

A Closer Look More opportunities to hedge account non-financial items



Introduction

This month the International Accounting Standards Board (IASB) issued a draft of the new proposals for hedge accounting under IFRS. These long awaited reforms will eventually form part of the new standard on financial instrument accounting, IFRS 9, and are expected to be effective from 1 January 2015. The draft will be available on the IASB website until early December.

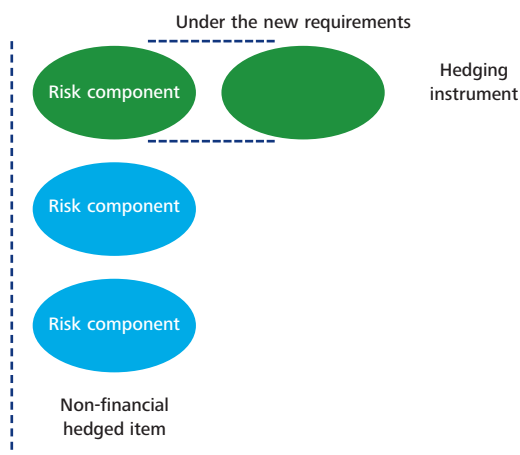
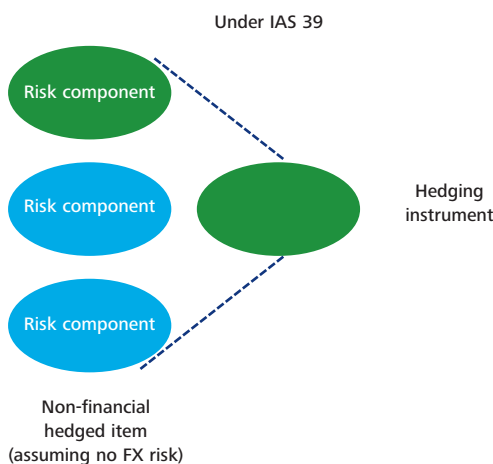
The IASB has proposed a number of significant changes to the current IAS 39 hedge accounting requirements. The overall effect will be more opportunities to apply hedge accounting and consequently less profit or loss volatility arising from risk management activities. To date, the restrictive accounting rules have led to some companies not applying hedge accounting or in some cases changing their risk management approach to become eligible. Hence, the lifting of these restrictions could prompt changes in risk management and more application of hedge accounting.

To highlight the practical effect of some of the new proposals we have written a series of examples contrasting the current IAS 39 requirements with the new proposals. This publication is the second in that series¹ and will explore the changes to the eligibility of risk component hedging for non-financial items.

Background

Under IAS 39, a non-financial item may be designated as a hedged item in its entirety (i.e. all risks), for FX risk or for all risks except FX risk. As a result, if an entity economically hedges a non-financial item for a risk-component other than FX risk, it is not permitted to designate a hedge for that component in isolation. Generally, in such cases an entity either does not apply hedge accounting or designates the entire item, or a proportion of it. Not applying hedge accounting or designating the entire item when this is not the intention of the economic hedge gives rise to profit or loss volatility that does not reflect the risk management objective of the hedge.

Hedging risk components



¹ The first in the series explored the changes to the accounting of option contracts designated as hedging instruments and the new hedge effectiveness assessment requirements. This is available for download at www.iasplus.com/en/publications/ifrs-in-focus/2012/a-closer-look

To address this issue, the IASB has introduced a principle that permits risk components of non-financial items to be eligible hedged items if they are separately identifiable and reliably measurable. In practice the ability to meet these criteria will depend on the specific facts and circumstances. Generally it would be easier to demonstrate that a risk component is “separately identifiable and reliably measurable” if it is a price variable referenced in a contract (i.e. a contractually specified risk component) than if the component is not contractually specified but implied.² For non-contractually specified risk components it will be necessary to provide sufficient analysis about the market structure of the item from which the risk component is identified in order to demonstrate that the hedged component is eligible (see below).

This paper considers the following two examples:

- Cash flow hedge of diesel price risk component (a contractually specified risk component).
- Cash flow hedge of risk components of jet fuel (non-contractually specified risk components).

The examples focus on specific commodity risks, however, the principles in this paper could equally apply to other risks in non-financial items (for example transport costs in purchase contracts or inflation clauses in operating leases). Note that the numbers used in these examples are for illustrative purposes only.

