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Project	<b>Financial Instruments (Replacement of IAS 39)—Hedge accounting</b>
Topic	<b>Risk components—the ‘sub-LIBOR’ issue</b>

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## Introduction

### *Background*

1. This paper contains further discussion of an issue that predominantly arises in a narrow subset of interest rate risk hedging. This issue is about the benchmark interest rate risk component of a financial asset or liability that bears interest below the benchmark rate. This paper illustrates the issue using LIBOR as an example but it applies in the same way for other benchmark rates.
2. Although the subset is narrow, it is nevertheless an important issue for the entities affected—predominantly although not exclusively financial institutions—and it has been raised by respondents during our outreach activities and in the comment letters. It has also been raised in the past in comment letters and in other communications with the IASB.
3. The staff presented this issue to the Board<sup>1</sup> during the deliberation process of the exposure draft (ED) on the general hedge accounting model. The Board decided to retain the restriction that currently exists in IAS 39 *Financial Instruments: Recognition and Measurement*, which states that entities cannot designate a portion that is bigger than the total of the cash flows of the hedged item.

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<sup>1</sup> Refer to agenda paper 16 presented at the 18-22 October IASB meeting.

This paper has been prepared by the technical staff of the IFRS Foundation for discussion at a public meeting of the IASB.

The views expressed in this paper are those of the staff preparing the paper. They do not purport to represent the views of any individual members of the IASB.

Comments made in relation to the application of an IFRS do not purport to be acceptable or unacceptable application of that IFRS—only the IFRS Interpretations Committee or the IASB can make such a determination.

The tentative decisions made by the IASB at its public meetings are reported in IASB *Update*. Official pronouncements of the IASB, including Discussion Papers, Exposure Drafts, IFRSs and Interpretations are published only after it has completed its full due process, including appropriate public consultation and formal voting procedures.

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**Summary of the feedback received from comment letters and outreach**

4. The comment letters and the extensive outreach provided the Board with mixed feedback.
5. Some respondents agree with the restriction on designating instruments that are priced sub-LIBOR to a risk component that does not exceed the instrument's total cash flows and with having processes to identify and control the outcomes that the restriction aims to address. These counterintuitive outcomes can be addressed for example by using option derivatives as hedging instruments.
6. Others feel that the restriction in relation to designating a benchmark component of an item with total cash flows that are less than those associated with the benchmark is not well understood as the Board's rationale for retaining it is unclear to them. In their view, this restriction should not exist because it is contrary to common risk management practices.
7. These respondents argue that designation on a risk components basis also reflects the risk management approach when the hedged item has a negative spread to the benchmark rate. For example, this occurs when the reference rate is highly correlated with LIBOR and the negative spread arises because of the better credit risk of the contributors to the reference index (eg TIBOR) when compared to LIBOR. It can also arise on variable-rate loans, many deposits and other items that bear interest at the benchmark reference rate 'minus xx basis points' because of the quality of a particular obligor.
8. In these respondents' view it should be possible to hedge the LIBOR risk as a benchmark component and treat the spread as a negative residual component.
9. Their view reflects the fact that they are hedging their exposure to the variability of cash flows that is attributable to LIBOR (or a correlated index) using LIBOR swaps. The proponents of this view therefore contend that the current model, by not allowing entities to reflect this risk management activity, does not allow them to show the substance of the hedging relationship, and that this forces them to recognise hedge ineffectiveness that in their view does not reflect their risk management strategy.

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10. Some of these respondents argued that the current restriction precludes entities from applying hedge accounting. In their view, the Board needs to clarify what the scope of the restriction is, what it is aimed at and whether it represents an explicit prohibition.
11. The same respondents asked the Board to make a clear distinction between sub-LIBOR instruments that have a floor at a rate of zero per cent and instruments without a floor. This was because the original staff paper stated that the sub-LIBOR issue only arises when the interest-bearing instrument has a floor. For these respondents, the distinction between instruments with a floor and without a floor is rather ‘theoretical’ and it is not clear how the restriction carried over from IAS 39 to the ED relates to instruments that do not have a floor (as it is common for instruments that are priced sub-LIBOR in some jurisdictions).
12. Finally, respondents also asked the Board to reconsider the restriction particularly in the context of the following scenarios:
  - (a) hedging a net exposure of an asset and a liability with the aim of hedging a combined *fixed* interest margin;
  - (b) hedging a non-financial item that is systematically priced below the benchmark, using a hedging instrument based on the benchmark component; and
  - (c) the ramifications for the hedging of core deposits and macro/portfolio hedge accounting.

