Hedge accounting may finally make sense!

The International Accounting Standards Board (IASB) has released a new financial instruments standard, IFRS 9 *Financial Instruments* (AASB 9 in Australia) which significantly changes the rules on applying hedge accounting. These revised rules make hedge accounting far more achievable than is the case under the current rules and are likely to make achieving hedge accounting for iron ore producers far easier.

In this article we look at how hedge accounting can now be applied to hedging price components under IFRS 9 and why it is a problem under the existing financial instruments standard IAS 39 *Financial Instruments: Recognition and Measurement* (AASB 139 in Australia). We consider two examples:

- Hedging the iron ore index component of the iron ore sales contract, and
- Hedging the diesel price index component of diesel purchases.

Background

IAS 39 was introduced as a 'temporary' accounting standard in 1999, in order for the IASB to be able to offer a standard on financial instruments and allow IFRS to meet all conditions placed upon it in order to be adopted as the suite of accounting standard in the European Union (EU) from 2005 onwards.

This 'temporary standard' is very rules based and in the case of hedge accounting set complex rules that in many instances did not reflect the economics or hedge objectives of an entity's hedging strategy. The basic premise under IAS 39 is that 'hedge accounting was a privilege not a right!'

What is Hedge accounting? ... Why do entities want to achieve hedge accounting?

The basic premise of IAS 39 and IFRS 9 is that all derivatives must be recorded at fair value at each reporting date. Unless hedge accounting is applied, the movement in the fair value of the derivative goes immediately to the income statement.

Example 1

1 August 2014

Entity A is an iron ore producer. It enters into a contract to supply 100,000 metric tonnes (mt) of iron ore to be priced against the March 2015 index.

Entity A wishes to fix the price for its sale of iron ore in advance, so it enters into a derivative contract to sell 100,000mt of iron ore for $100/mt to settle against the average of the March 2015 index.

Note: Economic risk management aim is to lock in the sales price for 100,000mt of iron ore at $100/mt.

31 December 2014

The March 2015 iron ore index average is $60/Mt.

The derivative is now an asset worth $4,000,000($100-$60x100,000mt) representing the gain the holder of the derivative will make by selling iron ore at $100/mt compared with a market price of $60/mt.

Fair value movement of derivative from 1/8/14 to 31/12/14 = is $4,000,000 [($100-$60) x 100,000mt)] (For simplicity we have ignored the effect of time value of money and any credit/debit value adjustments).

Journal entry if hedge accounting is not applied:

	DR	CR
DR Derivative asset	$4,000,000	
CR Profit or loss		$4,000,000

This accounting does not follow Entity A's hedge objectives of the transaction i.e. to lock in a sales price for iron ore based on the average of the March 2015 index, instead it gives rise to significant 'profit and loss volatility', bringing forward a notional derivative gain on 31 December 2014.

31 March 2015

If the iron ore index average remains at $60/mt when the iron ore is delivered in March 2015 then the entries will be (assuming cost of production is $55 per tonne):

	DR	CR
DR Receivable	$6,000,000	
CR Revenue ($60 x 100,000mt)		$6,000,000

To recognise revenue and receivable at the iron ore index average for March 2015.

	DR	CR
DR Cost of goods sold	$5,500,000	
CR Inventory		$5,500,000

To derecognise inventory and recognise costs of goods sold at $55 per tonne.

	DR	CR
DR Cash	$4,000,000	
CR Derivative asset		$4,000,000

To derecognise the derivative asset and recognise cash when the derivative is settled.

Impact on the income statement when there is no hedge accounting

	2014	2015
Sales	-	$6,000,000
Gain/loss from derivatives	$4,000,000	-

Cost of goods sold	-	($5,500,000)
Profit or loss	**$4,000,000**	**$500,000**

This obviously does not reflect the economic hedge objective which was to protect the producer from price volatility on known sales. In order to record the hedging profit in 2015 the entity would have to apply hedge accounting. Whilst still following the basic requirement that all derivatives must be recorded at fair value at each reporting date, for 'cash flow' hedges, hedge accounting allows any gain or loss on the derivative to be deferred by making an entry into equity (other comprehensive income (OCI)).