Cash flow hedge of diesel price risk (a contractually specified risk component)

The risk management objective

Entity X is a large retailer with an extensive network of shops and distribution centres throughout the UK. Fuel costs for the entity are significant. To reduce profit or loss volatility arising from changes in fuel prices, the entity’s risk management policy allows it to hedge a component of the fuel price risk using diesel swaps for periods of up to three years.

The entity purchases fuel under a five year contract which specifies the price per litre. Payments under the contract are made on a monthly basis and are determined using the following formula:

$$\text{Price} = \{[(95\% * \text{Diesel}) + (5\% * \text{Gasoil})] * \text{Spot Rate} * \text{Conversion Factor} * \text{Duty}\} + \text{Margin}$$

Where:

- Diesel is the average price for the month in USD;
- Gasoil is the average price for the month in USD;
- Spot Rate is the average GBP:USD spot rate for the month;
- Conversion Factor is 1183 litres per metric tonne;
- Duty is the UK fuel duty rate; and
- Margin is a fixed amount set by the supplier per litre.

The amount of fuel to be purchased under the contract is not specified. Driver’s fill up their vehicles as needed at the supplier’s petrol stations and the volume used is billed on a monthly basis. The margin will be renegotiated annually throughout the life of the contract.

Entity X chooses to economically hedge up to 90% of the diesel price component of the forecast fuel purchase under the contract, in GBP, with GBP diesel swaps. We will consider the treatment of one such contract:

Trade date: 1 January 20X2

Maturity date: 31 December 20X4

Notional: 1 million litres per month

Calculation periods: Each calendar month

Pay: £0.50 per litre

Receive: £(Diesel*Spot Rate*Conversion Factor) per litre
Where:

- Diesel is the average price for the month;
- Spot Rate is the average GBP:USD spot rate for the month.
- Conversion Factor is 1183 litres per metric tonne;

Payment dates: 7 working days after the relevant calculation period

Hedge accounting under IAS 39

- Under IAS 39, Entity X could designate the forecast fuel purchase in a hedge of either the:
 - total fuel price risk (i.e. ‘all risk’);
 - FX risk; or
 - all risk excluding FX risk (i.e. the fuel price risk in USD).

² See paragraphs 6.3.7 and B6.3.8 – B6.3.15 of the IASB’s Hedge Accounting Draft

- Entity X contemplates designating all risk as the hedged risk for the first million of fuel purchases each month until 20X4 but chooses not to for the following reasons:
 - The hedge accounting designation of all price risk does not reflect the economics of the actual economic hedge as the entity is only hedging for the price variability arising from changes in the diesel price. To hedge account for all price risk, which would be permitted, would result in volatility in the profit or loss account due to hedge ineffectiveness resulting from changes in risks not economically hedged (e.g. gasoil, duty, margin) and hence not reflect the risk management objective of the hedge.
 - To apply hedge accounting Entity X would need to demonstrate the hedge relationship is effective both prospectively and retrospectively. Because of the difference between all price risk and the actual price in the derivative ineffectiveness is inevitable and failure to meet the 80 to 125 per cent offset requirement is a realistic possibility which would mean that hedge accounting cannot be applied.
 - To assess hedge effectiveness and measure hedge ineffectiveness it would be necessary to measure risks that are not economically hedged. For example, if hedge effectiveness is tested using the hypothetical derivative method, Entity X would need to derive a contract specific forward curve incorporating all pricing components of the contract price payable (i.e. including the gasoil, duty and margin components as well as the overall effect of FX rates) in order to determine the fixed leg on the hypothetical derivative. This pricing information would also be needed as valuation inputs to subsequently value the hypothetical derivative after inception of the hedge. Constructing such forward curves is deemed by the entity to be too onerous because of the limited observable market data (for example it would likely have to conduct further analysis to demonstrate the validity of its valuation assumptions made).
- The prospective effectiveness test involves demonstrating that there is an economic relationship³ between the hedged item and the hedging instrument. For the diesel hedge this is demonstrated by matching the critical terms of the hedged diesel risk component and the diesel swap. Note that it would be possible to designate gasoil as a hedged item with a proportion of the diesel swap to the extent there is an economic relationship between gasoil and diesel prices. In such a case, it would be necessary to perform sufficient analysis to demonstrate an economic relationship as the critical terms would not match (it would instead be a “proxy” hedge). It would also be necessary to determine the appropriate hedge ratio.⁴
- Hedge ineffectiveness must still be measured (as with IAS 39). However, this may be done using the hypothetical derivative method based on the hedged risk component (not based on all price risk as in IAS 39). This is more reflective of the economic hedge resulting in an accounting result that more closely reflects the risk management activities of the entity.