**Purpose of the paper**

13. The purpose of this paper is to analyse the implications for hedge accounting when:
  - (a) an entity uses a hedging instrument that is based on a benchmark risk to hedge an item with total cash flows that are *less than* those associated with that benchmark and, *in addition*,
  - (b) the context is hedging a fixed *margin* between an interest-bearing financial asset and an interest-bearing financial liability. This includes the analysis of the effect upon the restriction when the financial instruments have a floor.

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14. This paper does not address the issues described in paragraphs 12(b) and 12(c) above. These will be the subject of separate papers.
15. For the purpose of this paper, the staff use one example provided by one respondent that represents the view of a variety of preparers, users and auditors. This example describes a scenario whereby an entity hedges to lock in a margin between an asset and a liability with an interest rate that is lower than LIBOR (ie there is a negative spread to LIBOR). This example will be analysed first on the assumption that a floor exists and then on the assumption that no floor exists.
16. This example is particularly important as respondents were concerned that it was not explicitly considered in the deliberations that preceded the ED.
17. This paper contains one question to the Board.

**The issues**

18. Is there a 'full' LIBOR component<sup>2</sup> of an interest-bearing financial asset or financial liability if the interest rate of the instrument is lower than LIBOR? If so, should that LIBOR-component be eligible for designation as a hedged item?
19. Does the existence of a floor of the interest-bearing financial asset or financial liability affect the restriction on designating on a full LIBOR risk components basis?

**Staff analysis and alternatives**

*The requirements included in the ED*

20. As described in paragraph 3 above, the Board decided to retain in the ED the restriction that currently exists in IAS 39. Hence, the ED addresses hedging risk components of an interest-bearing financial asset or financial liability as part of the designation of financial items as hedged items (refer to paragraphs B25 and

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<sup>2</sup> References to a 'full' LIBOR component mean a LIBOR interest rate risk component that does not include the effect of a floor but instead includes the effect of all changes in LIBOR (ie the full range of possible LIBOR outcomes).

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B26, which are reproduced in Appendix A). Neither the ED nor IAS 39 prohibit the application of hedge accounting in the context of instruments that bear interest at sub-LIBOR. They simply state that entities cannot designate a hedged item on a full risk (eg LIBOR) component basis and thereby assume a (potentially) perfectly effective hedge even though the total cash flows of the instrument are lower than the cash flows that would be attributed to the risk component.

21. Consistently with the existing requirements, the ED mandates that entities cannot designate a risk component that is bigger than the total of the cash flows of the hedged item. The total exposure in the context of the example in the current ED is given by the interest rate on the hedged item.
22. Paragraph B25 of the ED uses an example of variable rate instruments. That paragraph allows entities to designate a full LIBOR component of an interest-bearing asset or liability provided that the instrument has a *zero or positive* spread over LIBOR. Upon designation, entities might achieve accounting for a fully effective hedge<sup>3</sup>.
23. However, it is important to note that for an asset or liability with a *negative* spread an entity could still designate *all* of the cash flows of the *entire* financial asset or financial liability as the hedged item with regard to benchmark interest rate risk, thus hedging the change in the fair value or cash flows of that entire liability that is attributable to changes in LIBOR. Hedge ineffectiveness could arise but hedge accounting per se is not prohibited.
24. Paragraph B26 of the ED applies the same approach to a scenario where the risk being hedged is the benchmark component of a fixed rate instrument. In this scenario, if the effective interest rate of the instrument (a fixed rate) that would be determined if the asset had been purchased on the date of designation of the hedged item is higher than LIBOR, entities are allowed to designate the full LIBOR component and might achieve accounting for a fully effective hedge<sup>4</sup>

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<sup>3</sup> Credit risk is ignored for simplicity.

<sup>4</sup> Credit risk is ignored for simplicity.

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(because the fixed-rate component can be decomposed into a coupon of LIBOR plus a positive spread)<sup>5</sup>.

**The sub-LIBOR issue**

25. The sub-LIBOR issue arises when entities have access to funding below LIBOR or funding that is linked to a reference rate that is demonstrably below LIBOR (eg TIBOR) or invest in financial assets that bear interest below LIBOR. In these scenarios, the ED does not allow entities to designate the hedging relationship on a full LIBOR risk component basis.

**Staff analysis**

26. As mentioned in paragraph 25, the sub-LIBOR issue arises for example in scenarios where entities, particularly banks, have access to sub-LIBOR funding (bearing an interest coupon at LIBOR minus a spread). This spread represents a positive margin for the borrower because banks will on average pay LIBOR for their funding in the interbank market.
27. When entering into hedging relationships, many entities cannot or do not obtain an instrument that is tailored to the particular types of transactions that are priced sub-LIBOR such as deposits (eg because of the cost of using an instrument other than a standard LIBOR swap). Consequently, many entities hedge these exposures using standard LIBOR swaps.
28. For risk management purposes, many entities try to hedge the changes in the variability of the cash flows that are attributable to LIBOR such that the interest *margin* is 'locked' over time (as long as LIBOR is not below the absolute value of the negative spread).

