecast business combination be accounted for as a cash flow hedge?

**Illustration**
Entity A, whose functional currency is the Euro, on 1 March 20X1 started negotiations with entity B (an overseas entity) in order to take control of entity B and gain access to the overseas market. On 1 August 20X1, entity A and entity B agree the key terms of the transaction, including the purchase price which will be denominated in a fixed amount of the
overseas currency. However, entity A has not yet received a required approval from the overseas authorities. On 29 March 20X2, entity A and entity B agree the full terms of the transaction and the overseas authorities have granted their approval. At this point, there are no significant uncertainties that could affect the completion of the business combination. Entity A's risk management strategy is to hedge forecast transactions in a foreign currency as soon as they are highly probable. The entity intends to use a forward contract to hedge the payment in the overseas currency.

**Solution**

Yes. However, the forecast business combination must be highly probable in order to be an eligible hedged item.

- Could entity A apply hedge accounting to the forecast transaction at 1 August 20X1?

  It depends. In order to apply hedge accounting to a forecast transaction, this transaction must be highly probable. Whether this is the case will depend on the specific facts and circumstances and the significance of the outstanding contingencies affecting the completion of the transaction. In some territories, a regulatory process could be considered perfunctory or a ‘rubber stamping’ of the agreement and so the transaction can be considered highly probable before receiving the formal approval. However, in other cases the regulatory approval process will be more substantive and there will be significant uncertainty over whether it will be received, such that the transaction can be considered highly probable only once the formal approval is received.

- Can entity A designate only the spot component of the forward contract as the hedging instrument?

  Once the hedge accounting criteria are met, the entity can choose either to designate the full fair value of the forward contract as a hedging instrument or to separate the forward points and to designate as hedging instrument only the spot component (on a discounted basis).

**3.9 Accounting for basis adjustment on transition to IFRS 9**

**Question**

How should a basis adjustment be accounted for on transition to IFRS 9?

**Illustration**

An entity may elect to hedge a forecast transaction that subsequently results in recognition of a non-financial asset or a non-financial liability. When the hedged transaction occurs, IAS 39 provides the entity with an accounting policy choice to:

- recycle the amount that has been accumulated in the cash flow hedge reserve to profit or loss in the same period or periods during which the non-financial asset acquired or non-financial liability assumed affects profit or loss; or
- adjust the initial cost or other carrying amount of the non-financial asset or the non-financial liability (often referred to as ‘basis adjustment’).

Entity A previously chose to recycle when the hedged cash flows affected profit under IAS 39 (that is, it did not basis adjust the carrying amount of the non-financial asset or non-financial liability).

**Solution**

IFRS 9 eliminates the accounting policy choice provided by IAS 39. The entity must account for the basis adjustment.

On transition to IFRS 9, an entity should apply the new hedge accounting requirements to all hedge relationships existing on the date of transition. Accordingly, the amount accumulated in the cash flow hedge reserve at the date of initial application should be removed from the reserve and included in the carrying amount of the corresponding non-financial asset or non-financial liability. Entity A (a calendar-year reporter) would make an adjustment on 1 January in the year of adoption of IFRS 9. The comparative balance sheet (at 31 December) is not adjusted. This basis adjustment is not a reclassification adjustment, and so it does not affect Entity A’s statement of comprehensive income.
4. Hedged item
4.1 Layer components

**Question**

How could an entity designate layers of hedged items in practice?

**Illustration**

An entity intends to designate a layer component as a hedged item and is considering the following scenarios:

<table>
<thead>
<tr>
<th>Underlying</th>
<th>Layer designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part of monetary transaction</td>
<td>- The next USD10,000 cash flows from sale denominated in USD after the first USD20,000 in March 200X</td>
</tr>
<tr>
<td>Part of physical or other transaction volume</td>
<td>- The first 100 barrels of oil purchases in June 200X</td>
</tr>
<tr>
<td>- The first 100 MWh of electricity sales in June 200X</td>
<td></td>
</tr>
<tr>
<td>Layer from a nominal amount</td>
<td>- The last EUR80,000 to be paid of a EUR100,000 firm commitment</td>
</tr>
<tr>
<td>- The last GBP20,000 to be paid of a GBP100,000 fixed rate bond</td>
<td></td>
</tr>
<tr>
<td>- The first of CAD30,000 to be paid from a total CAD100,000 of fixed-rate debt that can be prepaid at fair value</td>
<td></td>
</tr>
</tbody>
</table>

**Solution**

The layer components in the scenarios above are eligible hedged items. Under IFRS 9 a layer component might be specified from either a defined nominal amount or a defined, but open, population. It must be sufficiently specific so that, when a transaction occurs or the value of some items in the population change, it is clear whether or not the transaction (or item) was part of the hedge relationship.

A layer component that includes a prepayment option is an eligible hedged item only if the designated layer includes the effect of the related prepayment option when determining the change in fair value of the hedged item.

For a layer component of a nominal amount in a fair value hedge, the total defined nominal amount must be tracked in order to track the designated bottom/top layer.

4.2 Forecast inter-company dividends

**Question**

Are forecast inter-company dividends which are undeclared but expected to be paid and received in a foreign currency an eligible hedged item in consolidated financial statements?

**Illustration**

Company Q, whose functional currency is the GBP, has a subsidiary in the US, whose functional currency is the US dollar. On 1 January 200X, company Q's management forecasts that it will receive an USD100m dividend from its US subsidiary in six months. The inter-company dividend was declared and approved on 30 April 200X, at which time both company Q and its subsidiary recognised the dividend as a receivable and payable respectively.