A hedge designation for the diesel price risk may also be achievable when the diesel price risk is not a contractually specified risk component but is still separately identifiable and reliably measurable. The challenges faced when hedging non-contractually specified risk components are discussed in more detail below.

Hedge accounting under proposed IFRS 9

- IFRS 9 allows the designation of risk components in non-financial items if the components are separately identifiable and reliably measurable. In this case the diesel price risk is separately identifiable as it is contractually specified. It is also deemed by the entity to be reliably measurable for the period of the hedge. As a result, Entity X chooses to apply hedge accounting for the diesel price risk component in GBP.
- The hedge is formally designated on 1 January 20X2 as a cash flow hedge of the highly probably forecast purchase of the first million litres of fuel during each calendar month until the end of 20X4.
- Under IFRS 9 prospective effectiveness will need to be assessed at the beginning of each hedged period. Retrospective effectiveness testing is not required.

Cash flow hedge of risk components of jet fuel (non-contractually specified risk components)

The risk management objective

Entity Y is an airline based in northern Europe. Jet fuel represents a significant proportion of operating costs and so fluctuations in the jet fuel price considerably impact profitability. The entity's risk management policy is to manage its jet fuel price risk exposure out to 24 months as follows:

12-24 months

Brent crude oil futures purchased on a monthly basis to hedge the crude oil component of a proportion of forecast jet fuel purchases. These contracts would be closed out 12 months prior to the month of purchase.

6-12 months

Gasoil futures purchased on a monthly basis to hedge the gas oil component of a proportion of forecast jet fuel purchases. As noted below, these contracts are retained to combine with basis swaps transacted up to 6 months prior to the purchase of jet fuel.

Up to 6 months

Over the counter basis swaps transacted to combine with gasoil futures to hedge the jet fuel price risk. Under the contract it pays a fixed amount in exchange for the differential between the average jet fuel price and gasoil prices for the month of purchase. Both contracts would be net settled prior to purchase of jet fuel.

³ See paragraphs 6.4.1(c) (i) and B6.4.3 – B6.4.5 of the IASB's Hedge Accounting Draft

⁴ See paragraphs 6.4.1(c) (ii) and B6.4.8 - B6.4.10 of the IASB's Hedge Accounting Draft

This hedging strategy, like many other hedges of commodities seen in practice, is designed to balance the economic effectiveness of the hedge with the cost of the hedge.

Cost of hedging

The liquidity of the market in which the hedging instrument is traded will affect the “cost” of the hedge as the more liquid the market is, the lower the liquidity premium will be.

In this example, beyond 12 months the market for crude oil futures is the most liquid. Hence the liquidity premium for entering into a crude oil derivative would be significantly less than that for entering into a 24 month jet fuel contract.

Markets for shorter dated instruments are generally more liquid than those for longer dated instruments, so as the delivery date approaches it becomes more economically viable to use alternative contracts such as gasoil futures and jet fuel contracts to more fully hedge the jet fuel price risk.

Effectiveness

Crude oil: Jet fuel is a distillate of crude oil. In the long run crude oil and jet fuel prices are correlated and an increase or decrease in the price of crude oil will filter through to distillate prices simply because crude oil is used to produce jet fuel. However, in the short term the relationship is less correlated and the difference between the price of a barrel of oil and the price of the refined products (the “crack spread”) can be volatile. Factors contributing to this volatility include short term demand and supply, refinery utilisation, regulation and seasonal variation.

Consequently the correlation between crude oil and jet fuel *forward* prices is closer than that between *spot* prices.

Gasoil: Gasoil is also a distillate of crude oil. In general, price movements between jet fuel and gasoil are more closely correlated than those between jet fuel and crude oil. This is because some factors that cause the crack spread to vary will not impact the price differential between gasoil and jet fuel (the “jet diff”). However, the jet diff is not stable and other factors such as different responses to seasonality between the distillates will cause volatility.

