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Project	Hedging variability in cash flows due to real interest rates (IFRS 9)		
Paper topic	Initial consideration		
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Introduction

1. The IFRS Interpretations Committee (Committee) received a submission about applying the hedge accounting requirements in IFRS 9 *Financial Instruments* when the objective is to fix the cash flows in real terms.
2. The submission asks whether a hedge of the variability in cash flows arising from changes in the real interest rate, rather than the nominal interest rate, could be accounted for as a cash flow hedge. More specifically, the request describes a fact pattern in which an entity wants to hedge a floating rate (LIBOR) debt with an inflation swap (which swaps the variable interest cash flows of the floating rate debt for variable cash flows based on an inflation index) in a cash flow hedge.
3. As part of its deliberations on the hedge accounting requirements in IFRS 9, the Board discussed the complexity of application of hedge accounting to inflation as a non-contractually specified risk component. IAS 39 prohibited the designation of inflation as a non-contractually specified risk component. In the context of a fair value hedge, IFRS 9 introduced a rebuttable presumption that, unless inflation risk is contractually specified, it is not separately identifiable and reliably measurable and hence cannot be designated as a risk component of a financial instrument. However, in limited cases, IFRS 9 notes that it

- is possible to identify a risk component for inflation risk that is separately identifiable and reliably measurable because of the particular circumstances of the inflation environment and the relevant debt market.
4. Our research shows that revenue streams explicitly linked (either contractually or through regulation) to inflation are fairly common in industries such as real estate, pensions and utilities, whereas the issuance of inflation-linked bonds occurs frequently in countries such as the United States, UK and Canada. However, we identified few instances where entities apply hedge accounting to inflation risk as a non-contractually specified risk component.
 5. The objective of this paper is to:
 - (a) provide the Committee with a summary of the matter;
 - (b) present our research and analysis; and
 - (c) ask the Committee whether it agrees with our recommendation not to add a standard-setting project to the work plan.

Structure of the paper

6. This paper includes:
 - (a) summary of the submission;
 - (b) staff analysis; and
 - (c) staff recommendation.
7. There are two appendices to the paper:
 - (a) Appendix A—Proposed wording of the tentative agenda decision; and
 - (b) Appendix B—Submission.

Summary of the submission

8. The submission states that Entity A's revenue is inflation-linked¹, however it does not consider inflation to be a separately identifiable component of revenue and, therefore, cannot designate the inflation component in a hedging relationship. To economically hedge its exposure to inflation-linked revenue, Entity A sometimes issues inflation-linked debt for which the rate of interest payable on the debt is a fixed percentage of the principal amount of the debt, but the principal increases by the rate of inflation. Entity A measures its inflation-linked debt at amortised cost.² Consequently, Entity A is exposed to inflation risk on its interest expense. In effect, the inflation-linked debt economically matches Entity A's revenue exposure and to some extent neutralises the effect of inflation. In this scenario, Entity A has achieved a natural hedge of its income (revenue) and expense (interest expense) without applying hedge accounting.
9. However, due to limited demand for inflation-linked debt, Entity A instead often issues LIBOR-based debt and alters the cash flows using an inflation swap, which pays inflation-linked cash flows and receives LIBOR-based cash flows. In combination, this creates the same economic outcome as if Entity A had issued an inflation-linked bond and replicates the aforementioned natural hedge on inflation risk stemming from Entity A's revenue. However, this also creates volatility in the income statement due to the measurement of the derivative at fair value through profit or loss.
10. As a result, Entity A is looking to designate the inflation swap in an IFRS 9 cash flow hedge relationship, hedging LIBOR debt for changes in real interest rates (the real interest rate is defined as the rate of return adjusted for the effects of inflation). To the extent the cash flow hedge is effective, Entity A would recognise the fair value movements on the derivative in other comprehensive income (OCI) and align the interest expense (including the effect of the swap) with revenue, which is also influenced by

¹ It is unclear from the submission how revenue is linked to inflation. The submission implies that the link is not contractual but does not elaborate on how revenue is influenced by inflation.