The foreign currency dividend receivable in company Q's balance sheet was retranslated at the reporting period end, 31 May 200X, resulting in a foreign currency loss. The subsidiary paid the dividend on 30 June 200X, resulting in a further foreign currency loss.

Company Q's management designated the highly probable inter-company dividend as the hedged item in a cash flow hedge from 1 January 200X to 30 June 200X, in order to hedge the exposure to changes in the GBP/USD exchange rate.

**Solution**

No. IFRS 9 does not permit hedge accounting to be applied to hedges of inter-company transactions in consolidated accounts except in certain specified circumstances, such as where the foreign currency risk on intra-group monetary items is not eliminated on consolidation.

Undeclared inter-company dividends are not foreign currency transactions that are eligible hedged items under IFRS 9, because they do not affect the consolidated income statement; they are distributions of earnings.

On the other hand, the foreign currency exposure arising from the dividend receivable in US dollars recognised on 30 April 200X could be designated as a hedged item, because it gives rise to foreign currency gains and losses that do not fully eliminate on consolidation and therefore affect the consolidated income statement. Company Q's management can therefore only apply hedge accounting from 30 April 200X, when the dividend is declared, until 30 June 200X when the cash is received.
4.3 Forecast inter-company foreign currency transactions

Question
Are highly probable forecast inter-company foreign currency transactions eligible hedged items in a cash flow hedge in consolidated financial statements?

Illustration
Group X comprises a French parent, whose functional currency is the Euro, and a number of subsidiaries with various functional currencies. A UK subsidiary, whose functional currency is the GBP, is proposing to hedge highly probable forecast sales of inventory to a US sister company whose functional currency is the US dollar. The sister company markets and sells the inventory to external customers in the US. The intra-group sales are denominated in US dollars and the UK subsidiary proposes to hedge the associated currency risk with a USD/GBP forward contract.

Solution
It depends. IFRS 9 does not permit hedge accounting to be applied to hedges of inter-company transactions in consolidated accounts except in certain circumstances, including where the foreign currency risk on intra-group monetary items is not eliminated on consolidation.

The forecast intra-group sales of inventory that will be sold to external parties can be the hedged item in a cash flow hedge.

In the above illustration, the transactions are denominated in a currency (USD) other than the functional currency of the entity entering into them (GBP); and the onward sales of the inventory to external customers means that the foreign currency risk arising from the intra-group sales will affect consolidated profit or loss, therefore, these are eligible hedge items.

To the extent the hedge is effective, the gain or loss on the hedging instrument is initially recognised in other comprehensive income and deferred in equity and is reclassified to the consolidated income statement when the external sale is recognised by the USD subsidiary or if the inventory is written down.

This solution is not applicable, by analogy, to inter-company hedging instruments.

4.4 Entity’s own shares

Question
Can a forecast transaction in an entity’s own shares be designated as the hedged item?

Illustration
Company P has repurchased some of its own shares (treasury shares). It plans to resell the shares in the market in six months’ time to finance a new investment. The entity purchases a cash-settled put option on its own shares, to protect itself against the risk that the proceeds from the future sale of the treasury shares will decrease because of a fall in the share price.

Solution
No. Under IFRS 9, a recognised asset or liability or a forecast transaction qualifies as a hedged item only if it exposes the entity to a particular risk that can affect profit or loss (or other comprehensive income (‘OCI) where the entity hedges an equity investment for which it elects to present fair value changes in OCI).

A purchase, sale, issue or cancellation of an entity’s own equity instruments is recorded in equity and hence does not affect either profit or loss or OCI.

4.5 Assessment of whether a transaction is ‘highly probable’

Question
How does an entity assess whether a transaction is ‘highly probable’?

Solution
The assessment of whether a forecast transaction is highly probable should be based on observable evidence.

Examples of facts that can be taken into consideration for a hedge of a transaction includes a history of entering into the same or similar transactions (for example, there has been no individual month in which sales in a specified foreign currency have been less than x million), the current size of order books, and economic data relevant to the period of the forecast transaction.
In general, the further into the future the forecast transaction is expected to occur, the more difficult it will be to demonstrate that the transaction is highly probable. For example, the proportion of forecast future sales that are highly probable might be relatively high in the short term, but it decreases as the period to the future sales increases. A sales budget alone is normally not persuasive evidence of a forecast transaction being highly probable, unless there are other supporting circumstances, such as having confirmed orders or the entity having a history of always selling at least the budgeted amount where there have been no recent changes to the budgeting process.

Where the forecast transaction is a single, one-off transaction (such as the forecast issuance of debt), the assessment of whether the transaction is highly probable will need to address other factors such as the availability of alternative sources of finance, the status of negotiations with the counterparty, the business purpose for which the finance is being raised, and the consequences for the business of not proceeding with the debt issuance.

### 4.6 Forecast cash flow in associates

**Question**
Can a forecast cash flow of an associate be designated as a hedged item in consolidated financial statements?

**Illustration**
Company R has a 25% investment in a foreign entity over which it has significant influence. It therefore accounts for the foreign entity as an associate using the equity method (IAS 28). The associate's functional currency, in which most of its sales and costs are denominated, differs from company R's functional currency. In company R's consolidated financial statements, its share of the associate's net results will fluctuate with the changes in the exchange rate.

Company R intends to designate a portion of the associate's forecast cash flows as the hedged item in a hedge of foreign currency risk.

**Solution**
No. Under the functional currency concept in IAS 21, a cash flow that is denominated in the functional currency of an associate does not give rise to a foreign currency (transaction) exposure for the associate in its separate financial statements. The variability in company R’s share of its associate’s net results arises only in its consolidated financial statements and arises from the translation of the associate's financial statements into the group's presentation currency. This is a translation rather than a transaction exposure.