31 December 2014 journal entry if hedge accounting is applied:

	DR	**CR**
DR Derivative asset	$4,000,000	
CR Equity (other comprehensive income)		$4,000,000

To recognise the derivative at fair value and the changes in equity (other comprehensive income).

When the iron ores are delivered and sold on 31 March 2015, the journal entries are:

	DR	**CR**
DR Receivable	$6,000,000	
CR Revenue ($60 x 100,000mt)		$6,000,000

To recognise revenue and receivable at iron ore index average for March 2015.

	DR	**CR**
DR Cost of goods sold	$5,500,000	
CR Inventory		$5,500,000

To derecognise inventory and recognise costs of goods sold at $55 per tonne

	DR	**CR**
DR Cash	$4,000,000	
CR Derivative asset		$4,000,000

To derecognise the derivative asset and recognise cash as the derivative is closed out.

	DR	**CR**
DR Equity (other comprehensive income)	$4,000,000	
CR Revenue		$4,000,000

To reclassify the gain in OCI to revenue as the iron ore sale impacts profit or loss.

Impact on income statement when hedge accounting is applied

	2014	2015
Sales	-	$10,000,000
Gain/loss from derivatives	-	-
Cost of goods sold	-	($5,500,000)
Profit or loss	**-**	**$4,500,000**
Equity (OCI)	**$4,000,000**	**-**

(Note: This example assumes all the hedge effectiveness criteria are met and the hedge is 100% effective.)

Problems in achieving hedge accounting under IAS 39

Hedge accounting under IAS 39 is very difficult, with numerous rules laid out as to the criteria that entities must satisfy in order to qualify for hedge accounting. The two most troublesome criteria that have prevented iron ore producers from applying hedge accounting under IAS 39 have been the prohibition to hedge pricing components and the strict 80-125% hedge effectiveness test. These two restrictions have resulted in a number of hedging transactions simply failing hedge accounting under IAS 39.

Pricing components of non-financial items

Hedge accounting must apply to non-financial items as a whole under IAS 39. This results in ineffectiveness because the derivative is often only taken out for a certain pricing component with the sales or purchase contract e.g. iron ore index component of the iron ore sales contract, or diesel price index component of diesel purchases.

Hedge effectiveness

IAS 39 contains very strict rules around hedge effectiveness in terms of both requiring a hedging relationship to sit within an 80 to 125 % effectiveness band and very strict rules as to how effectiveness will be calculated (which includes the mandatory requirement to perform both forward and backward looking mathematical effectiveness tests).

Hedging the iron ore index pricing component of iron ore sales

Iron ore supply contracts are rarely priced just based on the iron ore index alone. It is more common for iron ore supply contracts to contain price adjustments for quality, freight and other elements.

The existing IAS 39 financial instruments standard does not allow hedge accounting to be applied to the index pricing component only. Hedge accounting must be applied to the entire supply contract (including the other pricing adjustments). This often leads to the breaching of the highly effective (i.e. offset must be within 80-125%) requirement and therefore failing hedge accounting.

The new IFRS 9 standard is less restrictive and allows hedge accounting to be applied to price components (e.g. iron ore index price component) within a supply contract.

Example 2 – Iron ore sales

On 1 January 2015, Entity B enters into a contract to supply 100,000 metric tonnes of iron ore in 12 months' time. The supply contract price is based on the pricing formula: The Steel Index (TSI) TSI 62% Fe CFR Tianjin Port adjusted for discount or premium for the iron content, chemical specification, sizing adjustments, freight and other pricing adjustments.

To secure a fixed price for the iron ore benchmark component, Entity B enters into a derivative contract (priced based on the TSI 62% Fe CFR Tianjin Port) to sell 100,000mt of iron ore for $65/mt to settle against the index average of December 2015.

