International Financial Reporting Standard

Financial Instruments

November 2013

ILLUSTRATIVE EXAMPLES – AMENDMENTS

[IFRS 9]

[Related to AASB 2013-9]

IFRS 9 *Financial Instruments* Illustrative examples

These examples accompany, but are not part of, IFRS 9

This publication amends some existing paragraphs and adds paragraphs IE7–IE39. Only the paragraphs that have been amended are included, or those that are there for ease of reference. No mark-up has been used; instead the amended paragraph should be replaced in full.

Financial liabilities at fair value through profit or loss

IE1 The following example illustrates the calculation that an entity might perform in accordance with paragraph B5.7.18 of IFRS 9.

IE2 On 1 January 20X1 an entity issues a 10-year bond with a par value of CU150,000[1] and an annual fixed coupon rate of 8 per cent, which is consistent with market rates for bonds with similar characteristics.

IE3 The entity uses LIBOR as its observable (benchmark) interest rate. At the date of inception of the bond, LIBOR is 5 per cent. At the end of the first year:

(a) LIBOR has decreased to 4.75 per cent.

(b) the fair value for the bond is CU153,811, consistent with an interest rate of 7.6 per cent.[2]

IE4 The entity assumes a flat yield curve, all changes in interest rates result from a parallel shift in the yield curve, and the changes in LIBOR are the only relevant changes in market conditions.

IE5 The entity estimates the amount of change in the fair value of the bond that is not attributable to changes in market conditions that give rise to market risk as follows:

1 In this guidance monetary amounts are denominated in 'currency units' (CU).

2 This reflects a shift in LIBOR from 5 per cent to 4.75 per cent and a movement of 0.15 per cent which, in the absence of other relevant changes in market conditions, is assumed to reflect changes in credit risk of the instrument.

[paragraph B5.7.18(a)] First, the entity computes the liability's internal rate of return at the start of the period using the observed market price of the liability and the liability's contractual cash flows at the start of the period. It deducts from this rate of return the observed (benchmark) interest rate at the start of the period, to arrive at an instrument-specific component of the internal rate of return.	At the start of the period of a 10-year bond with a coupon of 8 per cent, the bond's internal rate of return is 8 per cent. Because the observed (benchmark) interest rate (LIBOR) is 5 per cent, the instrument-specific component of the internal rate of return is 3 per cent.
[paragraph B5.7.18(b)] Next, the entity calculates the present value of the cash flows associated with the liability using the liability's contractual cash flows at the end of the period and a discount rate equal to the sum of (i) the observed (benchmark) interest rate at the end of the period and (ii) the instrument-specific component of the internal rate of return as determined in accordance with paragraph B5.7.18(a).	The contractual cash flows of the instrument at the end of the period are: • interest: CU12,000[(a)] per year for each of years 2–10. • principal: CU150,000 in year 10. The discount rate to be used to calculate the present value of the bond is thus 7.75 per cent, which is the end of period LIBOR rate of 4.75 per cent, plus the 3 per cent instrument-specific component. This gives a present value of CU152,367.[(b)]
[paragraph B5.7.18(c)] The difference between the observed market price of the liability at the end of the period and the amount determined in accordance with paragraph B5.7.18(b) is the change in fair value that is not attributable to changes in the observed (benchmark) interest rate. This is the amount to be presented in other comprehensive income in accordance with paragraph 5.7.7(a).	The market price of the liability at the end of the period is CU153,811.[(c)] Thus, the entity presents CU1,444 in other comprehensive income, which is CU153,811 − CU152,367, as the increase in fair value of the bond that is not attributable to changes in market conditions that give rise to market risk.

(a) CU150,000 × 8% = CU12,000
(b) PV = $[CU12,000 \times (1 - (1 + 0.0775)^{-9})/0.0775] + CU150,000 \times (1 + 0.0775)^{-9}$
(c) market price = $[CU12,000 \times (1 - (1 + 0.076)^{-9})/0.076] + CU150,000 \times (1 + 0.076)^{-9}$

Disclosures on Transition from IAS 39 to IFRS 9

IE6 The following illustration is an example of one possible way to meet the quantitative disclosure requirements in paragraphs 44S–44W of IFRS 7 at the date of initial application of IFRS 9. However, this illustration does not address all possible ways of applying the disclosure requirements of this IFRS.

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Hedge accounting for aggregated exposures

IE7 The following examples illustrate the mechanics of hedge accounting for aggregated exposures.

Example 1—combined commodity price risk and foreign currency risk hedge (cash flow hedge/cash flow hedge combination)

Fact pattern

IE8 Entity A wants to hedge a highly probable forecast coffee purchase (which is expected to occur at the end of Period 5). Entity A's functional currency is its Local Currency (LC). Coffee is traded in Foreign Currency (FC). Entity A has the following risk exposures:

(a) commodity price risk: the variability in cash flows for the purchase price, which results from fluctuations of the spot price of coffee in FC; and

(b) foreign currency (FX) risk: the variability in cash flows that result from fluctuations of the spot exchange rate between LC and FC.

IE9 Entity A hedges its risk exposures using the following risk management strategy:

(a) Entity A uses benchmark commodity forward contracts, which are denominated in FC, to hedge its coffee purchases four periods before delivery. The coffee price that Entity A actually pays for its purchase is different from the benchmark price because of differences in the type of coffee, the location and delivery arrangement.[3] This gives rise to the risk of changes in the relationship between the two coffee prices (sometimes referred to as 'basis risk'), which affects the effectiveness of the hedging relationship. Entity A does not hedge this risk because it is not considered economical under cost/benefit considerations.

(b) Entity A also hedges its FX risk. However, the FX risk is hedged over a different horizon—only three periods before delivery. Entity A considers the FX exposure from the variable payments for the coffee purchase in FC and the gain or loss on the commodity forward contract in FC as one aggregated FX exposure. Hence, Entity A uses one single FX forward contract to hedge the FX cash flows from a forecast coffee purchase and the related commodity forward contract.

IE10 The following table sets out the parameters used for Example 1 (the 'basis spread' is the differential, expressed as a percentage, between the price of the coffee that Entity A actually buys and the price for the benchmark coffee):

3 For the purpose of this example it is assumed that the hedged risk is not designated based on a benchmark coffee price risk component. Consequently, the entire coffee price risk is hedged.