IFRS 9 permits an entity to apply hedge accounting to a hedge of the translation foreign currency risk arising on the existing net investment in a foreign operation; but this should not be applied, by analogy, to forecasts of future cash flows or profits of the investee.

### 4.7 Translation risk versus transaction risk

**Question**
Where a subsidiary has a functional currency that is different from the parent, can the parent hedge the forecast transactions of the subsidiary into the parent's functional currency?

**Illustration**
Company V’s functional currency is the Euro. It has a US subsidiary, subsidiary C, whose functional currency is the US dollar. Subsidiary C has highly probable forecast sales denominated in Japanese yen.

Company V has hedged subsidiary C’s forecast Japanese yen inflows using external foreign currency forward contracts (Japanese yen/Euro) to hedge the exposure back into Euros (company V’s functional currency).

Company V intends to designate, in the consolidated financial statements, the forward contracts as hedging instruments in a cash flow hedge of the forecast transactions denominated in Japanese yen.

**Solution**
No. The Japanese yen/Euro forward contracts taken out by company V do not qualify for cash flow hedge accounting in its consolidated financial statements.

There is no Japanese yen/Euro cash flow exposure in the consolidated income statement. The income statement will be exposed to Japanese yen/US dollar movements, as subsidiary C will translate its Japanese yen sales into its own functional currency (US dollar). The exposure to movements in US dollars against Euros constitutes a translation risk rather than a cash flow exposure, and therefore cannot be the subject of a cash flow hedge.

On the other hand, it is possible for subsidiary C to designate a yen/US dollar forward contract as a cash flow hedge of its yen/US dollar transaction exposure in both entity C’s and entity V’s consolidated financial statements. Also, parent company V, in its consolidated financial statements, can designate a Euro/US dollar forward as a hedge of its net investment in subsidiary C. However, this would not include the forecast sale transactions in subsidiary C.
4.8 What may be included in a net investment and qualify as a hedged item

**Question**

What amount of a net investment in a foreign operation qualifies as a hedged item in a net investment hedge?

**Illustration**

Company W, whose functional currency is the Euro, has a wholly owned US subsidiary, subsidiary D, whose functional currency is US dollars.

The carrying value of subsidiary D’s net assets is USD70 million. Subsidiary D’s net assets include an inter-company borrowing of USD10 million received from company W, which is not expected to be settled in the foreseeable future.

Subsidiary D’s management predicts that it is highly probable that it will:

- earn a profit of at least USD8 million; and
- pay a dividend of USD5 million to company W.

**Solution**

Company W can hedge up to USD80 million of its net investment in subsidiary D at the date of hedge designation. The USD80 million is represented by:

- USD70 million of subsidiary D’s net assets; and
- USD10 million inter-company loan. This loan could be designated as a hedged item, because it is not expected to be settled in the foreseeable future and, in substance, forms part of company W’s net investment in subsidiary D (IAS 21.15).

Subsidiary D’s forecast profits (USD8 million) and forecast inter-company dividend payments (USD5 million) cannot be included in the hedged item, because they do not form part of company W’s existing net investment. The undeclared forecast inter-company dividend payments (USD5 million) do not qualify as hedged items, because they will not affect reported net profit or loss. As the profits are earned, they increase the net investment and can then be included in the hedged item. When dividends are paid, the amount covered in the net investment hedge might need to be reduced accordingly.

4.9 Hedging cash flows in specific time buckets

**Question**

Can management designate forecast sales as the hedged item if it is unable to link the forecast future cash flows to specific individual sales transactions?

**Illustration**

Company T manufactures and sells ice cream. Its functional currency is the Euro, and 30% of its sales are made in the UK and denominated in GBP. Management forecasts highly probable sales in the UK for the next summer season on a monthly basis. Using these forecasts, the entity enters into forward contracts to sell GBP in exchange for Euros. Due to the nature of its business, company T is not able to forecast or track individual sales transactions.

**Solution**

Yes. Management can designate the forecast sales as the hedged item by using the layer approach. It would designate the hedged item as the first GBP x million of highly probable cash flows from sales in specific time buckets (for example, GBP sales in each month). To qualify for hedge accounting, the designation must be sufficiently specific to ensure that, when a forecast transaction occurs, it is possible to determine objectively whether that transaction is or is not one that is hedged. In addition, IFRS 9 requires that such forecast sales be discounted from the date they are expected to occur. In the event the date is not aligned to that of the hedging instrument, some ineffectiveness will arise.

If the hedged cash flows do not occur in the designated time bucket, management cannot continue to defer the related hedging gains/losses in equity and must transfer them to the income statement. Under IFRS 7, an entity will need to disclose the amounts reclassified from the cash flow hedge reserve into profit or loss because the hedged item has affected profit or loss separately from the amounts that have been transferred because the hedged future cash flows are no longer expected to occur.
4.10 Hedging cash flows when their maturity is not exactly the same as that of the hedging instrument

**Question**
Can an entity designate a hedging relationship when it is unlikely that the maturity of the hedging instrument and the hedged item will match?

**Illustration**
Company J enters into cash flow hedges of highly probable forecast sales in a foreign currency (USD) in June 20X6. It is not possible to determine exactly when in June the individual sales will occur. Company J therefore decides to hedge the first x million of sales in USD in June 20X6. The hedging instrument, however, will mature on a specified day (for example, 15 June 20X6).

**Solution**
Yes. There is no requirement for the maturity date of the hedged item to match exactly the maturity of the hedging instrument. However, company J’s risk management strategy should recognise and accept that timing mismatches might give rise to ineffectiveness. In addition, if the derivative matures after the hedged item, it cannot be designated only for the change in value of the derivative attributable to the period until the hedged item occurs. This is because, under IFRS 9, it is not possible to designate only a portion of the time period for which a hedging instrument remains outstanding.