Analysis under existing IAS 39 standard

Under the existing IAS 39 standard, hedge accounting can only be applied to the iron ore sales contract price (which includes the other pricing adjustments). This results in hedge ineffectiveness being recorded in respect of movements of the other pricing adjustments (i.e. discount/premium, freight and other adjustments). In many cases these pricing adjustments can vary substantially and breach the 80-125% range and fail hedge accounting, either from the outset (not highly probable that the 80-125 % will be met) or during the life of the derivative.

Assume the following forecasted sales prices:

	TSI Index component	Pricing adjustments	**Forecast final supply contract price**
1/1/2015	$75	$15	**$90**
30/6/2015	$85	$20	**$105**
31/12/2015	$50	$21	**$71**

	Cumulative FV change in forecast final contract price (hedged item)	**Cumulative FV change in derivative (based on the iron ore price index) (hedging instrument)**	**Hedge Effectiveness under IAS 39**
30/6/2015	**$15**	**$(10)**	**150%**

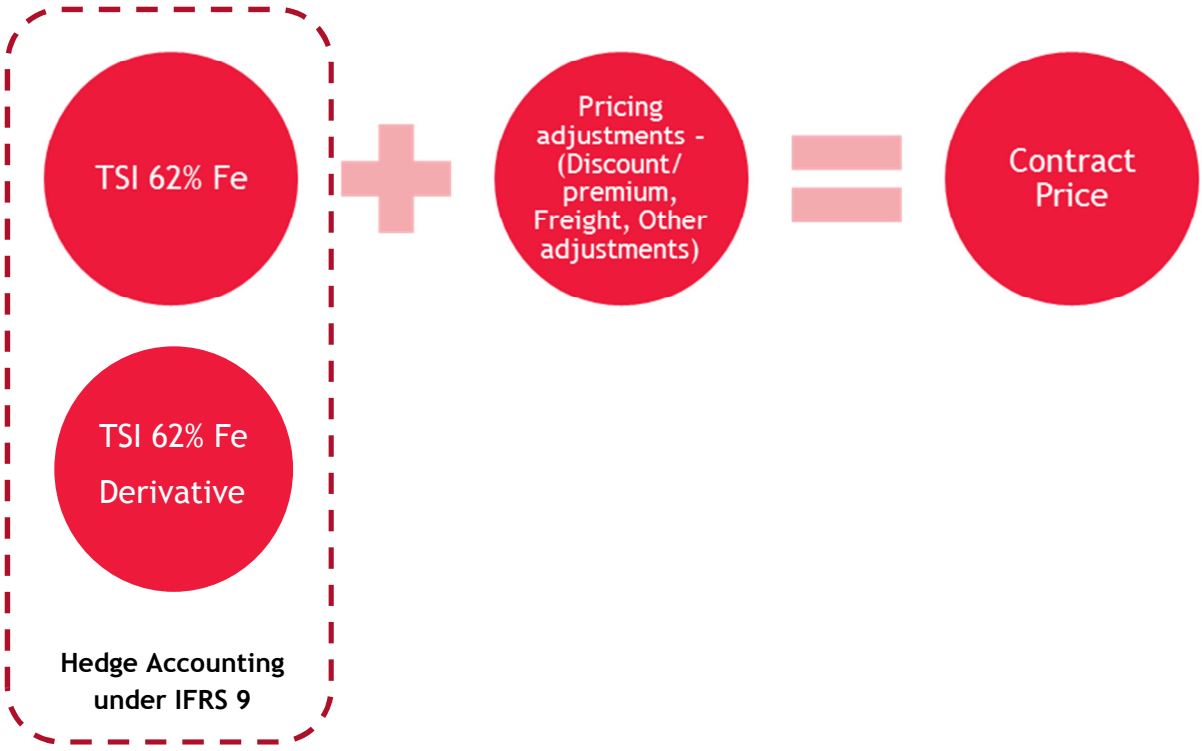
	($105-$90)	($75-$85)	($15/$10)
31/12/2015	**$(19)**	**$25**	**76%**
	($71-$90)	($75-$50)	($19/$25)

*Note for simplicity we have ignored the effect of time value of money and any credit/debit value adjustments.