Example 1—Parameters Period	1	2	3	4	5
Interest rates for remaining maturity [FC]	0.26%	0.21%	0.16%	0.06%	0.00%
Interest rates for remaining maturity [LC]	1.12%	0.82%	0.46%	0.26%	0.00%
Forward price [FC/lb]	1.25	1.01	1.43	1.22	2.15
Basis spread	-5.00%	-5.50%	-6.00%	-3.40%	-7.00%
FX rate (spot) [FC/LC]	1.3800	1.3300	1.4100	1.4600	1.4300

Accounting mechanics

IE11 Entity A designates as cash flow hedges the following two hedging relationships:[4]

(a) A commodity price risk hedging relationship between the coffee price related variability in cash flows attributable to the forecast coffee purchase in FC as the hedged item and a commodity forward contract denominated in FC as the hedging instrument (the 'first level relationship'). This hedging relationship is designated at the end of Period 1 with a term to the end of Period 5. Because of the basis spread between the price of the coffee that Entity A actually buys and the price for the benchmark coffee, Entity A designates a volume of 112,500 pounds (lbs) of coffee as the hedging instrument and a volume of 118,421 lbs as the hedged item.[5]

(b) An FX risk hedging relationship between the aggregated exposure as the hedged item and an FX forward contract as the hedging instrument (the 'second level relationship'). This hedging relationship is designated at the end of Period 2 with a term to the end of Period 5. The aggregated exposure that is designated as the hedged item represents the FX risk that is the effect of exchange rate changes, compared to the forward FX rate at the end of Period 2 (ie the time of designation of the FX risk hedging relationship), on the combined FX cash flows in FC of the two items designated in the commodity price risk hedging relationship, which are the forecast coffee purchase and the commodity forward contract. Entity A's long-term view of the basis spread between the price of the coffee that it actually buys and the price for the benchmark coffee

4 This example assumes that all qualifying criteria for hedge accounting are met (see IFRS 9.6.4.1). The following description of the designation is solely for the purpose of understanding this example (ie it is not an example of the complete formal documentation required in accordance with IFRS 9.6.4.1(b)).

5 In this example, the current basis spread at the time of designation is coincidentally the same as Entity A's long-term view of the basis spread (-5 per cent) that determines the volume of coffee purchases that it actually hedges. Also, this example assumes that Entity A designates the hedging instrument in its entirety and designates as much of its highly probable forecast purchases as it regards as hedged. That results in a hedge ratio of 1/(100%-5%). Other entities might follow different approaches when determining what volume of their exposure they actually hedge, which can result in a different hedge ratio and also designating less than a hedging instrument in its entirety (see IFRS 9.B6.4.10).

has not changed from the end of Period 1. Consequently, the actual volume of hedging instrument that Entity A enters into (the nominal amount of the FX forward contract of FC140,625) reflects the cash flow exposure associated with a basis spread that had remained at -5 per cent. However, Entity A's actual aggregated exposure is affected by changes in the basis spread. Because the basis spread has moved from -5 per cent to -5.5 per cent during Period 2, Entity A's actual aggregated exposure at the end of Period 2 is FC140,027.

IE12 The following table sets out the fair values of the derivatives, the changes in the value of the hedged items and the calculation of the cash flow hedge reserves and hedge ineffectiveness:[6]

6 In the following table for the calculations all amounts (including the calculations for accounting purposes of amounts for assets, liabilities, equity and profit or loss) are in the format of positive (plus) and negative (minus) numbers (eg a profit or loss amount that is a negative number is a loss).

Example 1—Calculations

			Period	1	2	3	4	5
Commodity price risk hedging relationship (first level relationship)								
Forward purchase contract for coffee								
Volume (lbs)	112,500							
Forward price [FC/lb]	1.25	Price (fwd) [FC/lb]		1.25	1.01	1.43	1.22	2.15
		Fair value [FC]		0	(26,943)	20,219	(3,373)	101,250
		Fair value [LC]		0	(20,258)	14,339	(2,310)	70,804
		Change in fair value [LC]			(20,258)	34,598	(16,650)	73,114
Hedged forecast coffee purchase								
Hedge ratio	105.26%	Basis spread		-5.00%	-5.50%	-6.00%	-3.40%	-7.00%
Hedged volume	118,421	Price (fwd) [FC/lb]		1.19	0.95	1.34	1.18	2.00
Implied forward price	1.1875	Present value [FC]		0	27,540	(18,528)	1,063	(96,158)
		Present value [LC]		0	20,707	(13,140)	728	(67,243)
		Change in present value [LC]			20,707	(33,847)	13,868	(67,971)
Accounting				*LC*	*LC*	*LC*	*LC*	*LC*
Derivative				0	(20,258)	14,339	(2,310)	70,804
Cash flow hedge reserve				0	(20,258)	13,140	(728)	67,243
Change in cash flow hedge reserve					(20,258)	33,399	(13,868)	67,971
Profit or loss					0	1,199	(2,781)	5,143
Retained earnings				0	0	1,199	(1,582)	3,561
FX risk hedging relationship (second level relationship)								
FX rate [FC/LC]			Spot	1.3800	1.3300	1.4100	1.4600	1.4300
			Forward	1.3683	1.3220	1.4058	1.4571	1.4300
FX forward contract (buy FC/sell LC)								
Volume [FC]	140,625							
Forward rate (in P_2)	1.3220	Fair value [LC]			0	(6,313)	(9,840)	(8,035)
		Change in fair value [LC]				(6,313)	(3,528)	1,805
Hedged FX risk								
Aggregated FX exposure		Hedged volume [FC]			140,027	138,932	142,937	135,533
		Present value [LC]			0	6,237	10,002	7,744
		Change in present value [LC]				6,237	3,765	(2,258)
Accounting					*LC*	*LC*	*LC*	*LC*
Derivative					0	(6,313)	(9,840)	(8,035)
Cash flow hedge reserve					0	(6,237)	(9,840)	(7,744)
Change in cash flow hedge reserve						(6,237)	(3,604)	2,096
Profit or loss						(76)	76	(291)
Retained earnings					0	(76)	0	(291)

IE13 The commodity price risk hedging relationship is a cash flow hedge of a highly probable forecast transaction that starts at the end of Period 1 and remains in

place when the FX risk hedging relationship starts at the end of Period 2, ie the first level relationship continues as a separate hedging relationship.

IE14 The volume of the aggregated FX exposure (in FC), which is the hedged volume of the FX risk hedging relationship, is the total of:[7]

(a) the hedged coffee purchase volume multiplied by the current forward price (this represents the expected spot price of the actual coffee purchase); and

(b) the volume of the hedging instrument (designated nominal amount) multiplied by the difference between the contractual forward rate and the current forward rate (this represents the expected price differential from benchmark coffee price movements in FC that Entity A will receive or pay under the commodity forward contract).

IE15 The present value (in LC) of the hedged item of the FX risk hedging relationship (ie the aggregated exposure) is calculated as the hedged volume (in FC) multiplied by the difference between the forward FX rate at the measurement date and the forward FX rate at the designation date of the hedging relationship (ie the end of Period 2).[8]

IE16 Using the present value of the hedged item and the fair value of the hedging instrument, the cash flow hedge reserve and the hedge ineffectiveness are then determined (see paragraph 6.5.11 of IFRS 9).

IE17 The following table shows the effect on Entity A's statement of profit or loss and other comprehensive income and its statement of financial position (for the sake of transparency the line items[9] are disaggregated on the face of the statements by the two hedging relationships, ie for the commodity price risk hedging relationship and the FX risk hedging relationship):

7 For example, at the end of Period 3 the aggregated FX exposure is determined as: 118,421 lbs × 1.34 FC/lb = FC159,182 for the expected price of the actual coffee purchase and 112,500 lbs × (1.25 [FC/lb] − 1.43 [FC/lb]) = FC(20,250) for the expected price differential under the commodity forward contract, which gives a total of FC138,932—the volume of the aggregated FX exposure at the end of Period 3.