4.11 Partial term hedging

**Question**
Can foreign currency risk be hedged for a portion of the time to maturity of a hedged item?

**Solution**
It depends on whether the hedged item is a financial instrument. See illustrations below:

**Illustration 1 – Portion of time until a forecast sale**
Company A, whose functional currency is the Euro, has a forecast GBP sale in nine months’ time and wishes to hedge the foreign exchange exposure for the first three months. In order to hedge the expected foreign exchange volatility in the first three months, it entered into a three-month forward to swap GBP for Euros. Could this relationship be designated as a partial term hedge of the foreign currency exposure for only the first three months?

**Solution**
No, IFRS 9 does not permit partial term hedges other than in certain specific circumstances (see illustration 2 below). However, Company A could potentially designate a hedge for the full period using the forward rate method provided the mismatch is not so long as to invalidate the economic relationship. The mismatch in periods between the hedged item and the hedging instrument will potentially create ineffectiveness because the hypothetical derivative used to measure effectiveness would need to reflect the term of the hedged item. Such ineffectiveness will arise regardless of whether the designated hedged risk is the forward or the spot foreign currency rate, due to the fact that the requirement in IFRS 9 to consider the time value of money is applicable in both circumstances.

**Illustration 2 – Portion of loan period**
Company A, with a Euro functional currency, has issued a two-year floating rate USD loan. It wishes to hedge the foreign exchange exposure and the change in the value of the principal associated with foreign currency changes in the first year of the loan. After that date, it expects to enter into other USD activities which might provide a natural offset to the foreign exchange exposure. Company A has entered into a one year forward contract to hedge the spot exchange risk on the principal. Could this relationship be designated as a cash flow hedge?

**Solution**
Yes, partial term hedging is permitted for this specific fact pattern if the designation is in line with the entity’s risk management strategy. The Implementation Guidance in IAS 39 (F.2.17 on partial term hedging) allows hedging a financial instrument (the hedged item) for only a portion of its cash flows or fair value, if effectiveness can be measured and the other hedge accounting criteria are met. Although IFRS 9 did not carry forward the IAS 39 Implementation Guidance, in its Basis for Conclusions, the IASB emphasised that not carrying forward the Implementation Guidance did not mean that it had rejected that guidance. In a hedge of the spot foreign currency risk, effectiveness should be measured based on discounted spot rate (that is, on a present value basis).

It should be noted that hedging with a time portion of a hedging instrument, such as the first year of a two year swap, is not permitted.
4.12 Hedge of commercial paper roll-over program

**Question**
Can a commercial paper roll-over program qualify as a hedged item?

**Illustration**
Entity A, in order to meet its current and future cash liquidity needs, enters into a US commercial paper issuance program where the company regularly issues short-term commercial paper. The commercial paper is issued either on a one-month, three-month or six-month maturity depending on the market situation and the entity’s liquidity forecast. These are periodically rolled over. The entity’s liquidity policy is to have a minimum of USD250 million and a maximum of USD500 million outstanding at all times under this program. This commercial paper program creates variability in the future interest cash flows of entity A.

The risk management strategy of entity A is to fix the interest rate on its debt for a proportion of 60% to 80% of its total debt on a three-year horizon. In line with this strategy, entity A contracts a pay fixed/receive LIBOR three-month swap for a nominal of USD200 million and a maturity of 3 years (that is, 75% of the minimum estimated future issuance of commercial paper).

**Solution**
Yes. The roll over program can qualify as a hedged item, provided that it is highly probable for the duration of the hedging relationship. The hedging relationship can be designated, provided it meets the qualifying criteria in IFRS 9 (for example, that an economic relationship exists between the one-three – and six-month LIBOR rates inherent in the commercial paper rollovers and the three-month LIBOR rate underlying the interest rate swap settlements).

Ineffectiveness will be measured using a hypothetical swap with characteristics that match the characteristics of the commercial paper issuance program (for example, with a variable leg based on an average rate with a relevant mix of one-, three- and six-month LIBOR).

4.13 Shares in subsidiaries, associates or joint ventures

**Question**
Can a parent’s equity investment in a subsidiary, associate or joint venture be designated as a hedged item for foreign currency risk in its separate financial statements?

**Illustration**
Company S, the parent company of a group, has entered into a foreign currency forward contract to hedge the net investment in one of its foreign subsidiaries. It applies net investment hedge accounting in its consolidated financial statements. Management would also like to designate its equity investment in the subsidiary as the hedged item in company S’s separate financial statements.

**Solution**
Yes. Although net investment hedge accounting can only be applied in the consolidated financial statements, company S can designate its equity investment in the foreign subsidiary as the hedged item in a fair value hedge of the foreign currency risk associated with the shares, provided that all of the conditions for hedge accounting are met. These conditions include the need to designate a clear and identifiable exposure to changes in foreign exchange rates in the shares held, which is most likely to exist if the foreign subsidiary has the same functional currency as the currency being hedged.

Hedging a non-monetary item for foreign currency risk is explicitly acknowledged by IAS 39 Implementation Guidance (IG) E3.4 and such guidance has been carried forward, along with certain other IGs, into the IFRS 9 Implementation Guidance.

Equity investments in associates and joint ventures can similarly be designated as hedged items in fair value hedges in the separate financial statements.
4.14 Forecast debt where the currency of issuance is not certain

**Question**
Can an entity designate its exposure to functional currency interest payments linked to a forecast debt issuance as a qualifying hedged item, even if the currency of issuance is not yet known?