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<sup>5</sup> If the hedged item is priced sub-LIBOR and subject to a hedging relationship involving a standard LIBOR swap the issue of negative interest will also arise.

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29. This risk management hedging strategy provides offsetting changes regarding the LIBOR-related interest rate risk in the same way as in a ‘LIBOR-plus’ situation, ie with a spread that is positive (or zero), as long as LIBOR does not fall below the absolute value of the negative spread. However, if LIBOR falls below that spread there are no more offsetting changes. That can for example imply zero interest or ‘negative interest’. Depending upon the relevant terms and conditions of the hedged instrument, the exposure can have:
- (a) either a zero interest rate floor; or
  - (b) ‘negative interest’<sup>6</sup>.
30. Counterintuitive results (for example paying interest on assets or receiving interest on liabilities) can occur regardless of whether hedging an individual sub-LIBOR instrument or ‘locking’ a margin between two interest-bearing financial instruments.
31. Following the feedback from respondents described above, the staff provide an analysis of the various perspectives underlying the designation of a LIBOR component in an instrument priced sub-LIBOR in the context of hedging a locked margin. The analysis is structured in two sections in order to outline the two areas that the Board needs to consider when assessing this issue.

***Designation of a LIBOR component***

32. The designation of a LIBOR component of a sub-LIBOR instrument encompasses a variety of issues that are described in the following paragraphs.
33. The first issue is under what circumstances an instrument priced sub-LIBOR behaves like a full LIBOR exposure.
34. In the staff’s view, a sub-LIBOR instrument behaves like a full LIBOR exposure as long as LIBOR will not drop below the absolute value of the negative spread. We will analyse this issue using an example provided by respondents.

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<sup>6</sup> That means paying interest on an asset or receiving interest on a liability.

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35. The second issue is whether hedging to lock in a margin rather than hedging a single instrument would have an effect upon identifying a LIBOR component.
36. **In the staff's view, the fact that the objective of the hedging relationship is to hedge an interest margin has no effect on the question of whether a full LIBOR component can be identified.** This is because the level of the margin is influenced by whether the instruments involved in the hedging relationship result in negative interest on their own. In addition, it would seem counterintuitive that the application of the hedge accounting model would report outcomes that are inconsistent with the economics of instruments containing a zero per cent interest rate floor.
37. The third issue is whether the existence or non-existence of a floor of the sub-LIBOR instruments should affect the ability to designate a full LIBOR component.
38. In the staff's view, the existence of a floor affects the ability to designate a full LIBOR component. In the cases where there is *no floor* the instrument(s) may end-up in a scenario of receiving interest on a liability and paying interest on an asset if the benchmark rate falls below the absolute value of the spread. The issue of designation on a risk components basis therefore is resolved, because a LIBOR component can always be identified. This means that the exposure has a 'self-adjusting' feature that generates the offsetting changes to match the ones generated by the movements in the interest rate derivative used to lock the margin (this derivative does not have a floor or any other optionality if it is a standard LIBOR swap).

**Example 1<sup>7</sup>—Locking an interest margin when a floor exists**

39. Entity A has a risk management strategy of hedging the interest rate margin between loans and the associated funding.

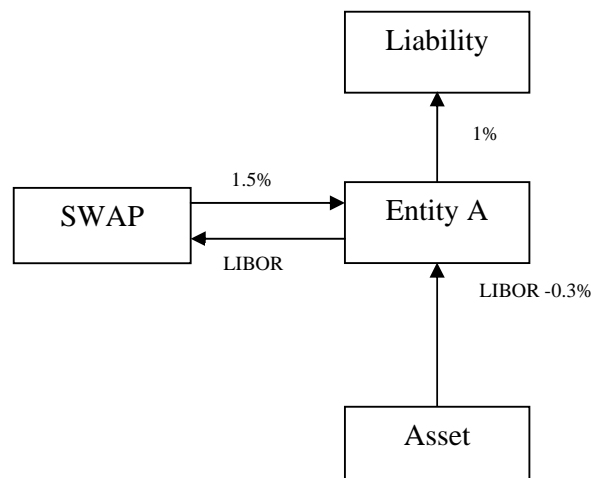
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<sup>7</sup> This example has been provided by respondents as a representation of a real scenario that the IASB should consider.