8 For example, at the end of Period 3 the present value of the hedged item is determined as the volume of the aggregated exposure at the end of Period 3 (FC138,932) multiplied by the difference between the forward FX rate at the end of Period 3 (1/1.4058) and the forward FX rate and the time of designation (ie the end of Period 2: 1/1.3220) and then discounted using the interest rate (in LC) at the end of Period 3 with a term of 2 periods (ie until the end of Period 5 − 0.46 per cent). The calculation is: FC138,932 × (1/(1.4058[FC/LC]) − 1/(1.3220 [FC/LC]))/(1 + 0.46%) = LC6,237.

9 The line items used in this example are a possible presentation. Different presentation formats using different line items (including line items that include the amounts shown here) are also possible (IFRS 7 *Financial Instruments: Disclosures* sets out disclosure requirements for hedge accounting that include disclosures about hedge ineffectiveness, the carrying amount of hedging instruments and the cash flow hedge reserve).

Example 1—Overview of effect on statements of financial performance and financial position

[All amounts in LC]

Period	**1**	**2**	**3**	**4**	**5**
Statement of profit or loss and other comprehensive income					
Hedge ineffectiveness					
Commodity hedge		0	(1,199)	2,781	(5,143)
FX hedge		0	76	(76)	291
Profit or loss	0	0	(1,123)	2,705	(4,852)
Other comprehensive income (OCI)					
Commodity hedge		20,258	(33,399)	13,868	(67,971)
FX hedge		0	6,237	3,604	(2,096)
Total other comprehensive income	0	20,258	(27,162)	17,472	(70,067)
Comprehensive income	0	20,258	(28,285)	20,177	(74,920)
Statement of financial position					
Commodity forward	0	(20,258)	14,339	(2,310)	70,804
FX forward		0	(6,313)	(9,840)	(8,035)
Total net assets	0	(20,258)	8,027	(12,150)	62,769
Equity					
Accumulated OCI					
Commodity hedge	0	20,258	(13,140)	728	(67,243)
FX hedge		0	6,237	9,840	7,744
	0	20,258	(6,904)	10,568	(59,499)
Retained earnings					
Commodity hedge	0	0	(1,199)	1,582	(3,561)
FX hedge		0	76	0	291
	0	0	(1,123)	1,582	(3,270)
Total equity	0	20,258	(8,027)	12,150	(62,769)

IE18 The total cost of inventory after hedging is as follows:[10]

Cost of inventory [all amounts in LC]	
Cash price (at spot for commodity price risk and FX risk)	165,582
Gain/loss from CFHR for commodity price risk	(67,243)
Gain/loss from CFHR for FX risk	7,744
Cost of inventory	106,083

IE19 The total overall cash flow from all transactions (the actual coffee purchase at the spot price and the settlement of the two derivatives) is LC102,813. It differs from the hedge adjusted cost of inventory by LC3,270, which is the net amount of cumulative hedge ineffectiveness from the two hedging relationships. This hedge ineffectiveness has a cash flow effect but is excluded from the measurement of the inventory.

Example 2—combined interest rate risk and foreign currency risk hedge (fair value hedge/cash flow hedge combination)

Fact pattern

IE20 Entity B wants to hedge a fixed rate liability that is denominated in Foreign Currency (FC). The liability has a term of four periods from the start of Period 1 to the end of Period 4. Entity B's functional currency is its Local Currency (LC). Entity B has the following risk exposures:

(a) fair value interest rate risk and FX risk: the changes in fair value of the fixed rate liability attributable to interest rate changes, measured in LC.

(b) cash flow interest rate risk: the exposure that arises as a result of swapping the combined fair value interest rate risk and FX risk exposure associated with the fixed rate liability (see (a) above) into a variable rate exposure in LC in accordance with Entity B's risk management strategy for FC denominated fixed rate liabilities (see paragraph IE211(a) below).

IE21 Entity B hedges its risk exposures using the following risk management strategy:

(a) Entity B uses cross-currency interest rate swaps to swap its FC denominated fixed rate liabilities into a variable rate exposure in LC. Entity B hedges its FC denominated liabilities (including the interest) for their entire life. Consequently, Entity B enters into a cross-currency interest rate swap at the same time as it issues an FC denominated liability. Under the cross-currency interest rate swap Entity B receives fixed interest in FC (used to pay the interest on the liability) and pays variable interest in LC.

10 'CFHR' is the cash flow hedge reserve, ie the amount accumulated in other comprehensive income for a cash flow hedge.

(b) Entity B considers the cash flows on a hedged liability and on the related cross-currency interest rate swap as one aggregated variable rate exposure in LC. From time to time, in accordance with its risk management strategy for variable rate interest rate risk (in LC), Entity B decides to lock in its interest payments and hence swaps its aggregated variable rate exposure in LC into a fixed rate exposure in LC. Entity B seeks to obtain as a fixed rate exposure a single blended fixed coupon rate (ie the uniform forward coupon rate for the hedged term that exists at the start of the hedging relationship).[11] Consequently, Entity B uses interest rate swaps (denominated entirely in LC) under which it receives variable interest (used to pay the interest on the pay leg of the cross-currency interest rate swap) and pays fixed interest.

IE22 The following table sets out the parameters used for Example 2:

11 An entity may have a different risk management strategy whereby it seeks to obtain a fixed rate exposure that is not a single blended rate but a series of forward rates that are each fixed for the respective individual interest period. For such a strategy the hedge effectiveness is measured based on the difference between the forward rates that existed at the start of the hedging relationship and the forward rates that exist at the effectiveness measurement date for the individual interest periods. For such a strategy a series of forward contracts corresponding with the individual interest periods would be more effective than an interest rate swap (that has a fixed payment leg with a single blended fixed rate).

Example 2—Parameters					
	t_0	**Period 1**	**Period 2**	**Period 3**	**Period 4**
FX spot rate [LC/FC]	1.2000	1.0500	1.4200	1.5100	1.3700
Interest curves (vertical presentation of rates for each quarter of a period on a p.a. basis)					
LC	2.50%	5.02%	6.18%	0.34%	[N/A]
	2.75%	5.19%	6.26%	0.49%	
	2.91%	5.47%	6.37%	0.94%	
	3.02%	5.52%	6.56%	1.36%	
	2.98%	5.81%	6.74%		
	3.05%	5.85%	6.93%		
	3.11%	5.91%	7.19%		
	3.15%	6.06%	7.53%		
	3.11%	6.20%			
	3.14%	6.31%			
	3.27%	6.36%			
	3.21%	6.40%			
	3.21%				
	3.25%				
	3.29%				
	3.34%				
FC	3.74%	4.49%	2.82%	0.70%	[N/A]
	4.04%	4.61%	2.24%	0.79%	
	4.23%	4.63%	2.00%	1.14%	
	4.28%	4.34%	2.18%	1.56%	
	4.20%	4.21%	2.34%		
	4.17%	4.13%	2.53%		
	4.27%	4.07%	2.82%		
	4.14%	4.09%	3.13%		
	4.10%	4.17%			
	4.11%	4.13%			
	4.11%	4.24%			
	4.13%	4.34%			
	4.14%				
	4.06%				
	4.12%				
	4.19%				

Accounting mechanics

IE23 Entity B designates the following hedging relationships:[12]

(a) As a fair value hedge, a hedging relationship for fair value interest rate risk and FX risk between the FC denominated fixed rate liability (fixed rate FX liability) as the hedged item and a cross-currency interest rate swap as the hedging instrument (the 'first level relationship'). This hedging relationship is designated at the beginning of Period 1 (ie t_0) with a term to the end of Period 4.