² It is worth noting that while the Committee considered the application of the effective interest rate method to a financial instrument whose cash flows are linked to changes in an inflation index in July 2008, the resulting [agenda decision](#) did not state any preference for one of the presented methods.

inflation. Entity A is of the view that this hedge designation (if eligible for hedge accounting) will achieve the same outcome in the income statement as if it has issued an inflation-linked bond.

The question in the submission

11. The question in the submission is whether, applying IFRS 9, a hedge of the variability in cash flows arising from changes in the real interest rate, rather than the nominal interest rate, could be accounted for as a cash flow hedge. The submission describes two views on the matter, which are reproduced in Appendix B to this paper.
12. In considering the submission, the Committee is asked to consider how the requirements in IFRS 9 apply to the particular facts submitted (Question 1 in this paper). The submission focusses on the application of the rebuttable presumption in paragraph B6.3.13 of IFRS 9³ and whether the rebuttable presumption can be overcome in case of a cash flow hedge designation. When developing IFRS 9, the Board specifically considered the designation of non-contractually specified inflation risk components and the usefulness of the information that would result from the application of paragraph B6.3.13 of IFRS 9. Paragraphs BC6.192 and BC6.193 note the Board's conclusions in this respect.

Outreach

13. We decided not to perform outreach on this submission for the following reasons:
 - (a) During the development of IFRS 9, the Board discussed extensively the criteria to overcome the rebuttable presumption in paragraph B6.3.13 of IFRS 9 that a non-contractually specified inflation risk component is not separately identifiable and reliably measurable. Because there are limited cases in which the rebuttable

³ Paragraph B6.3.13 of IFRS 9 states 'there is a rebuttable presumption that unless inflation risk is contractually specified, it is not separately identifiable and reliably measurable and hence cannot be designated as a risk component of a financial instrument. However, in limited cases, it is possible to identify a risk component for inflation risk that is separately identifiable and reliably measurable because of the particular circumstances of the inflation environment and the relevant debt market.'

presumption could be overcome because of the particular circumstances of the inflation environment and the relevant debt market, we were of the view that outreach may not give a complete and representative picture in the context of IFRS 9.

- (b) IAS 39 prohibited the designation of a non-contractually specified inflation risk component of a financial instrument; the rebuttable presumption is therefore a new requirement that was added to IFRS 9. We are of the view that the IFRS 9 hedge accounting requirements for inflation hedging (specifically for non-contractually specified risk components) is too narrow and new for outreach to be efficient. We also note that IAS 39 hedge accounting continues to be available for application even when an entity otherwise applies IFRS 9. There is therefore likely to be little observable practice at this time.

Staff Analysis

Summary of relevant IFRS 9 requirements

14. The objective of the hedge accounting requirements in IFRS 9 is to represent, in the financial statements, the effect of an entity's risk management activities that use financial instruments to manage exposures arising from particular risks that could affect profit or loss (or other comprehensive income). This approach aims to convey the context of hedging instruments for which hedge accounting is applied to allow insight into their purpose and effect.
15. However, while having a risk management objective is necessary to apply hedge accounting, it is not in itself sufficient. An entity must also meet the specific hedge accounting requirements in IFRS 9 to qualify for hedge accounting. If those requirements are met, an entity may choose to designate a hedging relationship between a hedging instrument and a hedged item and apply hedge accounting.
16. One type of hedging relationship is a cash flow hedge, in which an entity hedges the exposure to variability in cash flows that is attributable to a particular risk associated with all, or a component of, a recognised asset or liability (such as all or some future interest

payments on variable-rate debt) or a highly probable forecast transaction, and could affect profit or loss⁴.

17. Paragraph 6.4.1 of IFRS 9 requires a hedging relationship to meet all of the following criteria for hedge accounting to be applied:
 - (a) the hedging relationship consists only of eligible hedging instruments and hedged items;
 - (b) at inception of the hedging relationship there is formal designation and documentation of the hedging relationship and the entity's risk management strategy and objective for undertaking the hedge; and
 - (c) the hedging relationship meets all the hedge effectiveness requirements specified in paragraph 6.4.1(c).