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40. Consider an example whereby Entity A has a liability that pays a fixed rate of 1 per cent. The entity grants a loan at a floating rate of LIBOR -0.3 per cent. In accordance with its risk management strategy, entity A enters into an interest rate swap with the aim of locking the margin that it will earn on the combined position. Assume that the swap will pay LIBOR and receive 1.5 per cent. A diagram of the transaction is shown below:



41. By using the structure above Entity A wants to lock in a margin of 0.2 per cent. First we will analyse examples where the asset has a floor as we believe this is the most common. If the hedging relationship could be defined as a cash flow hedge of a variable rate of revenue from the sub-LIBOR asset and there is a floor on the asset, once LIBOR reaches the absolute value of the negative spread on the asset, the hedging relationship will create hedge ineffectiveness as a result of the asset having a zero interest floor. This is illustrated in the tables below.

LIBOR	Liability	Asset	Swap		Net Receipt	Margin
			Pay LIBOR	Receive fixed		
3%	1%	LIBOR - 0.3%	3.00%	1.50%	1.20%	0.20%
2%	1%	LIBOR - 0.3%	2.00%	1.50%	1.20%	0.20%
1.50%	1%	LIBOR - 0.3%	1.50%	1.50%	1.20%	0.20%
1%	1%	LIBOR - 0.3%	1.00%	1.50%	1.20%	0.20%
0.50%	1%	LIBOR - 0.3%	0.50%	1.50%	1.20%	0.20%

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0.30%	1%	LIBOR - 0.3%	0.30%	1.50%	1.20%	0.20%
0.25%	1%	0%	0.25%	1.50%	1.25%	0.25%
0.20%	1%	0%	0.20%	1.50%	1.30%	0.30%
0%	1%	0%	0.00%	1.50%	1.50%	0.50%

	Interest on the asset will be zero (the floor applies)
	Margin becomes variable instead of locked

- 42. As LIBOR decreases below the absolute value of the negative spread, the return on the asset (after taking into account the effect of the swap) increases as a result of the interest rate swap not having a floor. This means that the hedging relationship (if designated on a full LIBOR risk components basis) has outcomes that are inconsistent with the notion of a locked margin. In this fact pattern the margin can become variable instead of being locked.
- 43. In the context of hedge accounting this generates hedge ineffectiveness, which needs to be recognised in profit or loss. This hedge ineffectiveness does not arise as a result of different repricing dates or basis risk but rather from the absence of offsetting cash flows.
- 44. Entities may still achieve hedge accounting by designating *all* of the cash flows of the hedged item for LIBOR interest rate risk. Note that this is different from designating a full LIBOR component that assumes cash flows exceeding those of the hedged item. In order to illustrate this issue, below is an example where the effect of the zero interest floor on the asset is illustrated.

**Example 1.1 A<sup>8</sup>—Illustrating the impact of changes in LIBOR in the context of a cash flow hedge of a sub-LIBOR asset.**

- 45. Consider the same scenario as described in example 1 above and assume the following additional facts:

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<sup>8</sup> This example has been provided by respondents as a representation of a real scenario that the IASB should consider.

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- (a) The amount of the transaction is CU1 million.
- (b) The term of the transaction is 4 years with annual payments.
- (c) The term structure of interest rates is assumed to be flat<sup>9</sup> at 1.5 per cent at the inception of the hedging relationship.
- (d) Two negative parallel shifts will be assumed.: a first shift to a level of 0.2 per cent from T1 to T2 and a positive parallel shift from T3 to the maturity of the transaction to 0.4 per cent.
- (e) Interest on the asset subject to the hedging relationship is floored at zero per cent.

46. The measurement of the hedged item reflects the zero interest floor on the asset as the holder of the asset has a minimum interest rate of zero per cent For the subsequent periods the outcomes are as follows:

<b>Notional</b>	<b>1,000,000</b>
<b>T0 = Flat LIBOR at 1.5%</b>	
<b>T1 = Flat LIBOR at 0.2%</b>	
<b>T2 = Flat LIBOR at 0.2%</b>	
<b>T3 = Flat LIBOR at 0.4%</b>	
<b>Swap 4 periods</b>	

<b>Hypothetical Derivative T0</b>					
If LIBOR = 1.5%					
	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
Pay 1.2%		12000	12000	12000	12000
Receive 1.2%		12000	12000	12000	12000
Net		0	0	0	0
PV		0	0	0	0
FV T0	<b>0</b>				

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<sup>9</sup> A flat term structure of interest rates has been assumed for simplicity. A similar scenario would have arisen in a non-flat scenario. The example aims to illustrate the outcomes and their impact. Credit risk is also being ignored for simplicity.