(b) As a cash flow hedge, a hedging relationship between the aggregated exposure as the hedged item and an interest rate swap as the hedging instrument (the 'second level relationship'). This hedging relationship is designated at the end of Period 1, when Entity B decides to lock in its interest payments and hence swaps its aggregated variable rate exposure in LC into a fixed rate exposure in LC, with a term to the end of Period 4. The aggregated exposure that is designated as the hedged item represents, in LC, the variability in cash flows that is the effect of changes in the combined cash flows of the two items designated in the fair value hedge of the fair value interest rate risk and FX risk (see (a) above), compared to the interest rates at the end of Period 1 (ie the time of designation of the hedging relationship between the aggregated exposure and the interest rate swap).

IE24 The following table[13] sets out the overview of the fair values of the derivatives, the changes in the value of the hedged items and the calculation of the cash flow hedge reserve and hedge ineffectiveness.[14] In this example, hedge ineffectiveness arises on both hedging relationships.[15]

12 This example assumes that all qualifying criteria for hedge accounting are met (see IFRS 9.6.4.1). The following description of the designation is solely for the purpose of understanding this example (ie it is not an example of the complete formal documentation required in accordance with IFRS 9.6.4.1(b)).

13 Tables in this example use the following acronyms: 'CCIRS' for cross-currency interest rate swap, 'CF(s)' for cash flow(s), 'CFH' for cash flow hedge, 'CFHR' for cash flow hedge reserve, 'FVH' for fair value hedge, 'IRS' for interest rate swap and 'PV' for present value.

14 In the following table for the calculations all amounts (including the calculations for accounting purposes of amounts for assets, liabilities and equity) are in the format of positive (plus) and negative (minus) numbers (eg an amount in the cash flow hedge reserve that is in brackets is a loss).

15 For a situation such as in this example, hedge ineffectiveness can result from various factors, for example credit risk, differences in the day count method or, depending on whether it is included in the designation of the hedging instrument, the charge for exchanging different currencies that is included in cross-currency interest rate swaps (commonly referred to as the 'currency basis').

Example 2—Calculations					
	t_0	**Period 1**	**Period 2**	**Period 3**	**Period 4**
Fixed rate FX liability					
Fair value [FC]	(1,000,000)	(995,522)	(1,031,008)	(1,030,193)	(1,000,000)
Fair value [LC]	(1,200,000)	(1,045,298)	(1,464,031)	(1,555,591)	(1,370,000)
Change in fair value [LC]		154,702	(418,733)	(91,560)	185,591
CCIRS (receive fixed FC/pay variable LC)					
Fair value [LC]	0	(154,673)	264,116	355,553	170,000
Change in fair value [LC]		(154,673)	418,788	91,437	(185,553)
IRS (receive variable/pay fixed)					
Fair value [LC]		0	18,896	(58,767)	0
Change in fair value [LC]			18,896	(77,663)	(58,767)
CF variability of the aggregated exposure					
Present value [LC]		0	(18,824)	58,753	0
Change in present value [LC]			(18,824)	77,577	(58,753)
CFHR					
Balance (end of period) [LC]		0	18,824	(58,753)	0
Change [LC]			18,824	(77,577)	58,753

IE25 The hedging relationship between the fixed rate FX liability and the cross-currency interest rate swap starts at the beginning of Period 1 (ie t_0) and remains in place when the hedging relationship for the second level relationship starts at the end of Period 1, ie the first level relationship continues as a separate hedging relationship.

IE26 The cash flow variability of the aggregated exposure is calculated as follows:

(a) At the point in time from which the cash flow variability of the aggregated exposure is hedged (ie the start of the second level relationship at the end of Period 1), all cash flows expected on the fixed rate FX liability and the cross-currency interest rate swap over the hedged term (ie until the end of Period 4) are mapped out and equated to a single blended fixed coupon rate so that the total present value (in LC) is nil. This calculation establishes the single blended fixed coupon rate (reference rate) that is used at subsequent dates as the reference point to measure the cash flow variability of the aggregated exposure since the start of the hedging relationship. This calculation is illustrated in the following table:

Example 2—Cash flow variability of the aggregated exposure (calibration)

		Variability in cash flows of the aggregated exposure							
		FX liability		CCIRS FC leg		CCIRS LC leg		Calibration	PV
		CF(s)	PV	CF(s)	PV	CF(s)	PV	1,200,000 Nominal 5.6963% Rate 4 Frequency	
		[FC]	[FC]	[FC]	[FC]	[LC]	[LC]	[LC]	[LC]
	Time								
	t_0								
	t_1								
Period 1	t_2								
	t_3								
	t_4								
	t_5	0	0	0	0	(14,771)	(14,591)	17,089	16,881
Period 2	t_6	(20,426)	(19,977)	20,246	19,801	(15,271)	(14,896)	17,089	16,669
	t_7	0	0	0	0	(16,076)	(15,473)	17,089	16,449
	t_8	(20,426)	(19,543)	20,582	19,692	(16,241)	(15,424)	17,890	16,229
	t_9	0	0	0	0	(17,060)	(15,974)	17,089	16,002
Period 3	t_{10}	(20,426)	(19,148)	20,358	19,084	(17,182)	(15,862)	17,089	15,776
	t_{11}	0	0	0	0	(17,359)	(15,797)	17,089	15,551
	t_{12}	(20,426)	(18,769)	20,582	18,912	(17,778)	(15,942)	17,089	15,324
	t_{13}	0	0	0	0	(18,188)	(16,066)	17,089	15,095
Period 4	t_{14}	(20,426)	(18,391)	20,246	18,229	(18,502)	(16,095)	17,089	14,866
	t_{15}	0	0	0	0	(18,646)	(15,972)	17,089	14,638
	t_{16}	(1,020,426)	(899,695)	1,020,582	899,832	(1,218,767)	(1,027,908)	1,217,089	1,026,493
	Totals		(995,522)		995,550		(1,200,000)		1,199,971
	Totals in LC		(1,045,298)		1,045,327		(1,200,000)		1,199,971
	PV of all CF(s) [LC]		0 ◄						$\sum$

The nominal amount that is used for the calibration of the reference rate is the same as the nominal amount of aggregated exposure that creates the variable cash flows in LC (LC1,200,000), which coincides with the nominal amount of the cross-currency interest rate swap for the variable rate leg in LC. This results in a reference rate of 5.6963 per cent (determined by iteration so that the present value of all cash flows in total is nil).