**Illustration**
At 1 January 200X, entity A, whose functional currency is the Euro, intends to issue a variable interest rate debt in six months’ time in order to finance future activities. Depending on the market conditions existing at 1 July 200X, entity A will decide whether the debt is issued in Euros or in US dollars. If the debt is issued in US dollars, then at the debt issuance date (1 July 200X) entity A will enter into a cross-currency swap in order to convert the US dollar exposure on the debt to a Euro exposure.

Management wants to hedge its exposure to variable interest rates. On 1 January 200X, it contracts a forward-starting interest rate swap (that is, an interest rate swap that will start on 1 July 200X) which is denominated in Euros.

**Solution**
Yes. Under IFRS 9, an aggregated exposure that is a combination of a forecast transaction that could qualify as a hedged item and a derivative can be designated as a hedged item, provided that the aggregated exposure is highly probable and, once it has occurred and is therefore no longer forecast, it is eligible as a hedged item.

As a result, the proposed designation is acceptable, provided that it is in line with entity A’s risk management strategy and objectives. In the illustration, the designated hedged item would be the highly probable variable interest payments in Euros (entity A’s functional currency), arising either from the Euro debt or the aggregated exposure (US dollar debt swapped into Euros by using the cross-currency swap).

4.15 Layering a derivative on top of a hedged item

**Question**
Is it possible to layer basis swaps on top of a hedged item in a hedge relationship?

**Illustration**
According to its business plan, entity A will have liquidity requirements between EUR200 million and EUR300 million during the next three-year period. In order to meet this funding requirement, management decides to enter into a revolving facility with bank B. The entity can draw up to EUR350 million at a variable rate, being either EURIBOR three-month + spread or EURIBOR one-month + spread. The chosen rate is EURIBOR three-month.

Its risk management strategy regarding the exposure to interest rate risk is to fix the interest rate of at least 60% of its floating rate debt. In order to comply with this strategy, the treasurer has contracted an interest rate swap where entity A receives EURIBOR three-month and pays 2.6% fixed rate on a principal amount of EUR200 million with a three-year maturity.

One year later, due to differences in liquidity of EURIBOR one-month and EURIBOR three-month markets, entity A decides to roll its revolving facility on a EURIBOR one-month basis and enters into a basis swap receive EURIBOR one-month/pay EURIBOR three-month in order to avoid discrepancies between the interest rate swap and the borrowing.

**Solution**
Yes. Under IFRS 9, it is possible to designate a risk exposure and a derivative as a hedged item (commonly referred to as ‘aggregated exposure’). As per IFRS 9 the items that constitute the aggregated exposure remain accounted for separately, however, an entity considers the combined effect of these items for the purpose of assessing hedge effectiveness and measuring ineffectiveness.

In this illustration, entity A designated the floating-to-fixed interest rate swap as the hedging instrument in a cash flow hedge of the interest rate risk exposure on its floating rate loan (the ‘first level hedge relationship’). One year later, the loan’s reference rate is changed from three-month to one-month EURIBOR, which increases entity A’s exposure to variability in cash flows on the aggregated exposure (that is, the floating rate loan and the interest rate swap that are included in the first level hedge relationship).

Under IFRS 9 entity A can designate the basis swap as the hedging instrument in a cash flow hedge of the aggregated exposure (the ‘second level hedge relationship’). When the second level hedge relationship starts, the first level hedge relationship continues as a separate hedge relationship.
4.16 Risk components of non-financial items

Question
What factors should be considered in determining whether a risk component is implicit in the fair value or cash flows of an entire item, in order to be an eligible hedged component?

Solution
To be eligible for designation as a hedged item, a risk component must be a separately identifiable component, and the changes in cash flows or fair value of the item attributable to change in that component must be reliably measurable.

IFRS 9 also requires the qualifying criteria for an eligible risk component to be assessed in the context of the particular market structure to which the risks relate and in which the hedging activity takes place.

It will often be obvious whether a risk component is an eligible hedged component for a financial instrument, because the fair values of financial assets and liabilities are usually determined using formulae with inputs determined through established market practice.

However, in the case of a non-financial item, for there to be a hedgeable risk component it would generally be necessary for the price of the entire item to be built up from various components using a ‘building block’ approach to demonstrate the market structure. For example, it should be clear that informed buyers and sellers of this non-financial item would consider the price of the component (such as raw materials, labour, overheads and profit margin) in establishing the price of the overall non-financial item. Consideration of the approach of other market participants is necessary to demonstrate that the market structure supports the designation as a risk component.

The evidence required to support the market structure is a matter of judgement based on facts and circumstances, but should not rely solely on the entity’s own negotiating position or standard costing systems.

4.17 Risk components in manufacturing processes

Question
An entity wishes to hedge a non-contractually specified risk component of a non-financial item. If the risk component is an input in the manufacturing process of the non-financial item, is this sufficient for the risk component to be an eligible hedged item?

Solution
No. In general, it will be necessary for the risk component to be an input in the manufacturing process in order to be considered as ‘separately identifiable’, and so meet the criteria in IFRS 9. However, merely being an input in the manufacturing process is not, in itself, sufficient. Paragraph B6.3.9 of IFRS 9 requires that the qualifying criteria for an eligible risk component should be assessed in the context of the particular market structure to which the risks relate and in which the hedging activity takes place.

For example, wool is an input in the manufacturing process for woollen sweaters. Whether the wool price is a hedgeable risk component of the total price of the sweater depends on the market structure for the particular sweater. In the luxury apparel market, the price of the raw material (wool) will often have a low impact on the price of a woollen sweater that will instead mainly reflect the perceived value of the brand. In such a market, the wool price is unlikely to be an eligible risk component for a retailer. On the other hand, the price of a ‘no frills’ sweater of a generic design might be driven by the cost of the inputs into the manufacturing process (such as raw materials, labour and overheads) and a production margin. This is likely to give rise to a hedgeable risk component for the wool price component.