18. With regards to the requirements for eligible hedged items, paragraph 6.3.7 of IFRS 9 permits an entity to designate an item in its entirety or a component of an item as the hedged item in a hedging relationship. A component comprises less than the entire fair value change or cash flow variability of an item. An entity may designate a risk component as the hedged item provided that, based on an assessment within the context of the particular market structure, the risk component is a separately identifiable component of the item and the changes in the cash flows or the fair value of the item attributable to changes in that risk component are reliably measurable.

19. With regards to inflation risk, paragraph B6.3.13 states that there is a rebuttable presumption that unless inflation risk is contractually specified, it is not separately identifiable and reliably measurable and hence cannot be designated as a risk component of a financial instrument. However, in limited cases, it is possible to identify a risk component for inflation risk that is separately identifiable and reliably measurable because of the particular circumstances of the inflation environment and the relevant debt market. The Board intentionally decided to place restrictions in relation to hedging an inflation risk component to ensure that the risk component criteria in IFRS 9 were

⁴ Paragraph 6.5.2(b) of IFRS 9.

appropriately applied. In particular, the Board noted that there needs to be a market structure that supports the independent determination and measurement of the hedged item for changes in inflation risk rather than simply projecting the terms and conditions of the inflation derivative that was actually used as the hedging instrument onto the hedged item⁵.

20. Paragraph B6.3.14 of IFRS 9 uses examples to illustrate a situation in which the inflation risk component meets the requirement in paragraph B6.3.13 of IFRS 9 as well as a situation in which the inflation risk component would not meet those requirements. IFRS 9 states that when an entity issues debt in an environment in which inflation-linked bonds have a volume and term structure that results in a sufficiently liquid market that allows constructing a term structure of zero-coupon real interest rates, it would be possible to identify an inflation risk component that is separately considered by the debt markets for the respective currency. In such circumstances, the inflation risk component could be considered to be separately identifiable and reliably measurable for the purposes of designating a non-contractually specified risk component as a hedged item in a fair value hedge. Conversely, when an entity issues nominal interest rate debt in an environment with a market for inflation-linked bonds that is not sufficiently liquid to allow a term structure of zero-coupon real interest rates to be constructed, the rebuttable presumption is not overcome.

Analysis of how to apply the requirements in IFRS 9

21. In analysing the fact pattern described in paragraphs 8–10 of this paper, we have particularly considered *whether a non-contractually specified real interest rate risk component can be designated as a hedged item in a cash flow hedging relationship?*
22. From the submission it remains unclear if the inflation risk component overcomes the rebuttable presumption in IFRS 9. On the one hand, the submission states that entity A operates in an economic environment where the real interest rate risk component of nominal interest rates is considered to be liquid, separately identifiable and reliably

⁵ Paragraphs BC6.192 and BC6.193 of IFRS 9.

measurable as prices from relevant instruments (inflation linked bonds) are observable. On the other hand, the submission also refers to the fact that demand for inflation linked bonds is limited (principally to pension counterparties), which might imply that the market for inflation-linked bonds is not sufficiently liquid to allow a term structure of zero-coupon real interest rates to be constructed.