(b) At subsequent dates, the cash flow variability of the aggregated exposure is determined by comparison to the reference point established at the end of Period 1. For that purpose, all remaining cash flows expected on

the fixed rate FX liability and the cross-currency interest rate swap over the remainder of the hedged term (ie from the effectiveness measurement date until the end of Period 4) are updated (as applicable) and then discounted. Also, the reference rate of 5.6963 per cent is applied to the nominal amount that was used for the calibration of that rate at the end of Period 1 (LC1,200,000) in order to generate a set of cash flows over the remainder of the hedged term that is then also discounted. The total of all those present values represents the cash flow variability of the aggregated exposure. This calculation is illustrated in the following table for the end of Period 2:

Example 2—Cash flow variability of the aggregated exposure (at the end of Period 2)

		Variability in cash flows of the aggregated exposure							
		FX liability		CCIRS FC leg		CCIRS LC leg		Calibration	PV
		CF(s)	PV	CF(s)	PV	CF(s)	PV	1,200,000 Nominal 5.6963% Rate 4 Frequency	
		[FC]	[FC]	[FC]	[FC]	[LC]	[LC]	[LC]	[LC]
	Time								
	t_0								
	t_1								
Period 1	t_2								
	t_3								
	t_4								
	t_5	0	0	0	0	0	0	0	0
Period 2	t_6	0	0	0	0	0	0	0	0
	t_7	0	0	0	0	0	0	0	0
	t_8	0	0	0	0	0	0	0	0
	t_9	0	0	0	0	(18,120)	(17,850)	17,089	16,835
Period 3	t_{10}	(20,426)	(20,173)	20,358	20,106	(18,360)	(17,814)	17,089	16,581
	t_{11}	0	0	0	0	(18,683)	(17,850)	17,089	16,327
	t_{12}	(20,426)	(19,965)	20,582	20,117	(19,203)	(18,058)	17,089	16,070
	t_{13}	0	0	0	0	(19,718)	(18,243)	17,089	15,810
Period 4	t_{14}	(20,426)	(19,726)	20,246	19,553	(20,279)	(18,449)	17,089	15,547
	t_{15}	0	0	0	0	(21,014)	(18,789)	17,089	15,280
	t_{16}	(1,020,426)	(971,144)	1,020,582	971,292	(1,221,991)	(1,072,947)	1,217,089	1,068,643
	Totals		(1,031,008)		1,031,067		(1,200,000)		1,181,092
	Totals in LC		(1,464,031)		1,464,116		(1,200,000)		1,181,092
	PV of all CF(s) [LC]		(18,824) ← $\sum$						

The changes in interest rates and the exchange rate result in a change of the cash flow variability of the aggregated exposure between the end of Period 1 and the end of Period 2 that has a present value of LC-18,824.[16]

16 This is the amount that is included in the table with the overview of the calculations (see paragraph IE24) as the present value of the cash flow variability of the aggregated exposure at the end of Period 2.

IE27 Using the present value of the hedged item and the fair value of the hedging instrument, the cash flow hedge reserve and the hedge ineffectiveness are then determined (see paragraph 6.5.11 of IFRS 9).

IE28 The following table shows the effect on Entity B's statement of profit or loss and other comprehensive income and its statement of financial position (for the sake of transparency some line items[17] are disaggregated on the face of the statements by the two hedging relationships, ie for the fair value hedge of the fixed rate FX liability and the cash flow hedge of the aggregated exposure):[18]

17 The line items used in this example are a possible presentation. Different presentation formats using different line items (including line items that include the amounts shown here) are also possible (IFRS 7 *Financial Instruments: Disclosures* sets out disclosure requirements for hedge accounting that include disclosures about hedge ineffectiveness, the carrying amount of hedging instruments and the cash flow hedge reserve).

18 For Period 4 the values in the table with the overview of the calculations (see paragraph IE24) differ from those in the following table. For Periods 1 to 3 the 'dirty' values (ie including interest accruals) equal the 'clean' values (ie excluding interest accruals) because the period end is a settlement date for all legs of the derivatives and the fixed rate FX liability. At the end of Period 4 the table with the overview of the calculations uses clean values in order to calculate the value changes consistently over time. For the following table the dirty values are presented, ie the maturity amounts including accrued interest immediately before the instruments are settled (this is for illustrative purposes as otherwise all carrying amounts other than cash and retained earnings would be nil).

Example 2—Overview of effect on statements of financial performance and financial position

[All amounts in LC]

	t_0	Period 1	Period 2	Period 3	Period 4
Statement of profit or loss and other comprehensive income					
Interest expense					
FX liability		45,958	50,452	59,848	58,827
FVH adjustment		(12,731)	11,941	14,385	(49,439)
		33,227	62,393	74,233	9,388
Reclassifications (CFH)			5,990	(5,863)	58,982
Total interest expense		33,227	68,383	68,370	68,370
Other gains/losses					
Change in fair value of the CCIRS		154,673	(418,788)	(91,437)	185,553
FVH adjustment (FX liability)		(154,702)	418,733	91,560	(185,591)
Hedge ineffectiveness		0	(72)	(54)	(19)
Total other gains/losses		(29)	(127)	68	(57)
Profit or loss		33,198	68,255	68,438	68,313
Other comprehensive income (OCI)					
Effective CFH gain/loss			(12,834)	71,713	229
Reclassifications			(5,990)	5,863	(58,982)
Total other comprehensive income			(18,842)	77,577	(58,753)
Comprehensive income		33,198	49,432	146,015	9,560
Statement of financial position					
FX liability	(1,200,000)	(1,045,298)	(1,464,031)	(1,555,591)	(1,397,984)
CCIRS	0	(154,673)	264,116	355,553	194,141
IRS		0	18,896	(58,767)	(13,004)
Cash	1,200,000	1,166,773	1,098,390	1,030,160	978,641
Total net assets	0	(33,198)	(82,630)	(228,645)	(238,205)
Equity					
Accumulated OCI		0	(18,824)	58,753	0
Retained earnings	0	33,198	101,454	169,892	238,205
Total equity	0	33,198	82,630	228,645	238,205

IE29 The total interest expense in profit or loss reflects Entity B's interest expense that results from its risk management strategy:

(a) In Period 1 the risk management strategy results in interest expense reflecting variable interest rates in LC after taking into account the effect of the cross-currency interest rate swap, including a difference between the cash flows on the fixed rate FX liability and the fixed leg of the cross-currency interest rate swap that were settled during Period 1 (this means the interest expense does not exactly equal the variable interest expense that would arise in LC on a borrowing of LC1,200,000). There is also some hedge ineffectiveness that results from a difference in the changes in value for the fixed rate FX liability (as represented by the fair value hedge adjustment) and the cross-currency interest rate swap.

(b) For Periods 2 to 4 the risk management strategy results in interest expense that reflects, after taking into account the effect of the interest rate swap entered into at the end of Period 1, fixed interest rates in LC (ie locking in a single blended fixed coupon rate for a three-period term based on the interest rate environment at the end of Period 1). However, Entity B's interest expense is affected by the hedge ineffectiveness that arises on its hedging relationships. In Period 2 the interest expense is slightly higher than the fixed rate payments locked in with the interest rate swap because the variable payments received under the interest rate swap are less than the total of the cash flows resulting from the aggregated exposure.[19] In Periods 3 and 4 the interest expense is equal to the locked in rate because the variable payments received under the swap are more than the total of the cash flows resulting from the aggregated exposure.[20]

Example 3—combined interest rate risk and foreign currency risk hedge (cash flow hedge/fair value hedge combination)

Fact pattern

IE30 Entity C wants to hedge a variable rate liability that is denominated in Foreign Currency (FC). The liability has a term of four periods from the start of Period 1 to the end of Period 4. Entity C's functional currency is its Local Currency (LC). Entity C has the following risk exposures:

(a) cash flow interest rate risk and FX risk: the changes in cash flows of the variable rate liability attributable to interest rate changes, measured in LC.