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Hypothetical Derivative T1				
If LIBOR = 0.2%				
	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>
Pay 1.2%		12000	12000	12000
Receive 0%		0	0	0
Net		-12000	-12000	-12000
PV		-11,952	-11,905	-11,857
FV T1	<b>-35,714</b>			

Hypothetical Derivative T2				
If LIBOR = 0.2%				
	<b>0</b>	<b>1</b>	<b>2</b>	
Pay 1.2%		12000	12000	
Receive 0%		0	0	
Net		-12000	-12000	
PV		-11,976	-11,952	
FV T2	<b>-23,928</b>			

Hypothetical Derivative T3				
If LIBOR = 0.4%				
	<b>0</b>	<b>1</b>		
Pay 1.2%		12000		
Receive 0.1%		1000		
Net		-11000		
PV		-10,978		
FV T3	<b>-10,978</b>			

47. The hedging derivative does not have an interest rate floor at zero per cent, which creates a genuine economic mismatch. This means that hedge ineffectiveness will arise for LIBOR scenarios below the absolute value of the negative spread because of the absence of offsetting cash flows. The outcomes for the hedging instrument are illustrated below:

Hedging Derivative T0					
If LIBOR = 1.5%					
	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
Pay 1.5%		15000	15000	15000	15000
Receive 1.5%		15000	15000	15000	15000
Net		0	0	0	0
PV		0	0	0	0
FV T0	<b>0</b>				

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Hedging Derivative T1				
If LIBOR = 0.2%				
	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>
Pay 0.2%		2000	2000	2000
Receive 1.5%		15000	15000	15000
Net		13000	13000	13000
PV		12,948	12,897	12,845
FV T1	<b>38,690</b>			

Hedging Derivative T2			
If LIBOR = 0.2%			
	<b>0</b>	<b>1</b>	<b>2</b>
Pay 0.2%		2000	2000
Receive 1.5%		15000	15000
Net		13000	13000
PV		12,974	12,948
FV T2	<b>25,922</b>		

Hedging Derivative T3		
If LIBOR = 0.4%		
	<b>0</b>	<b>1</b>
Pay 0.4%		4000
Receive 1.5%		15000
Net		11000
PV		10,978
FV T3	<b>10,978</b>	

48. When considering the actual cash flows of the sub-LIBOR interest bearing asset the fact that changes in those cash flows are not perfectly offset by the changes in the cash flows of the standard LIBOR swap create hedge ineffectiveness. As the hedging relationship is a cash flow hedge, this affects the ‘lower of’ test that needs to be applied in order to determine the cash flow hedge reserve and the effect on the performance statement. The impact on OCI, accumulated OCI and profit or loss is as follows:

	T1	T2	T3	T4
<b>LIBOR</b>	<b>1.5%</b>	<b>0.2%</b>	<b>0.2%</b>	<b>0.4%</b>
‘Lower of’ test				
Swap	38,690	25,922	10,978	0
Hedged item	35,714	23,928	10,978	0

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Hedge ineffectiveness	2,976	-982	-1,994	0
OCI	35,714	-11,786	-12,950	-10,978
AOCI	35,714	23,928	10,978	0
<b>P/L</b>				
Swap	0	13,000	13,000	11,000
<b>Hedge ineffectiveness</b>	<b>2,976</b>	<b>-982</b>	<b>-1,994</b>	<b>0</b>
Variable rate asset	12,000	0	0	1,000
<b>Net P/L</b>	<b>14,976</b>	<b>12,018</b>	<b>11,006</b>	<b>12,000</b>

49. The hedge ineffectiveness results from the fact that the asset has a zero per cent interest floor while the hedging instrument, which is standard LIBOR swap, does not have a floor. At T2 and T3 the interest rate on the asset is floored at zero per cent while the interest rate swap has cash flows that still change with LIBOR changes. The effect of this economic mismatch is recognised as hedge ineffectiveness and in the context of a margin means that a locked margin becomes variable again.
50. The analysis above demonstrates that the mere fact that a margin is being hedged (to lock it in) does not change the implications of sub-LIBOR interest because even in a margin there is an economic mismatch (ie the possibility of the margin changing in particular scenarios for the level of LIBOR). That should be taken into consideration when determining the hedged item.
51. On the basis of these arguments, the staff consider that designation of a full LIBOR component in a sub-LIBOR instrument is inappropriate from an accounting perspective. However, this question encompasses other angles, which are explored below.
52. The example demonstrates that if a full LIBOR component is considered (for example by ignoring the floor on the variable rate asset) the accounting outcome is in effect that of ‘synthetic accounting’ instead of hedge accounting. If a full LIBOR component is imputed in the context of a hedging relationship involving instruments priced sub-LIBOR, this inappropriately defers hedge ineffectiveness in OCI and will from a profit and loss perspective ultimately result in accrual accounting for the interest rate swap (even though there is no offsetting change

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in cash flows for the hedged item). This issue is illustrated in the example below:

**Example 1.1 B<sup>10</sup>—Illustrating the impact of changes in LIBOR in the context of a cash flow hedge of a sub-LIBOR asset if a full LIBOR component was assumed**

- 53. In the responses to the invitation to comment and during the outreach some participants argued that it would be possible to identify a full LIBOR component even when the financial asset or financial liability bears interest at sub-LIBOR. This example illustrates the implications of such an assumption when designating a hedging relationship on a risk components basis.
- 54. Using the same data as in example 1.1A assume now that it would be possible to designate a full LIBOR risk component by ignoring the floor on the variable rate asset.
- 55. The first implication of this assumption would be that the measurement of the hedged item would use a full LIBOR component irrespective of the total cash flows of the hedged sub-LIBOR financial asset. This means that the hedged item (eg if measured using a hypothetical derivative) will have no floor and therefore will show offsetting changes against the hedging derivative.<sup>11</sup> The outcome of this scenario is illustrated below.

<b>Notional</b>	<b>1,000,000</b>
<b>T0 = Flat LIBOR at 1.5%</b>	
<b>T1 = Flat LIBOR at 0.2%</b>	
<b>T2 = Flat LIBOR at 0.2%</b>	
<b>T3 = Flat LIBOR at 0.4%</b>	
<b>Swap 4 periods</b>	

<b>Hypothetical Derivative T0</b>					
If LIBOR = 1.5%					
	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>

<sup>10</sup> This example has been provided by respondents as a representation of a real scenario that the IASB should consider.

<sup>11</sup> This means in substance that the receive leg of the hypothetical derivative is not floored at zero per cent and therefore can become an addition to the ‘pay leg’.

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Pay 1.2%		12000	12000	12000	12000
Receive 1.2% (LIBOR - 0.3%)		12000	12000	12000	12000
Net		0	0	0	0
PV		0	0	0	0
FV T0	<b>0</b>				

Hypothetical Derivative T1				
If LIBOR = 0.2%				
	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>
Pay 1.2%		12000	12000	12000
Receive LIBOR - 0.3%		-1000	-1000	-1000
Net		-13000	-13000	-13000
PV		-12,948	-12,897	-12,845
FV T1	<b>-38,690</b>			

Hypothetical Derivative T2			
If LIBOR = 0.2%			
	<b>0</b>	<b>1</b>	<b>2</b>
Pay 1.2%		12000	12000
Receive LIBOR - 0.3%		-1000	-1000
Net		-13000	-13000
PV		-12,974	-12,948
FV T2	<b>-25,922</b>		

Hypothetical Derivative T3		
If LIBOR = 0.4%		
	<b>0</b>	<b>1</b>
Pay 1.2%		12000
Receive 0.1% (LIBOR - 0.3%)		1000
Net		-11000
PV		-10,978
FV T2	<b>-10,978</b>	

56. As the hedging derivative has not changed the outcomes for the four periods will be the same as in example 1.1A above. However, when the cash flow hedge mechanics are applied the impacts are different as illustrated below:

	T1	T2	T3	T4
LIBOR	1.5%	0.2%	0.2%	0.4%
Lower of test				
Swap	38,690	25,922	10,978	0
Hedged item	38,690	25,922	10,978	0
Hedge ineffectiveness	0	0	0	0



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OCI	38,690	-12,768	-14,944	10,978
AOCI	38,690	25,922	10,978	0
<b>P/L</b>				
Swap	0	13,000	13,000	11,000
<b>Hedge ineffectiveness</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Variable rate asset	12,000	0	0	1,000
<b>Net P/L</b>	<b>12,000</b>	<b>13,000</b>	<b>13,000</b>	<b>12,000</b>

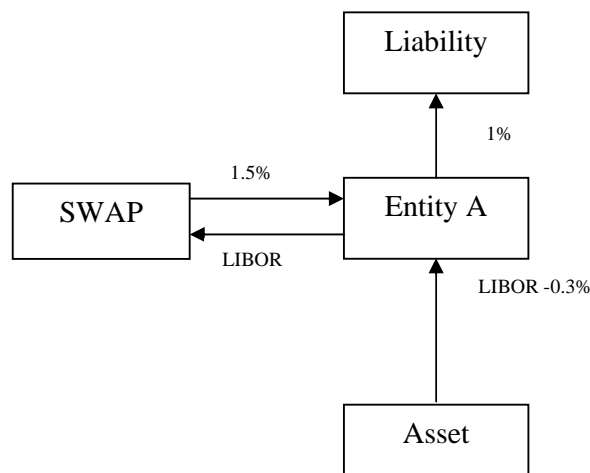
57. The example above illustrates that if a full LIBOR component is designated the hedging relationship will be shown as a perfectly effective hedge throughout its life. However, below the absolute value of the sub-LIBOR spread the assumption of a full LIBOR risk component creates a cash flow that needs to be imputed and is not consistent with the characteristics of the asset (which has an interest rate floored at zero per cent). This means that there are significant implications such as:

- (a) Imputing a full LIBOR component is tantamount to ‘synthetic accounting’ instead of hedge accounting. This is because the change in the fair value of the hedging derivative is deferred in OCI and recycled to profit or loss through interest accrual even though there is no offsetting change in the fair value of the hedged item (because that is a variable rate asset with an interest rate floor of zero per cent).
- (b) Hence, hedge ineffectiveness is inappropriately accumulated in OCI and deferred to the accrual period;
- (c) The implications highlighted in (a) and (b) when combined mean that the hedging derivative is accrual accounted for (in profit or loss) irrespective of an offsetting gain or loss on the hedged item, which is inconsistent with the accounting treatment for hedging derivatives under the hedge accounting model.

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**Example 2<sup>12</sup>—Locking an interest margin when no floor exists**

- 58. As described in paragraph 11, respondents asked the Board to consider whether the existence of a floor would influence how the hedging relationship can be designated on a risk components basis.
- 59. As stated in the example above, the restriction on the designation on a risk components basis for sub-LIBOR instruments aims to address the fact that the hedged item does not give rise to changes that offset the changes in the fair value of the hedging derivative when the benchmark rate falls below the absolute value of the negative spread.
- 60. When there is *no floor*, the sub-LIBOR instrument(s) subject to the hedging relationship still have changes in their cash flows that move with LIBOR even if LIBOR is below the absolute value of the spread. Hence, the variability in cash flows of the hedging instrument that locks the margin is offset by the variability of the cash flows of the sub-LIBOR instrument irrespective of the LIBOR level. This is illustrated in the following table, using the same example as in paragraph 41 but assuming this time the asset does not have a floor.




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<sup>12</sup> This example has been provided by respondents as a representation of a real scenario that the IASB should consider.

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		Asset	Swap		Net Payment	Margin
LIBOR	Liability		Pay LIBOR	Receive fixed		
3%	1%	LIBOR - 30 bps	3.00%	1.50%	1.20%	0.20%
2%	1%	LIBOR - 30 bps	2.00%	1.50%	1.20%	0.20%
1.50%	1%	LIBOR - 30 bps	1.50%	1.50%	1.20%	0.20%
1%	1%	LIBOR - 30 bps	1.00%	1.50%	1.20%	0.20%
0.50%	1%	LIBOR - 30 bps	0.50%	1.50%	1.20%	0.20%
0.30%	1%	LIBOR - 30 bps	0.30%	1.50%	1.20%	0.20%
0.25%	1%	LIBOR - 30 bps	0.25%	1.50%	1.20%	0.20%
0.20%	1%	LIBOR - 30 bps	0.20%	1.50%	1.20%	0.20%
0%	1%	LIBOR - 30 bps	0.00%	1.50%	1.20%	0.20%
Negative interest on the asset results from a payment by the holder to the obligor of the asset. The cash flow variability on the asset is fully offset by the movements in the interest rate swap.						

61. The example above demonstrates that where there is no floor, there will always be a full LIBOR risk component and therefore the restriction in the ED would not have consequences.
62. This is not the result of how the hedging relationship is designated, but is instead a consequence of the economic characteristics of the hedged items in *this* example. As a consequence, the economic mismatch generated by the floor in the first example (and related variations) does not arise in the second example. Instead, the LIBOR related cash flow variability in example two is the same as that of a full LIBOR component.

**Margin issue**

63. The ‘negative margin’ and stable margin issues illustrated by the examples above where a zero interest rate floor exists, demonstrate that the restriction prevents inconsistent outcomes, particularly ‘synthetic accounting’ and any inappropriate deferral of gains/losses on the hedging instrument.
64. In the first example an entity will potentially be reporting a variable margin which is the consequence of the existence of the floor on the sub-LIBOR asset.