23. However, as this is not the question asked in the submission the staff analysis in this paper is not focusing on whether the inflation risk component is indeed separately identifiable and reliably measurable in a particular market. The analysis instead analyses specifically if the real interest rate risk component is separately identifiable and reliably measurable for the proposed cash flow hedging relationship described in the submission.
24. This question is important because the objectives of a fair value hedge and a cash flow hedge are different. In a fair value hedge an entity is hedging the exposure to changes in fair value of the hedged item that are attributable to a particular risk, whereas in a cash flow hedge an entity is hedging the exposure to variability in cash flows that are attributable to a particular risk. It therefore follows that in a qualifying cash flow hedge, the entity's risk management strategy and objective is to eliminate the exposure to the variability in cash flows that is attributable to the designated risk component.
25. In simple terms, to determine whether cash flow hedge accounting could be applied to the fact pattern described in the submission, it is necessary to establish that the *cash flows* on the floating rate debt vary due to changes in the real interest rate or inflation risk component. Furthermore, the effect of applying cash flow hedge accounting is that the variable *cash flows* attributable to the particular risk component are 'fixed' after taking into account the effect of the hedging instrument.
26. Unlike a currency (which is a uniform measure in which to present economic activity in a particular environment), inflation varies based on the underlying methodology used to determine actual inflation (and can vary within a currency area). This is illustrated, for example, by the different rates of inflation within the Eurozone. Although all the countries in the Eurozone have the same currency, i.e. the Euro, each country has a different rate of inflation.

27. This complexity of converting nominal cash flows into inflation-adjusted cash flows in currency terms is demonstrated in IAS 29 *Financial Reporting in Hyperinflationary Economies* which refers to ‘a general price index’ and that ‘it is preferable that all entities that report in the currency of the same economy use the same index’. Given that there could be different price indices in the same economic environment, different entities could have different measures of inflation within their financial statements. Practically the question arises as to whether an inflation component can be reliably measured within a selected currency environment.
28. For variable rate financial instruments, the interest rate is defined in nominal terms for a given currency. Each currency unit of cash flow of a financial asset or liability is exposed to inflation risk. The real rate of interest, however, cannot be paid as a *cash flow* in currency terms, ie using the swap described in the submission as an example, the terms of the swap illustrate that the actual cash flows paid to a counterparty are always in currency or nominal terms. Therefore, the cash flows of a variable rate financial instrument cannot be separated into different cash flow streams for a real interest rate risk component and an inflation risk component.
29. In fact, the *cash flows* on a floating rate debt (such as LIBOR debt) do not vary directly with changes in the real interest rate or expected inflation. The present value of floating rate LIBOR debt remains constant if discounted with the zero-coupon LIBOR curve.⁶ Consequently, this means that changes in the real interest rate or expected inflation lead only to different allocations of the (present) values of the real interest rate risk component and inflation risk component cash flows, which make up the total cash flows on LIBOR debt. This contrasts with the fair value changes in a fair value hedging relationship as contemplated in paragraph B6.3.14 of IFRS 9—in that case, a change in the zero-coupon real interest rate curve affects the fair value of the inflation risk component⁷, but does not affect the actual cash flows paid under the hedged item.

⁶ On a given reset date, disregarding valuations in between reset dates.

⁷ In the case of a fair value hedge the change as calculated by discounting with an updated zero-coupon real curve is consistent with every currency amount being affected for the change in inflation exposure.

30. When developing IFRS 9, the Board specifically considered inflation risk and put in place restrictions to address its concern that the decision to remove the prohibition on designating inflation risk as a non-contractually specified risk component could be misunderstood as simply ‘rubber stamping’ the hedge accounting of inflation risk components⁸. In particular, the Board was concerned that entities might simply impute the terms and conditions of an inflation derivative by projecting them onto the hedged item ‘without proper application of the criteria for designating risk components’ as a hedged item.⁹ To appropriately account for hedge (in)effectiveness for both fair value and cash flow hedges, IFRS 9 requires an entity to measure the (present) value of the hedged item independently of the measurement of the (present) value of the hedging instrument.¹⁰
31. While the swap as per the submission may have altered the floating cash flow profile of the total cash flows, it has not fixed, eliminated or reduced any variability in currency terms. For a cash flow hedge designation to satisfy the requirements in IFRS 9, individual cash flow streams based on the identified risk component need to be interchangeable in the respective currency. Since cash is by nature a nominal denomination in a respective currency the real interest rate risk component cannot be identified in a cash flow hedge relationship. Compared to a fair value hedge relationship, a second step is therefore required to prove that the observed risk component is indeed separately identifiable in currency terms for a cash flow hedging relationship. In conclusion, the hedge designation as described in the submission does not meet the requirements to qualify as a cash flow hedging relationship applying IFRS 9.

