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International Accounting Standards Board

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Note: The observer note is based on the staff paper prepared for the IFRIC. Paragraph numbers correspond to paragraph numbers used in the IFRIC paper. However, because the observer note is less detailed, some paragraph numbers are not used.

**INFORMATION FOR OBSERVERS** 

### IFRIC meeting: May 2008, London

Project: Application of t

Application of the Effective Interest Rate Method (Agenda Paper 6)

### INTRODUCTION

- In February 2008 the IFRIC received a request for guidance on the application of the effective interest rate method (EIRM) to particular types of financial instruments. Portions of the original submission are included as an appendix.
- 2. Specifically, the submission asked how the EIRM should be applied to a debt instrument with future cash flows (principal and interest) linked to changes in an inflation index.
- 3. The submission deals only with instruments:
  - a. that are <u>not</u> classified as a financial asset or financial liability at fair value through profit or loss and

 b. in which the embedded derivative (the inflation linked mechanism) is determined to be <u>closely related</u> to the debt host contract, and therefore does not need to be accounted for separately.

For the purpose of this paper, such instruments are referred to as 'inflationlinked instruments'.

4. The submission (and this paper) does not address accounting for changes in estimated future cash flows that are attributable to changes in factors <u>other than</u> those arising from an inflation index (eg changes in the instrument's coupon arising from rating triggers).

### **OUTLINE OF ALTERNATIVES**

5. The submission states that it is unclear how to account for changes in the estimated future cash flows of an inflation-linked instrument. The submission suggests that the requirements of IAS 29 *Financial Reporting in Hyperinflationary Economies* or IAS 39 could apply.

### IAS 29

6. IAS 29 applies only to the financial statements of an entity whose functional currency is the currency of a hyperinflationary economy (as defined in paragraph 1 of IAS 29). The submission states the economy is <u>not</u> hyperinflationary. Therefore, the staff thinks it is inappropriate to apply (or analogise to) the requirements of IAS 29 if relevant guidance exists in IAS 39 – whose scope does include the inflation-linked instruments described in the submission.

### **IAS 39**

7. Paragraph 9 of IAS 39 describes the EIRM and states that it is a method of allocating interest expense (or interest income) over the relevant period. The effective interest rate (EIR) is the rate that exactly discounts estimated future cash flows through the expected life of the financial instrument to the net carrying amount of the financial instrument. Paragraphs AG7 and AG8 provide application guidance that sets out how changes in the estimated future cash

flows of financial instruments measured using a cost-based method should be accounted for.

- The submission suggests there are two possible approaches to account for changes in estimated future cash flows for inflation-linked instruments under IAS 39:
  - a. Apply the guidance in paragraph AG7
  - b. Apply the guidance in paragraph AG8

### Paragraph AG7

- 9. IAS 39 paragraph AG7 applies only to floating rate financial instruments whose estimated future cash flows are revised to reflect movements in market rates of interest.
- 10. Periodic re-estimations of those cash flows to reflect such movements <u>alter the</u> <u>effective interest rate</u>.
- 11. Paragraph AG7 states that if a floating rate financial instrument is recognised initially at an amount equal to the principal receivable or payable on maturity, re-estimating the future interest payments normally has no significant effect on the carrying amount of the asset or liability.
- 12. The portions of the original submission included as an appendix to this paper provide additional details about how paragraph AG7 might be applied to inflation-linked instruments.

### Paragraph AG8

- 13. Paragraph AG8 applies to changes in estimated future cash flows other than those that are addressed in paragraph AG7.
- 14. Periodic re-estimations of those cash flows <u>alter the carrying amount</u> of the instrument.
- 15. Paragraph AG8 states that if an entity revises its estimated cash flows, it should adjust the carrying amount of the financial instrument to reflect actual and

revised estimates of cash flows. The entity recalculates the carrying amount by computing the present value of the revised estimated future cash flows at the financial instrument's <u>original EIR</u>.

16. The portions of the original submission included as an appendix to this paper provide additional details about how paragraph AG8 might be applied to inflation-linked instruments.

### STAFF ANALYSIS

- 17. The question is whether an inflation-linked instrument is a floating rate instrument. If it is, paragraph AG7 is applied. If it is not, paragraph AG8 is applied.
- 18. Judgement often is required to determine whether an instrument is a floating rate instrument.