Conclusion under IAS 39: Fail hedge accounting because hedge effectiveness is outside the 80-125% range

Analysis under new IFRS 9 standard

IFRS 9 allows entities to apply hedge accounting to pricing components within a contract, meaning that Entity B can apply hedge accounting to the TSI 62% Fe CFR Tianjin Port (TSI index component) pricing component only. The new standard has also removed the 80-125% effectiveness range (discussed below), making hedge accounting for iron ore hedges a lot easier to achieve.



	Cumulative FV change in iron ore price index (TSI) of the forecast final contract price (hedged item)	Cumulative FV change in derivative (based on the iron ore price index (TSI)) (hedging instrument)	Hedge Effectiveness under IFRS 9
30/6/2015	**$10**	**$(10)**	**100%**
	($85-$75)	($75-$85)	($10/$10)

31/12/2015	**$(25)**	**$25**	**100%**
	($50-$75)	($75-$50)	($25/$25)

*Note for simplicity we have ignored the effect of time value of money and any credit/debit value adjustments.

Hedging the diesel index pricing component of diesel purchases

Allowing for price component to be eligible for hedge accounting also makes it easier to apply hedge accounting to purchases contracts under IFRS 9.

Example 3 – Diesel purchases

On 1 January 2015, to secure a fixed price for diesel, Entity C enters into a derivative contract to buy 10,000 barrels of diesel at $120 per barrel which is price based on ULSD 10PPM SG Index (ultra-low sulphur diesel 10 parts per million with Singapore delivery) settling in 12 months' time.

The actual price Entity C pays for the diesel is the terminal gate price which is calculated based on the ULSD 10PPM SG Index price adjusted for excise duties, freight, insurance and terminal charges.

*Note for simplicity we have not considered the effects of any foreign exchange movements between the Australian dollar and US dollar. The impact of any foreign exchange movements can be separately hedged and would not impact the below analysis.

Analysis under existing IAS 39 standard

Under the existing IAS 39 standard, hedge accounting can only be applied to the terminal gate price of diesel. This results in hedge ineffectiveness being recorded in respect of the movements of the other pricing adjustments (i.e. excise duties, freight, insurance and terminal charges). Like iron ore sales, these pricing adjustments can vary substantially and breach the 80-125% range and fail hedge accounting.

Assume the following forecasted prices:

	ULSD 10PPM SG Diesel Index	Pricing adjustments	**Terminal Gate Price for diesel purchases**

1/1/2015	$120	$85	**$205**
30/6/2015	$130	$90	**$220**
31/12/2015	$100	$60	**$160**