While it will, in general, be necessary for the risk component to be an input into the manufacturing process, there might be rare cases where the market structure is clear that a non-financial risk component is a separately identifiable component, even in the absence of a physical presence. For example, in some markets a long-term supply contract for natural gas may be based on a contractually specified formula that refers to indices including, inter alia, the price of crude oil. If a supply contract is in place, the crude oil price component would be considered to be an eligible risk component, because it is ‘explicitly specified’ in the contract. Equally, if a supply contract is not yet in place but the market commonly prices purchases of natural gas under long-term contracts in this manner, the crude oil price component would still be a hedgeable non-contractually specified risk component. This would be true for a highly probable forecast purchase of natural gas beyond the period for which liquid derivatives are available, despite crude oil not being an input in the manufacturing process for natural gas, when such pricing mechanism for natural gas (that is, the linkage to the crude oil prices) is the ‘industry norm’. A different conclusion may be reached in a jurisdiction where pricing for natural gas is not based on crude oil, for example, where there is a liquid spot and forward market for natural gas for the period being hedged.
4.18 Reliably measurable risk components

Question

How should an entity determine whether changes in cash flows or fair value attributable to changes in a hedged component are reliably measurable?

Solution

Changes in cash flows or fair value attributable to changes in the hedged component would be considered reliably measurable where the price of a non-contractually specified risk component has a predictable and direct impact on the price of the entire item. A linear relationship, where changes in the price of the risk component have an equivalent (though not necessarily one-to-one) impact on the price of the entire item, in the absence of changes in other inputs, would generally create such a predictable and direct impact.

Nevertheless, a non-linear relationship might also be sufficient for a risk component to be considered an eligible hedged component. For example, the prices of many items are only updated periodically, or where input prices increase or decrease beyond a reasonable threshold, creating ‘stepped’ changes in the link between the price of the risk component and the price of the entire item. Accordingly, an entity will need to analyse the nature of the non-linear relationship, and the reasons for that relationship, to establish whether the risk component is implicit in the fair value or cash flows of the entire item and hence is an eligible hedged component.

Factors to be considered in making this assessment should include:

- Absolute magnitude of the ‘steps’, before a change in the price of the risk component influences the change in price of the entire item. For example, the price of a luxury wool sweater will have limited correlation with the price of the raw material (wool).
- Frequency of updates to the price of the entire item in response to changes in the price of the risk component.
- Sensitivity of changes in the price of the entire item to its supply and demand (and the supply and demand of substitutes), compared with changes in the price of the risk component.
- Whether changes to the price of the entire item are one-sided (such as increases only) or prices are ‘stickier’ in one direction (for example, price increases occur more frequently or in greater magnitude than decreases).
- The reason that changes in the price of the component are not passed on immediately. For example, where increases in the price of the component are not passed on because the market cannot fully absorb such changes, this might indicate that the market structure is not consistent with a ‘building block’ approach.

Whether or not the impact of a risk component on the price of the entire item is non-linear is factored into the assessment of whether it qualifies as an eligible hedged component of the non-financial item; if an eligible risk component exists, it does not impact hedge effectiveness. Accordingly, once an eligible risk component has been identified, it is assumed to have a linear impact on the hedged item. This is because the non-linear element in the overall pricing reflects the willingness of an entity to absorb certain input price movements within its profit margin rather than pass the increase on to customers. In such circumstances the underlying relationship is linear, but the entity is willing to temporarily reduce or increase its margin. Accordingly, part of the profit margin is inversely correlated with the risk component for short periods and/or small price changes, which does not preclude the use of a linear relationship for assessing hedge effectiveness. If this inverse correlation exists for longer periods or larger price changes, however, it would call into question the original assessment that there is an eligible risk component and the validity of the hedge as a risk management strategy.

Assessing whether a risk component is implicit in the fair value or the cash flows of the entire item, and whether the changes in fair value or cash flows that are attributable to the risk component are reliably measurable is highly judgemental. Practice is likely to develop based on risk management strategies undertaken by entities. Management will need robust evidence, demonstrating the particular market structure, to support its assertion that the risk component qualifies as a hedged item. Given the judgement involved this could be a significant accounting judgement under IAS 1 that would require disclosure in the financial statements.
5. Hedging instrument
5.1 Derivatives with knock-in and knock-out features

**Question**
Can an option with knock-in or knock-out features qualify as a hedging instrument?

**Illustration**
Management of company U has invested into securities that bear a floating money market rate (that is, three-month LIBOR plus a spread). At inception, the current three-month LIBOR interest rate is 3.5%. It wishes to enter into a floor option in order to limit the downside in interest rates. But to reduce the cost of the hedging strategy, management is considering purchasing a LIBOR three-month interest rate floor with an out-of-the-money strike rate of 3% that is contingent on the LIBOR three-month rate not falling below 2% at some time during its life (such contingency is commonly known as a ‘knock-out barrier’).

**Solution**
It depends. There is no specific prohibition on designating an option with a knock-in or a knock-out feature as a hedging instrument, provided that the derivative is not a net written option. A combination of options is not a net written option when the entity does not receive a net premium for it, the critical terms of the options (except for the strike prices) are the same and the nominal amount of the written option is not greater than the notional amount of the purchase option. Furthermore, even though IFRS 9 does not require a quantitative assessment of effectiveness, an entity would need to consider whether this hedging transaction is in line with its risk management strategy and whether there is an economic relationship between the hedged item and the hedging instrument.