### Paragraph AG7

- 19. Paragraph AG7 applies to instruments whose changes in cash flows reflect movements in 'market rates of interest' (a floating rate instrument).
- 20. The requirements in paragraph AG7 reflect the fact that varying interest amounts are a contractual term of a floating rate instrument. Thus, it would be inappropriate at the inception of the instrument to determine a single rate to discount estimated future cash flows.
- 21. An entity might determine that an inflation-linked instrument is analogous to a floating rate instrument because varying interest amounts are a contractual term of the instrument. Changes in the inflation index result in changes to the instrument's effective yield. If such a determination is made, paragraph AG7 is applicable because it is inappropriate to determine a single EIR for the life of the instrument.

### Paragraph AG8

- 22. Alternatively an entity might determine that an inflation-linked instrument is not within the scope of paragraph AG7 because the changes in estimated future cash flows <u>do not</u> reflect movements in market interest rates.
- 23. Moreover, analogising to paragraph AG7 for inflation-linked instruments raises the question whether such an analogy is appropriate for many other instruments (eg an instrument whose coupon changes based on a rating trigger).
- 24. The scope of paragraph AG8 is wide because it applies to changes in estimated future cash flows other than those that are explicitly addressed in paragraph AG7. Therefore it could be argued that paragraph AG8 applies to all instruments whose changes in estimated future cash flows reflect factors other than movements in market interest rates, including inflation-linked instruments.

### STAFF RECOMMENDATION

- 25. The staff recommends that IFRIC not add the issue to its agenda. The staff thinks that the question is an application issue and can be resolved by applying existing guidance in IAS 39.
- 26. Reporting entities need to apply judgement to determine whether the inflationlinked instrument is a floating rate instrument. That determination must be based on the instrument's features and be applied consistently.
- 27. The staff thinks that inflation-linked instruments are only one example of instruments that will require such judgement. Consequently, the staff thinks that the IFRIC should not provide application guidance for a specific instrument.
- 28. [Paragraph omitted from observer note].

### **QUESTION FOR THE IFRIC**

29. Does the IFRIC agree that the issue should not be added to the agenda? If not, on what basis should it be added?

### APPENDIX

### IFRIC POTENTIAL AGENDA ITEM REQUEST

# <u>The issue:</u> Implementation of the effective interest rate method (EIRM) for indexed linked debt instruments

### Question:

How should the effective interest rate method (EIRM) be implemented for a financial debt instrument whose payments (principal and interest) are linked to the changes in inflation index?

Please note that this paper deals <u>only</u> with indexed linked debt instruments which are not carried at fair value through profit or loss, and where the inflation linked mechanism has been found to be closely related embedded derivative and therefore does not need to be recognized and measured separately.

### Alternative A - Applying IAS 39.AG8

According to this approach, the EIR of the debt instrument at initial recognition is determined by estimating the future cash flows to be paid on the debt, based on the expected level of the inflation index over the expected term of the debt. The estimated cash flows will be those that, when discounted at the assumed EIR, give rise to an amount equal to the fair value of the debt (usually the issue proceeds).

If in subsequent periods there is a change in the level of the inflation index expectations for the remaining term of the debt instrument, the entity revises its estimates of the future cash flows to be paid on the debt accordingly. It recalculates the carrying amount of the debt instrument by discounting the revised estimated cash flows using the original EIR. The resulting adjustment to the carrying amount of the debt is recognized immediately in the income statement as a gain or loss. The result is that a gain or loss is recognized in the current period for changes in the actual and the expected level of the inflation index.

### Alternative B - Applying IAS 39.AG7

Under this approach, the instrument is treated as a floating-rate debt instrument with the inflation link being part of the floating-rate mechanism. The EIR is determined at initial recognition, in the same way as under Alternative A above. However, if in subsequent periods there is a change in inflation expectations, the entity reflects these changes by adjusting both the expected future cash flows on the debt and the EIR.

A question that has arisen here is whether IAS39.AG7 (that deals with floating rate financial instruments) was initially drafted in order to determine the accounting treatment for inflation index linked debt. It is arguable, reading IAS 29.12, that IAS 29 does not prescribe special accounting treatment for monetary items (e.g. debt financial instruments), and therefore IAS 29.13 should be applied for index linked debt also in non-hyperinflationary economies (see alternative C below).