19 In other words, the cash flow variability of the interest rate swap was lower than, and consequently did not fully offset, the cash flow variability of the aggregated exposure as a whole (sometimes called an 'underhedge' situation). In those situations the cash flow hedge does not contribute to the hedge ineffectiveness that is recognised in profit or loss because the hedge ineffectiveness is not recognised (see IFRS 9.6.5.11). The hedge ineffectiveness arising on the fair value hedge affects profit or loss in all periods.

20 In other words, the cash flow variability of the interest rate swap was higher than, and consequently more than fully offset, the cash flow variability of the aggregated exposure as a whole (sometimes called an 'overhedge' situation). In those situations the cash flow hedge contributes to the hedge ineffectiveness that is recognised in profit or loss (see IFRS 9.6.5.11). The hedge ineffectiveness arising on the fair value hedge affects profit or loss in all periods.

(b) fair value interest rate risk: the exposure that arises as a result of swapping the combined cash flow interest rate risk and FX risk exposure associated with the variable rate liability (see (a) above) into a fixed rate exposure in LC in accordance with Entity C's risk management strategy for FC denominated variable rate liabilities (see paragraph IE31(a) below).

IE31 Entity C hedges its risk exposures using the following risk management strategy:

(a) Entity C uses cross-currency interest rate swaps to swap its FC denominated variable rate liabilities into a fixed rate exposure in LC. Entity C hedges its FC denominated liabilities (including the interest) for their entire life. Consequently, Entity C enters into a cross-currency interest rate swap at the same time as it issues an FC denominated liability. Under the cross-currency interest rate swap Entity C receives variable interest in FC (used to pay the interest on the liability) and pays fixed interest in LC.

(b) Entity C considers the cash flows on a hedged liability and on the related cross-currency interest rate swap as one aggregated fixed rate exposure in LC. From time to time, in accordance with its risk management strategy for fixed rate interest rate risk (in LC), Entity C decides to link its interest payments to current variable interest rate levels and hence swaps its aggregated fixed rate exposure in LC into a variable rate exposure in LC. Consequently, Entity C uses interest rate swaps (denominated entirely in LC) under which it receives fixed interest (used to pay the interest on the pay leg of the cross-currency interest rate swap) and pays variable interest.

IE32 The following table sets out the parameters used for Example 3:

Example 3—Parameter overview					
	t_0	**Period 1**	**Period 2**	**Period 3**	**Period 4**
FX spot rate [LC/FC]	1.2	1.05	1.42	1.51	1.37
Interest curves (vertical presentation of rates for each quarter of a period on a p.a. basis)					
LC	2.50%	1.00%	3.88%	0.34%	[N/A]
	2.75%	1.21%	4.12%	0.49%	
	2.91%	1.39%	4.22%	0.94%	
	3.02%	1.58%	5.11%	1.36%	
	2.98%	1.77%	5.39%		
	3.05%	1.93%	5.43%		
	3.11%	2.09%	5.50%		
	3.15%	2.16%	5.64%		
	3.11%	2.22%			
	3.14%	2.28%			
	3.27%	2.30%			
	3.21%	2.31%			
	3.21%				
	3.25%				
	3.29%				
	3.34%				
FC	3.74%	4.49%	2.82%	0.70%	[N/A]
	4.04%	4.61%	2.24%	0.79%	
	4.23%	4.63%	2.00%	1.14%	
	4.28%	4.34%	2.18%	1.56%	
	4.20%	4.21%	2.34%		
	4.17%	4.13%	2.53%		
	4.27%	4.07%	2.82%		
	4.14%	4.09%	3.13%		
	4.10%	4.17%			
	4.11%	4.13%			
	4.11%	4.24%			
	4.13%	4.34%			
	4.14%				
	4.06%				
	4.12%				
	4.19%				

Accounting mechanics

IE33 Entity C designates the following hedging relationships:[21]

(a) As a cash flow hedge, a hedging relationship for cash flow interest rate risk and FX risk between the FC denominated variable rate liability (variable rate FX liability) as the hedged item and a cross-currency interest rate swap as the hedging instrument (the 'first level relationship'). This hedging relationship is designated at the beginning of Period 1 (ie t_0) with a term to the end of Period 4.

(b) As a fair value hedge, a hedging relationship between the aggregated exposure as the hedged item and an interest rate swap as the hedging instrument (the 'second level relationship'). This hedging relationship is designated at the end of Period 1, when Entity C decides to link its interest payments to current variable interest rate levels and hence swaps its aggregated fixed rate exposure in LC into a variable rate exposure in LC, with a term to the end of Period 4. The aggregated exposure that is designated as the hedged item represents, in LC, the change in value that is the effect of changes in the value of the combined cash flows of the two items designated in the cash flow hedge of the cash flow interest rate risk and FX risk (see (a) above), compared to the interest rates at the end of Period 1 (ie the time of designation of the hedging relationship between the aggregated exposure and the interest rate swap).

IE34 The following table[22] sets out the overview of the fair values of the derivatives, the changes in the value of the hedged items and the calculation of the cash flow hedge reserve.[23] In this example no hedge ineffectiveness arises on either hedging relationship because of the assumptions made.[24]

21 This example assumes that all qualifying criteria for hedge accounting are met (see IFRS 9.6.4.1). The following description of the designation is solely for the purpose of understanding this example (ie it is not an example of the complete formal documentation required in accordance with IFRS 9.6.4.1(b)).

22 Tables in this example use the following acronyms: 'CCIRS' for cross-currency interest rate swap, 'CF(s)' for cash flow(s), 'CFH' for cash flow hedge, 'CFHR' for cash flow hedge reserve, 'FVH' for fair value hedge, 'IRS' for interest rate swap and 'PV' for present value.

23 In the following table for the calculations all amounts (including the calculations for accounting purposes of amounts for assets, liabilities and equity) are in the format of positive (plus) and negative (minus) numbers (eg an amount in the cash flow hedge reserve that is a negative number is a loss).

24 Those assumptions have been made for didactical reasons, in order to better focus on illustrating the accounting mechanics in a cash flow hedge/fair value hedge combination. The measurement and recognition of hedge ineffectiveness has already been demonstrated in Example 1 and Example 2. However, in reality such hedges are typically not perfectly effective because hedge ineffectiveness can result from various factors, for example credit risk, differences in the day count method or, depending on whether it is included in the designation of the hedging instrument, the charge for exchanging different currencies that is included in cross-currency interest rate swaps (commonly referred to as the 'currency basis').