Company U does not expect LIBOR rates to fall below 2% and therefore does not expect the knock-out barrier to be activated; so it considers that there is an economic relationship between the hedging instrument and the hedged item, and it expects that the change in the present value of the hedged item’s interest rate flows will be partially offset by the change in the fair value of the hedging instrument. This assumption should be reassessed prospectively at each reporting date in order to determine whether hedge accounting can continue to be applied. Should company U expect the barrier to be activated, then hedge accounting should be discontinued because there would no longer be an economic relationship between the hedged item and the hedging instrument.

However, when calculating and posting fair value movements on the hedging instrument and hedged item, there will be ineffectiveness to record, because the hedged item does not contain a matching knock-out feature.

If hedge effectiveness is calculated on the basis of intrinsic value, the provisions of aligned time value need to be taken into account.

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5.2 Three-way options

**Question**
Does a three-way option qualify as a hedging instrument under IFRS 9?

**Illustration**
A company with functional currency of Euro has highly probable forecast purchases of USD100. To hedge the corresponding foreign currency (FX) risk, the company enters into a ‘three-way’ option strategy, which comprises:

- a written FX put for 100 USD (strike 0.7 EUR per USD);
- a purchased FX call for 100 USD (strike 0.8 EUR per USD);
- a written FX call for 100 USD (strike 0.9 EUR per USD).

There is no net premium received for this combination.

The strategy is illustrated in the chart below:

- When the FX rate is less than 0.7 EUR, the company pays the difference between the market price and 0.7 EUR.
- When the FX rate is between 0.7 and 0.8 EUR, there is no financial exchange.
- When the FX rate is between 0.8 and 0.9 EUR, the bank pays the difference between 0.8 EUR and the market price.
- When the FX rate is more than 0.9 EUR, the bank pays the difference between 0.8 and 0.9 EUR. The gain is limited.

The company intends to designate the combination of these derivatives as the hedging instrument in a cash flow hedge of the forecast purchases in USD.
Solution

No. Net written options are not allowed as hedging instruments. Factors to assess that a combination of derivatives is not a net written option are:

- no net premium is received, and
- except for the strike prices, the critical terms and conditions of the written option component and the purchased option component are the same (including underlying, currency and maturity date). Also, the notional amount of the written option component is not greater than the notional amount of the purchased option component.

This three-way option is not eligible as a hedging instrument, because the notional amount of the written options (USD200) is greater than the notional amount of the purchased option (USD100).

5.3 Currency basis swap

Question

Can a currency basis swap qualify as a hedging instrument in a cash flow hedge?

Illustration

The risk management strategy of entity A, whose functional currency is the Euro, is to hedge any financial position against foreign currency risk. Entity A funds its activities issuing US dollar variable rate debt and decides to hedge its foreign currency exposure with a variable-to-variable cross-currency swap (or currency basis swap).

Solution

Yes, if the entity designates the hedged risk as the foreign currency spot component in the US dollar debt. The cash flow hedge is a hedge of the exposure to variability in cash flows that is attributable to a particular risk associated with all or a component of a recognised asset or liability or a highly probable forecast transaction, and could affect profit or loss. The fact that interest rates are not fixed in this example does not preclude hedging the foreign currency risk on the debt.

There are two possible accounting treatments when using a variable-to-variable cross-currency swap in a cash flow hedge:

- If the entity decides to separate the foreign currency basis spread component from the entire fair value of the currency basis swap, the treatment of the foreign currency basis spread is similar to the treatment of the forward points (that is, amortised on a rational basis to the income statement, with any further change in fair value being recognised in other comprehensive income and accumulated in equity).

- If the entity decides to designate the entire fair value of the currency basis swap as the hedging instrument, the effective portion of the entire fair value movements on the swap is accounted for in other comprehensive income and accumulated in equity, with any ineffectiveness (including that which is linked to the foreign currency basis spread) being recognised in the income statement.

One method commonly used by entities to assess hedge effectiveness is the hypothetical derivative method. In this scenario, the hypothetical derivative is a variable USD to variable EUR swap that reprices on an overnight basis and therefore, some ineffectiveness may arise due to the difference in repricing periods between the hedged item (that is, the hypothetical derivative) and that on the floating rate of the actual derivative (currency basis swap).

5.4 Inter-company non-derivative financial instruments in consolidated financial statements

Question

Can a foreign currency inter-company loan be designated as a hedging instrument in consolidated financial statements?

Illustration

Swiss group G, whose presentation currency is the Swiss franc (CHF), has a substantial investment in subsidiary A, whose functional currency is the USD. The parent company, whose functional currency is the CHF, also has an inter-company borrowing denominated in USD from subsidiary B (whose functional currency is the USD). Although the inter-company borrowing will be eliminated on consolidation, the currency gain or loss that arises in the parent company from translating the borrowing into CHF will affect the consolidated income statement.

The parent intends to designate the inter-company borrowing as the hedging instrument in a hedge of the net investment in subsidiary A.

Solution

No. IFRS 9 states that only instruments that involve a party external to the group can be designated as a hedging instrument. This applies irrespective of whether a proposed hedging instrument, such as an inter-company borrowing, will affect consolidated profit or loss.
5.5 Inter-company derivatives in consolidated financial statements

Question
Can an inter-company derivative be designated as a hedging instrument in consolidated financial statements?

Illustration
Company C uses internal derivative contracts to transfer risk exposures between different legal entities within the group or between divisions within a single legal entity. For example, a subsidiary’s foreign exchange risk might be transferred to the central treasury unit through an internal foreign exchange forward contract.

Company C intends to designate a hedging relationship using an internal derivative contract.