Alternatively, one can argue that for practical reasons, the implementation of IAS 39.AG7 does not require the estimation of future inflation expectations every balance sheet date. In practice, the EIR on indexed linked debt generally would not need to be adjusted at each repricing date as the impact generally would not be significant. In this case interest expense is recorded in the income statement based on the actual changes in inflation index plus/minus amortization of the discount or premium based on the original EIR. This view is supported by IAS 39.AG7 that states that "...re-estimating the future interest payments normally has no significant effect on the carrying amount of the asset or liability".

### Alternative C - Applying the provisions of IAS 29

IAS 29.13 states: "Assets and liabilities linked by agreement to changes in prices, such as index linked bonds and loans, are adjusted in accordance with the agreement in order to ascertain the amount outstanding at the balance sheet date. These items are carried at this adjusted amount in the restated balance sheet".

IAS 29.12 provides that "Monetary items are not restated because they are already expressed in terms of the monetary unit current at the balance sheet date", in the context of this paragraph, it is reasonable to assume that IAS 29.13 refers not only to hyperinflationary economies.

### **Example**

On January 1, 2004, the Company received a loan of CU 100,000, linked to the CPI and bearing CPI-linked interest of 5%. The loan will be repaid in full after five years. The interest on the loan is paid at each year end.

The Company prepares annual financial statements only.

Following are data of actual inflation rates and annual expected inflation rates on various dates:

		Annual expected inflation rates				
	Actual inflation rate	On 1.1.04	On 1.1.05	On 1.1.06	On 1.1.07	On 1.1.08
2004	1.2%	0.7%	-	-	-	-
2005	2.4%	2.6%	1.4%	-	-	-
2006	0%	2.8%	1.9%	1.7%	-	-
2007	3.4%	2.8%	3.5%	2.1%	1.2%	-
2008	2.5%	2.8%	3.5%	2.6%	1.6%	2.5%
	(assumed)					

Following are the expected cash flows at each date:

# 1.1.04

Cash flows on	Amount	Calculation		
31.12.04	5,035	=5,000*1.007		
31.12.05	5,166	=5,000*1.007*1.026		
31.12.06	5,311	=5,000*1.007*1.026*1.028		
31.12.07	5,459	=5,000*1.007*1.026*1.028*1.028		
31.12.08	117,854	=105,000*1.007*1.026*1.028*1.028*1.028		

## 1.1.05

Cash flows on	Amount	Calculation
31.12.05	5,131	=5,000*1.012*1.014
31.12.06	5,228	=5,000*1.012*1.014*1.019
31.12.07	5,411	=5,000*1.012*1.014*1.019*1.035
31.12.08	117,615	=105,000*1.012*1.014*1.019*1.035*1.035

# 1.1.06

Cash flows on Amount		Calculation		
31.12.06	5,270	=5,000*1.012*1.024*1.017		
31.12.07	5,380	=5,000*1.012*1.024*1.017*1.021		
31.12.08	115,921	=105,000*1.012*1.024*1.017*1.021*1.026		

# 1.1.07

Cash flows on	Amount	Calculation		
31.12.07	5,244	=5,000*1.012*1.024*1.012		
31.12.08	111,878	=105,000*1.012*1.024*1.012*1.016		

### 1.1.08

Cash flows on	Amount	Calculation	
31.12.08	115,323	=105,000*1.012*1.024*1.034*1.025	

	Alternative A (AG8)		Alternative B (AG7)		Alternative C (IAS 29)	
	Financial expenses	Loan balance	Financial expenses	Loan balance	Financial expenses	Loan balance
31.12.04	7,101	102,041	7,410	102,350	6,260	101,200
31.12.05	6,256	103,116	7,492	104,661	7,610	103,629
31.12.06	3,921	101,856	7,169	106,649	5,181	103,629
31.12.07	10,862	107,367	5,236	106,528	8,881	107,152
31.12.08	7,960	109,835	8,793	109,835	8,168	109,835
Total	36,100		36,100		36,100	

# Condensed data and comparison of the various alternatives