Example 3—Calculations	t_0	Period 1	Period 2	Period 3	Period 4
Variable rate FX liability					
Fair value [FC]	(1,000,000)	(1,000,000)	(1,000,000)	(1,000,000)	(1,000,000)
Fair value [LC]	(1,200,000)	(1,050,000)	(1,420,000)	(1,510,000)	(1,370,000)
Change in fair value [LC]		150,000	(370,000)	(90,000)	140,000
PV of change in variable CF(s) [LC]	0	192,310	(260,346)	(282,979)	(170,000)
Change in PV [LC]		192,310	(452,656)	(22,633)	112,979
CCIRS (receive variable FC/pay fixed LC)					
Fair value [LC]	0	(192,310)	260,346	282,979	170,000
Change in fair value [LC]		(192,310)	452,656	22,633	(112,979)
CFHR					
Opening balance	0	0	(42,310)	(28,207)	(14,103)
Reclassification FX risk		153,008	(378,220)	(91,030)	140,731
Reclassification (current period CF)		(8,656)	(18,410)	2,939	21,431
Effective CFH gain/loss		(186,662)	(479,286)	20,724	(135,141)
Reclassification for interest rate risk		0	(82,656)	67,367	(27,021)
Amortisation of CFHR		0	14,103	14,103	14,103
Ending balance		(42,103)	(28,207)	(14,103)	0
IRS (receive fixed/pay variable)					
Fair value [LC]		0	(82,656)	(15,289)	(42,310)
Change in fair value			(82,656)	67,367	(27,021)
Change in present value of the aggregated exposure					
Present value [LC]		(1,242,310)	(1,159,654)	(1,227,021)	(1,200,000)
Change in present value [LC]			82,656	(67,367)	27,021

IE35 The hedging relationship between the variable rate FX liability and the cross-currency interest rate swap starts at the beginning of Period 1 (ie t_0) and remains in place when the hedging relationship for the second level relationship starts at the end of Period 1, ie the first level relationship continues as a separate hedging relationship. However, the hedge accounting for the first level relationship is affected by the start of hedge accounting for the second level relationship at the end of Period 1. The fair value hedge for the second level relationship affects the timing of the reclassification to profit or loss of amounts from the cash flow hedge reserve for the first level relationship:

(a) The fair value interest rate risk that is hedged by the fair value hedge is included in the amount that is recognised in other comprehensive income as a result of the cash flow hedge for the first level hedging relationship (ie the gain or loss on the cross-currency interest rate swap

that is determined to be an effective hedge).[25] This means that from the end of Period 1 the part of the effective cash flow hedging gain or loss that represents the fair value interest rate risk (in LC), and is recognised in other comprehensive income in a first step, is in a second step immediately (ie in the same period) transferred from the cash flow hedge reserve to profit or loss. That reclassification adjustment offsets the gain or loss on the interest rate swap that is recognised in profit or loss.[26] In the context of accounting for the aggregated exposure as the hedged item, that reclassification adjustment is the equivalent of a fair value hedge adjustment because in contrast to a hedged item that is a fixed rate debt instrument (in LC) at amortised cost, the aggregated exposure is already remeasured for changes regarding the hedged risk but the resulting gain or loss is recognised in other comprehensive income because of applying cash flow hedge accounting for the first level relationship. Consequently, applying fair value hedge accounting with the aggregated exposure as the hedged item does not result in changing the hedged item's measurement but instead affects where the hedging gains and losses are recognised (ie reclassification from the cash flow hedge reserve to profit or loss).

(b) The amount in the cash flow hedge reserve at the end of Period 1 (LC42,310) is amortised over the remaining life of the cash flow hedge for the first level relationship (ie over Periods 2 to 4).[27]

IE36 The change in value of the aggregated exposure is calculated as follows:

(a) At the point in time from which the change in value of the aggregated exposure is hedged (ie the start of the second level relationship at the end of Period 1), all cash flows expected on the variable rate FX liability and the cross-currency interest rate swap over the hedged term (ie until the end of Period 4) are mapped out and their combined present value, in LC, is calculated. This calculation establishes the present value that is used at subsequent dates as the reference point to measure the change in present value of the aggregated exposure since the start of the hedging relationship. This calculation is illustrated in the following table:

25 As a consequence of hedging its exposure to cash flow interest rate risk by entering into the cross-currency interest rate swap that changed the cash flow interest rate risk of the variable rate FX liability into a fixed rate exposure (in LC), Entity C in effect assumed an exposure to fair value interest rate risk (see paragraph IE31).

26 In the table with the overview of the calculations (see paragraph IE34) this reclassification adjustment is the line item "Reclassification for interest rate risk" in the reconciliation of the cash flow hedge reserve (eg at the end of Period 2 a reclassification of a gain of LC82,656 from the cash flow hedge reserve to profit or loss—see paragraph IE36 for how that amount is calculated).

27 In the table with the overview of the calculations (see paragraph IE34) this amortisation results in a periodic reclassification adjustment of LC14,103 that is included in the line item "Amortisation of CFHR" in the reconciliation of the cash flow hedge reserve.

Example 3—Present value of the aggregated exposure (starting point)

		Present value of the aggregated exposure					
		FX liability		CCIRS FC leg		CCIRS LC leg	
		CF(s) [FC]	PV [FC]	CF(s) [FC]	PV [FC]	CF(s) [LC]	PV [LC]
	Time						
Period 1	t_0						
	t_1						
	t_2						
	t_3						
	t_4						
Period 2	t_5	(11,039)	(10,918)	11,039	10,918	(9,117)	(9,094)
	t_6	(11,331)	(11,082)	11,331	11,082	(9,117)	(9,067)
	t_7	(11,375)	(11,000)	11,375	11,000	(9,117)	(9,035)
	t_8	(10,689)	(10,227)	10,689	10,227	(9,117)	(9,000)
Period 3	t_9	(10,375)	(9,824)	10,375	9,824	(9,117)	(8,961)
	t_{10}	(10,164)	(9,528)	10,164	9,528	(9,117)	(8,918)
	t_{11}	(10,028)	(9,307)	10,028	9,307	(9,117)	(8,872)
	t_{12}	(10,072)	(9,255)	10,072	9,255	(9,117)	(8,825)
Period 4	t_{13}	(10,256)	(9,328)	10,256	9,328	(9,117)	(8,776)
	t_{14}	(10,159)	(9,147)	10,159	9,147	(9,117)	(8,727)
	t_{15}	(10,426)	(9,290)	10,426	9,290	(9,117)	(8,678)
	t_{16}	(1,010,670)	(891,093)	1,010,670	891,093	(1,209,117)	(1,144,358)
	Totals		(1,000,000)		1,000,000		(1,242,310)
	Totals in LC		(1,050,000)		1,050,000		(1,242,310)
PV of aggregated exposure [LC]			(1,242,310) ← Σ				

The present value of all cash flows expected on the variable rate FX liability and the cross-currency interest rate swap over the hedged term at the end of Period 1 is LC-1,242,310.[28]

(b) At subsequent dates, the present value of the aggregated exposure is determined in the same way as at the end of Period 1 but for the remainder of the hedged term. For that purpose, all remaining cash flows expected on the variable rate FX liability and the cross-currency