Solution
No. An inter-company derivative cannot be designated as a hedging instrument in Company C’s consolidated financial statements. Only instruments external to the reporting entity (that is, group C) can be designated as hedging instruments. Internal derivatives can be used to document the link between an external hedging instrument (held, for example, by the parent company or a treasury unit) and a hedged item in another group entity, such as an operating subsidiary, provided that all gains and losses arising on the internal derivative are eliminated on consolidation.

Company C and its subsidiaries might be able to achieve hedge accounting in their separate financial statements, provided the qualifying criteria in IFRS 9 are met. An entity can also apply hedge accounting in segment reporting under IFRS 8 if that is the information reported to the Chief Operating Decision Maker.

5.6 Derivative on an entity’s own equity instruments

Question
Is it possible to use a derivative on an entity’s own equity instruments in a hedge relationship?

Illustration
Company F has several share-based compensation schemes for employees and is also using share-based payments to pay consultants providing services to the entity. Company F is exposed to movements in the fair value of its own equity instruments, either through cash payments based on the fair value movements or through being required to issue (or, alternatively, to acquire and deliver) its own equity instruments to the employee or consultant.

Management of Company F enters into a financial instrument, for example, an option to purchase its own ordinary shares at a fixed price, to hedge the corresponding risk.

Company F intends to use this type of financial instrument in hedging relationships to hedge the risk related to share-based compensation or share-based payments.

Solution
It depends on both the classification of the financial instrument and the accounting treatment of the item being hedged.

If the financial instrument is classified as an equity instrument under IAS 32, it cannot be designated as a hedging instrument. For example, an option for the entity to purchase a fixed number of its own shares for a fixed price with no cash settlement alternative is an equity instrument under IAS 32 and cannot therefore be designated as a hedging instrument. Conversely, a net cash-settled option is classified and accounted for as a derivative and could be designated as a hedging instrument in a cash flow hedge, provided the conditions in the next paragraphs are met.

For a hedge to qualify for hedge accounting, the hedged item must expose the entity to a risk that could affect profit or loss (or other comprehensive income in the case where the hedged item is an equity instrument for which the entity has elected to account for fair value changes in other comprehensive income).

For example, if the hedged item is a forecast future repurchase of its own shares by the entity, it will never have an impact on the income statement and cannot qualify for hedge accounting. If the hedged item is a cash-settled share-based payment, changes in the fair value of the hedged item will have an impact on the income statement and can therefore qualify for cash flow hedge accounting if all other requirements for hedge accounting are fulfilled, including that it is highly probable that the amount of payment that is designated as being hedged will be made on the cash-settled share-based plan. In making this assessment, any performance or other vesting conditions in the share-based payment should be considered.
5.7 Non-derivative financial instruments as hedging instruments of foreign currency risk

**Question**
Is it possible to use a non-derivative financial instrument accounted for at amortised cost as a hedging instrument?

**Illustration**
Company A, whose functional currency is the Euro, has a foreign currency debt of USD50 and a highly probable forecast to sell a product for USD100 in six months’ time. The debt is accounted for at amortised cost and revalued for changes in the foreign currency spot rate through profit or loss each month.

Company A plans to designate the foreign currency component of the debt as the hedging instrument of the foreign currency exposure arising on a proportion of the highly probable forecast sale in a cash flow hedge.

**Solution**
Yes, for hedges of foreign currency risk. The foreign currency risk component of a non-derivative financial asset or a non-derivative financial liability could be designated as a hedging instrument, provided that it is not an investment in an equity instrument. The foreign currency risk component of a non-derivative financial instrument is determined in accordance with IAS 21.

In this case, the discounted spot component of the retranslation of the debt would be deferred in other comprehensive income and recycled to profit or loss when the hedged sale impacts profit or loss.

5.8 Non-derivative financial instruments at fair value through profit or loss as hedging instruments

**Question**
Is it possible to use a non-derivative contract measured at fair value through profit or loss as a hedging instrument?

**Illustration**
Entity ABC holds a one-year maturity note with a yield that is indexed on the price of gold. Under IFRS 9, such a loan is accounted for at fair value through profit or loss (FVTPL).

Entity ABC also has firm commitments to purchase gold in one year’s time in order to manufacture certain computer components.

Entity ABC intends to designate the note indexed to gold prices as the hedging instrument of the commodity price risk exposure on the firm commitment to purchase gold for hedge accounting purposes.

**Solution**
Yes. Provided the hedge accounting criteria are met, a non-derivative financial asset or a non-derivative financial liability measured at fair value through profit or loss can be designated as a hedging instrument. The exception to this is a financial liability designated as at fair value through profit or loss for which the change in fair value that is attributable to changes in entity ABC’s own credit risk is presented in other comprehensive income.

5.9 Novation of a derivative previously designated as hedging instrument

**Question**
What is the accounting for the novation of a derivative which was designated as a hedging instrument in a hedge relationship?

**Solution**
In general, the novation of a derivative to a new counterparty causes the de-designation of the hedging relationship in which this derivative was designated as a hedging instrument. The new derivative then needs to be re-designated as the hedging instrument in a new hedging relationship. IFRS 9 allows for an exception to this general rule, where the novation has the following cumulative characteristics:

- it is done as a consequence of laws and regulations;

- the parties to the hedging instrument agree that one or more central clearing counterparties replace the original counterparties to become the new counterparty to each of the parties; and

- any changes to the derivative are limited to the changes that are necessary to effect such replacement.

If a novation of a derivative meets these strict criteria, the original hedge relationship is not discontinued and the original hedging instrument is replaced by the novated derivative. Other elements of the hedging relationship (such as characteristics of the hypothetical derivative, and amounts accumulated in other comprehensive income) should not be modified.

There may be additional limited circumstances where a novation may not result in the discontinuation of hedge accounting, but that will depend on specific facts and circumstances.
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