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65. This also means that in the context of sub-LIBOR there is no concept of a ‘pure’ locked or fixed margin when hedging using standard interest rate swaps if the hedged item has a zero interest rate floor. The margin is variable; however the variability only occurs in a particular range of LIBOR (below the absolute value of the spread).
66. If LIBOR is below the absolute value of the negative spread of the sub-LIBOR asset the derivative generates a gain that is not offset by any cash flow on the sub-LIBOR asset. This is because the cash flows on the hedged item are floored at zero per cent.
67. If designation on a risk components basis is applied an artificial cash flow needs to be imputed to reflect the full extent of the component being designated, which prevents that hedge ineffectiveness arises. This has the implication of showing a perfectly effective hedge and is tantamount to accrual accounting for the hedging instrument in profit or loss (irrespective of any offsetting gain or loss on the hedged item). This is because part of the change in the fair value of the hedging instrument (which represents hedge ineffectiveness) is deferred in OCI to the accrual period. This outcome means in effect that ‘synthetic accounting’ is achieved for the combined position (variable rate asset and the LIBOR interest rate swap).
68. Those who would like to see the restriction on hedging a full LIBOR risk component when the cash flows of the hedged item are sub-LIBOR typically have agreed that it reflects their risk management. Given the outcomes when LIBOR levels are below the spread as illustrated in Example 1 and related variations (1.1 A and 1.1 B) above, the staff consider that hedge accounting on a risk components basis that assumes higher total cash flows than those of the actual hedged item would not represent the actual exposure of the entity. Therefore, it would not be aligned with the economic substance of the (combined) transactions and hence, the restriction in the ED should apply.

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**Staff's conclusion**

69. Based on the analysis above, the staff consider that the Board has at least two alternatives:
- (a) **Alternative 1**—Keep the current restriction in the exposure draft as described in paragraphs B25 and B26<sup>13</sup> of the ED.
  - (b) **Alternative 2**—Allow the designation of risk components on a benchmark risk basis that assumes cash flows exceeding the total actual cash flows of the hedged item (eg designation of a full LIBOR risk component in instruments priced sub-LIBOR that are subject to a hedging relationship using standardised instruments linked to LIBOR).

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<sup>13</sup> The restriction only applies to hedged items with an interest rate floor.

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**Implications for hedge accounting**

70. The pros and cons of the alternatives above are as follows:

**Alternative 1****Pros**

71. This alternative avoids counterintuitive outcomes such as ‘negative interest’, deferral of hedge ineffectiveness, and ultimately (in substance) ‘synthetic accounting’ for the combined position of the variable rate asset and the LIBOR interest rate swap.
72. It highlights the fact that the margin becomes variable within a particular range and therefore captures hedge ineffectiveness that should be recognised in profit or loss.

**Cons**

73. The Board will not be addressing the concerns of some of its respondents.
74. The designation of hedging relationships involving sub-LIBOR instruments may involve increased complexity because entities would not have a ‘fully matched’ hedging relationship.

**Alternative 2****Pros**

75. This would address the concerns of some respondents.

**Cons**

76. The hedging relationship may produce an accounting outcome that is inconsistent with the economics of the instrument being hedged (eg negative

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interest, or cost of funding inconsistent with movements in the market rates and inconsistent interest margin).

77. It will in substance allow inappropriate deferral of hedge ineffectiveness and thereby the use of ‘synthetic accounting’ for the combined position of the variable rate asset and the LIBOR interest rate swap.

**Staff recommendations and questions to the Board**

78. Taking into account the pros and cons the staff recommend Alternative 1.

**Question - sub--LIBOR issue**

Does the Board agree with the staff recommendation as outlined in paragraph 78?

If the Board disagrees with the staff recommendation, what would the Board prefer and why?

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## Appendix A—Current guidance in exposure draft

- A1 **B25** - If a portion of a financial asset or financial liability is designated as the hedged item, which designated portion must be less than to the total cash flows of the asset or liability? For example, in the case of a liability whose effective interest rate is below LIBOR, an entity cannot designate (a) a portion of the liability equal to the principal amount plus interest at LIBOR and (b) a negative residual portion. However an entity may designate all of the cash flows of the entire financial asset or financial liability as the hedged item and hedge the entire liability (ie principal plus interest at LIBOR minus 100 basis points) and hedge the change in the fair value or cash flows of that entire liability that is attributable to changes in LIBOR. The entity would choose a hedge ratio that meets the objective of the effectiveness assessment (see paragraph B29)
- A2 **B26** - In addition, if a fixed rate financial instrument is hedged some time after its origination and interest rates have changed in the meantime, the entity can designate a portion equal to a benchmark rate that is higher than the contractual rate paid on the item. The entity can do so provided that the benchmark rate is less than the effective interest rate calculated on the assumption that the entity had purchased the instrument on the day it first designates the hedged item. For example, assume an entity originates a fixed rate financial asset of CU100 that has an effective interest rate of 6 per cent at a time when LIBOR is 4 per cent. It begins to hedge that asset some time later when LIBOR has increased to 8 per cent and the fair value of the asset has decreased to CU90. The entity calculates that if it had purchased the asset on the date it first designates it as the hedged item for its then fair value of CU90, the effective yield would have been 9.5 per cent. Because LIBOR is less than this effective yield, the entity can designate a LIBOR portion of 8 per cent that consists partly of the contractual interest cash flows and partly of the difference between the current fair value (ie CU90) and the amount repayable on maturity (ie CU100).