28 In this example no hedge ineffectiveness arises on either hedging relationship because of the assumptions made (see paragraph IE34). Consequently, the absolute values of the variable rate FX liability and the FC denominated leg of the cross-currency interest rate are equal (but with opposite signs). In situations in which hedge ineffectiveness arises, those absolute values would not be equal so that the remaining net amount would affect the present value of the aggregated exposure.

interest rate swap over the remainder of the hedged term (ie from the effectiveness measurement date until the end of Period 4) are updated (as applicable) and then discounted. The total of those present values represents the present value of the aggregated exposure. This calculation is illustrated in the following table for the end of Period 2:

Example 3—Present value of the aggregated exposure (at the end of Period 2)

		Present value of the aggregated exposure					
		FX liability		CCIRS FC leg		CCIRS LC leg	
		CF(s) [FC]	PV [FC]	CF(s) [FC]	PV [FC]	CF(s) [LC]	PV [LC]
	Time						
Period 1	t_0						
	t_1						
	t_2						
	t_3						
	t_4						
Period 2	t_5	0	0	0	0	0	0
	t_6	0	0	0	0	0	0
	t_7	0	0	0	0	0	0
	t_8	0	0	0	0	0	0
Period 3	t_9	(6,969)	(6,921)	6,969	6,921	(9,117)	(9,030)
	t_{10}	(5,544)	(5,475)	5,544	5,475	(9,117)	(8,939)
	t_{11}	(4,971)	(4,885)	4,971	4,885	(9,117)	(8,847)
	t_{12}	(5,401)	(5,280)	5,401	5,280	(9,117)	(8,738)
Period 4	t_{13}	(5,796)	(5,632)	5,796	5,632	(9,117)	(8,624)
	t_{14}	(6,277)	(6,062)	6,277	6,062	(9,117)	(8,511)
	t_{15}	(6,975)	(6,689)	6,975	6,689	(9,117)	(8,397)
	t_{16}	(1,007,725)	(959,056)	1,007,725	956,056	(1,209,117)	(1,098,568)
	Totals		(1,000,000)		1,000,000		(1,159,654)
	Totals in LC		(1,420,000)		1,420,000		(1,159,654)
PV of aggregated exposure [LC]			(1,159,654) ← Σ				

The changes in interest rates and the exchange rate result in a present value of the aggregated exposure at the end of Period 2 of LC-1,159,654. Consequently, the change in the present value of the aggregated exposure between the end of Period 1 and the end of Period 2 is a gain of LC82,656.[29]

IE37 Using the change in present value of the hedged item (ie the aggregated exposure) and the fair value of the hedging instrument (ie the interest rate swap), the related reclassifications from the cash flow hedge reserve to profit or loss (reclassification adjustments) are then determined.

IE38 The following table shows the effect on Entity C's statement of profit or loss and other comprehensive income and its statement of financial position (for the sake of transparency some line items[30] are disaggregated on the face of the statements by the two hedging relationships, ie for the cash flow hedge of the variable rate FX liability and the fair value hedge of the aggregated exposure):[31]

29 This is the amount that is included in the table with the overview of the calculations (see paragraph IE34) as the change in present value of the aggregated exposure at the end of Period 2.

30 The line items used in this example are a possible presentation. Different presentation formats using different line items (including line items that include the amounts shown here) are also possible (IFRS 7 *Financial Instruments: Disclosures* sets out disclosure requirements for hedge accounting that include disclosures about hedge ineffectiveness, the carrying amount of hedging instruments and the cash flow hedge reserve).

31 For Period 4 the values in the table with the overview of the calculations (see paragraph IE34) differ from those in the following table. For Periods 1 to 3 the 'dirty' values (ie including interest accruals) equal the 'clean' values (ie excluding interest accruals) because the period end is a settlement date for all legs of the derivatives and the fixed rate FX liability. At the end of Period 4 the table with the overview of the calculations uses clean values in order to calculate the value changes consistently over time. For the following table the dirty values are presented, ie the maturity amounts including accrued interest immediately before the instruments are settled (this is for illustrative purposes as otherwise all carrying amounts other than cash and retained earnings would be nil).

Example 3—Overview of effect on statements of financial performance and financial position

[All amounts in LC]

	t_0	Period 1	Period 2	Period 3	Period 4
Statement of profit or loss and other comprehensive income					
Interest expense					
FX liability		45,122	54,876	33,527	15,035
FVH adjustment		0	(20,478)	16,517	(26,781)
		45,122	34,398	50,045	(11,746)
Reclassifications (CFH)		(8,656)	(18,410)	2,939	21,431
		36,466	15,989	52,983	9,685
Amortisation of CFHR		0	14,103	14,103	14,103
Total interest expense		36,466	30,092	67,087	23,788
Other gains/losses					
IRS		0	82,656	(67,367)	27,021
FX gain/loss (liability)		(150,000)	370,000	90,000	(140,000)
FX gain/loss (interest)		(3,008)	8,220	1,030	(731)
Reclassification for FX risk		153,008	(378,220)	(91,030)	140,731
Reclassification for interest rate risk		0	(82,656)	67,367	(27,021)
Total other gains/losses		0	0	0	0
Profit or loss		36,466	30,092	67,087	23,788
Other comprehensive income (OCI)					
Effective gain/loss		186,662	(479,286)	(20,724)	135,141
Reclassification (current period CF)		8,656	18,410	(2,939)	(21,431)
Reclassification for FX risk		(153,008)	378,220	91,030	(140,731)
Reclassification for interest rate risk		0	82,656	(67,367)	27,021
Amortisation of CFHR		0	(14,103)	(14,103)	(14,103)
Total other comprehensive income		42,310	(14,103)	(14,103)	(14,103)
Comprehensive income		78,776	15,989	52,983	9,685

continued...

...continued

Example 3—Overview of effect on statements of financial performance and financial position
[All amounts in LC]

	t_0	Period 1	Period 2	Period 3	Period 4
Statement of financial position					
FX liability	(1,200,000)	(1,050,000)	(1,420,000)	(1,510,000)	(1,375,306)
CCIRS	0	(192,310)	260,346	282,979	166,190
IRS		0	(82,656)	(15,289)	(37,392)
Cash	1,200,000	1,163,534	1,147,545	1,094,562	1,089,076
Total net assets	0	(78,776)	(94,765)	(147,748)	(157,433)
Accumulated OCI	0	42,310	28,207	14,103	0
Retained earnings	0	36,466	66,558	133,645	157,433
Total equity	0	78,776	94,765	147,748	157,433

IE39 The total interest expense in profit or loss reflects Entity C's interest expense that results from its risk management strategy:

(a) In Period 1 the risk management strategy results in interest expense reflecting fixed interest rates in LC after taking into account the effect of the cross-currency interest rate swap.

(b) For Periods 2 to 4, after taking into account the effect of the interest rate swap entered into at the end of Period 1, the risk management strategy results in interest expense that changes with variable interest rates in LC (ie the variable interest rate prevailing in each period). However, the amount of the total interest expense is not equal to the amount of the variable rate interest because of the amortisation of the amount that was in the cash flow hedge reserve for the first level relationship at the end of Period 1.[32]

32 See paragraph IE35(b). That amortisation becomes an expense that has an effect like a spread on the variable interest rate.