Again, the correlation between gasoil and jet fuel *forward* prices is closer than that between spot prices.

Jet fuel: Use of a jet fuel contract would allow for the terms of the hedged item and the hedging instrument to be matched. However, in practice factors such as timing, transfer costs and location could result in hedge ineffectiveness, for example a Gulf Coast jet fuel contract would not be a perfect hedge of jet fuel purchased in Europe.

Hedge accounting under IAS 39

- The economic hedge is not designated by Entity Y as a hedging relationship under IAS 39. Instead the entity gives disclosure in its financial statements to explain its risk management strategy and its impact on the figures reported.
- Consistent with the example of a cash flow hedge of diesel price risk described above Entity Y cannot designate a component of risk for hedge accounting purposes that reflects the economic risk that is hedged with the derivative. As Entity Y is not hedging *all price risk* it would prove difficult to demonstrate that the hedge would be highly effective prospectively. Even if prospectively it could be demonstrated that it would be highly effective there would be considerable hedge ineffectiveness recognised in profit or loss resulting from changes due to the risks not economically hedged (e.g. the crack spread). Further, it would be necessary to measure risks that are not economically hedged, for example, if hedge effectiveness is tested using the hypothetical derivative method, Entity Y would need to construct a jet fuel forward curve for periods when there is no liquid market in order to determine the fixed leg on the hypothetical derivative and to subsequently value it.

Hedge accounting under proposed IFRS 9

- To reduce P&L volatility, and given its hedging strategy, Entity Y chooses to designate the following hedging relationships under IFRS 9:
 - The Brent crude oil futures as a hedge of the variability in cash flows of its forecast jet fuel purchases due to changes in the Brent crude oil price (i.e. a risk component hedge) until 12 months prior to the forecast jet fuel purchase; and
 - The gasoil futures as a hedge of the variability in cash flows of their forecast jet fuel purchases due to changes in the gasoil price risk component until six months prior to the jet fuel purchase.
- Entity Y chooses not to designate the combined gasoil futures and OTC basis swap in a proxy hedge of the jet fuel price risk because of the short term nature of the hedge.
- Under the proposed IFRS 9 each hedging instrument would need to be formally designated in a hedging relationship if hedge accounting is to be applied (i.e. the same as IAS 39).
- Unlike IAS 39, the proposed IFRS 9 will allow the designation of risk components for non-financial items if they are separately identifiable and reliably measurable.

- Because in this example the risk components are not contractually specified, Entity Y will have to demonstrate that the price risk components that it wishes to designate are separately identifiable and reliably measurable.
- As Entity Y is purchasing a crude oil distillate in northern Europe, one would expect the price of the distillate to have a Brent crude oil (European crude oil) price risk component but not a WTI crude oil (North American crude oil) price risk component.
- However, the fact that the jet fuel purchased is physically derived from Brent crude oil does not on its own mean that it represents a price risk component. What needs to be considered is the market structure and pricing of the jet fuel to be purchased. For example, in the market that Entity Y operates, beyond 12 months the Brent crude oil futures market is liquid but the gasoil and jet fuel markets are not. Markets exist to trade the price differentials between Brent crude oil and gasoil and jet fuel. Hence, for this period, the price of gasoil and jet fuel is determined based on the quoted Brent crude oil price and quoted price differentials (i.e. crack spread and jet diff). Given this market structure, Entity Y demonstrates that the Brent crude oil price and gasoil price represent eligible risk components of the jet fuel forward price for the periods hedged by Entity Y.

Closing remarks

Allowing hedge accounting for risk components in non-financial items will increase the scope for applying hedge accounting. However the challenge will be greater when hedging risk components that are not contractually specified. Analysis to demonstrate that the hedged risk component is separately identifiable and reliably measurable will be necessary. Once these criteria are satisfied the next hurdle will be to demonstrate the hedge is expected to meet the hedge effectiveness requirements. Given the proposed IFRS 9 effectiveness requirements are less restrictive than IAS 39 and based on the economic relationship this should be less problematic. A more detailed consideration of the new hedge effectiveness requirements is the subject of the next publication in this series. If you would like to discuss these examples or any others with one of our hedge accounting specialists please get in touch with one of the contacts below.

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