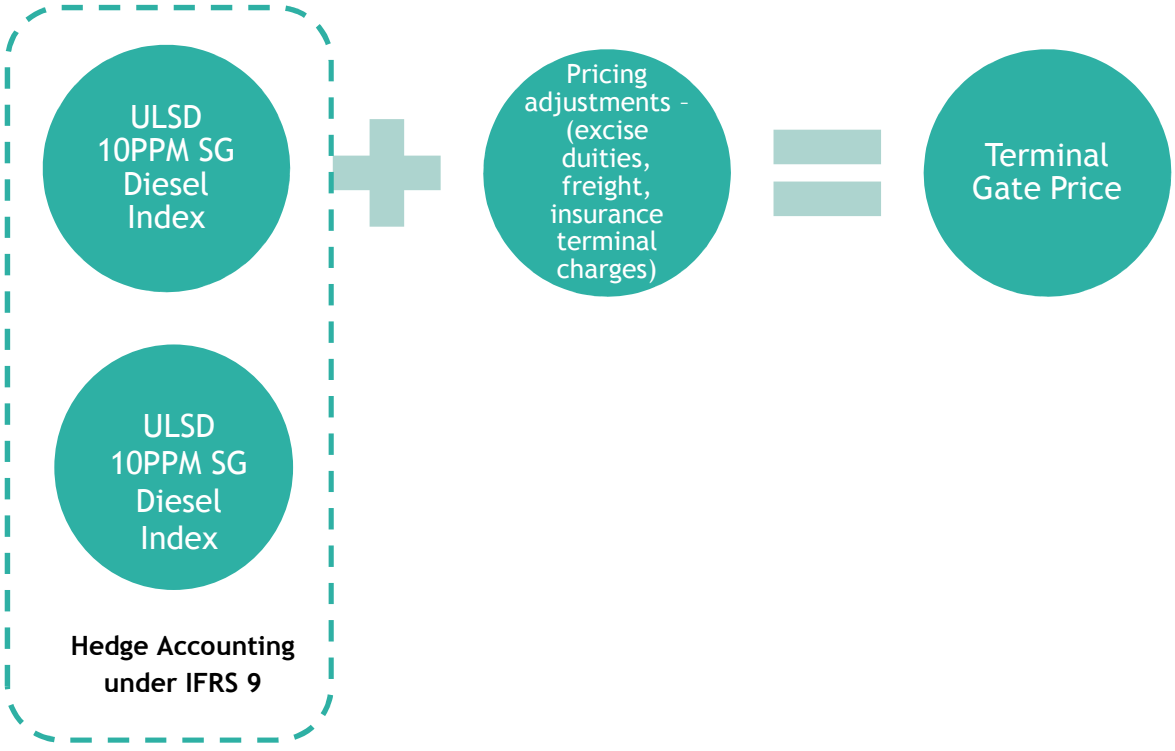
	Cumulative FV change in forecast Terminal Gate Price for diesel purchases (hedged item)	Cumulative FV change in derivative (based on the ULSD 10PPM SG diesel index) (hedging instrument)	Hedge Effectiveness under IAS 39
30/6/2015	**$(15)**	**$10**	**153%**
	($205-$220)	($130-$120)	($15/$10)
31/12/2015	**$45**	**($20)**	**225%**
	($205-$160)	($100-$120)	($45/$20)

*Note for simplicity we have ignored the effect of time value of money and any credit/debit value adjustments.

Conclusion under IAS 39: Fail hedge accounting because hedge effectiveness is outside the 80-125% range

Analysis under new IFRS 9 standard

IFRS 9 allows entities to apply hedge accounting to pricing components within a contract, meaning that Entity C can apply hedge accounting to the ULSD 10PPM SG Index pricing component only. The new standard has also removed the 80-125% effectiveness range (discussed below), making hedge accounting for diesel hedges a lot easier to achieve.



	Cumulative FV change in ULSD 10PPM SG diesel index component of the forecast terminal gate price for diesel purchases (hedged item)	Cumulative FV change in derivative (based on the ULSD 10PPM SG diesel index) (hedging instrument)	Hedge Effectiveness under IFRS 9
30/6/2015	**$(10)** ($120-$130)	**$10** ($130-$120)	**100%** ($10/$10)
31/12/2015	**$20** ($120-$100)	**($20)** ($100-$120)	**100%** ($20/$20)

*Note for simplicity we have ignored the effect of time value of money and any credit/debit value adjustments.

Simplified hedge effectiveness testing

The new standard has also simplified the hedge effectiveness testing criteria and has removed the 80-125% highly effective threshold and the mandatory requirement to perform forward and backward looking mathematical effectiveness tests.

Under the new standard if the derivatives are entered into for the same quantity, timing and pricing index as the forecast iron ore sales (i.e. the critical terms match), it may be sufficient to only carry out a forward looking qualitative test without the need to perform any further mathematical calculations.

Effective date and early adoption

Although IFRS 9 does not come into effect until 1 January 2018, it can be early adopted.

For more information

If you would like more information about the new IFRS 9 hedge accounting requirements please contact Judith Leung.

Judith was formerly a staff member at the IASB and was part of the team that developed this new model and is ideally placed to assist with implementation of the new IFRS 9 standard including:

- Providing accounting advice on the application of hedge accounting
- Drafting hedge accounting documentation to comply with accounting standards
- Drafting hedge accounting risk management policy to comply with the accounting standard
- Assist with complying with the hedge effectiveness testing requirements.