Other considerations

32. Applying IFRS 9, an entity can apply hedge accounting only if (in addition to meeting the specific hedge accounting criteria) the hedging relationship is consistent with the entity’s risk management strategy and objective for managing its exposure. The submission infers

⁸ IFRS 9 paragraph BC6.193.

⁹ IFRS 9 paragraphs BC6.192 and BC6.193.

¹⁰ IFRS 9 BC6.290 (b).

that the entity’s risk management objective is derived from a holistic view of its business activities (including both income and expense) by achieving a natural hedge to the variability of the entity’s revenue streams. For the reasons set out in the submission, Entity A seeks to replicate the economic effects of the natural hedge by issuing LIBOR debt and entering into an inflation swap. However, without applying hedge accounting, the fair value movements on the swap will cause volatility in the income statement, therefore Entity A wants to apply cash flow hedge accounting.

33. We note that IFRS 9 does not prohibit the use of ‘proxy hedging’ as an eligible way of designating the hedged item, as long as that still reflects risk management¹¹. However, as the Committee observed [previously](#), risk management activities that aim only to reduce volatility arising from the hedging instrument are inconsistent with the designation of a risk component as the hedged item.

Question 1 for the Committee

Does the Committee agree with our analysis of the requirements in IFRS Standards, outlined in paragraphs 14–33 of this paper?

Should the Committee add this matter to its standard setting agenda?

Is it necessary to add to or change IFRS Standards to improve financial reporting?¹²

34. Based on our analysis in paragraphs 14–33 of this paper, we conclude that the principles and requirements in IFRS 9 provide an adequate basis for an entity to determine whether the real interest rate component could be designated in a cash flow hedging relationship.

¹¹ Paragraph BC6.98 of IFRS 9

¹² Paragraph 5.16(b) of the [Due Process Handbook](#).

Staff recommendation

35. Based on our assessment of the work plan criteria in paragraph 5.16 of the *Due Process Handbook* (discussed in paragraph 34 of this paper), we recommend that the Committee does not add a standard-setting project to the work plan. Instead, we recommend publishing a tentative agenda decision that outlines how an entity applies the applicable requirements in IFRS 9.
36. Appendix A to this paper sets out the proposed wording of the tentative agenda decision. In our view, the proposed tentative agenda decision (including the explanatory material contained within it) would not add or change requirements in IFRS Standards.¹³

Questions 2 and 3 for the Committee

2. Does the Committee agree with our recommendation not to add a standard-setting project to the work plan?
3. Does the Committee have any comments on the proposed wording of the tentative agenda decision in Appendix A to this paper?

¹³ Paragraph 8.4 of the *Due Process Handbook* states: ‘Agenda decisions (including any explanatory material contained within them) cannot add or change requirements in IFRS Standards. Instead, explanatory material explains how the applicable principles and requirements in IFRS Standards apply to the transaction or fact pattern described in the agenda decision.’

Appendix A—Proposed wording of the tentative agenda decision

Hedging variability in cash flows due to real interest rates (IFRS 9 *Financial Instruments*)

The Committee received a request about the application of the hedge accounting requirements in IFRS 9 when the objective is to ‘fix’ the cash flows in real terms.

The request asks whether a hedge of the variability in cash flows arising from changes in the real interest rate, rather than the nominal interest rate, could be accounted for as a cash flow hedge. The request describes a fact pattern in which an entity hedges a floating rate (LIBOR) debt with an inflation swap (which swaps the variable interest cash flows of the floating rate debt for variable cash flows based on an inflation index).

Hedge accounting requirements in IFRS 9

The objective of hedge accounting is to represent, in the financial statements, the effect of an entity’s risk management activities that use financial instruments to manage exposures arising from particular risks that could affect profit or loss (or other comprehensive income) (paragraph 6.1.1 of IFRS 9).

One type of hedging relationship is a cash flow hedge in which an entity hedges the exposure to variability in cash flows that is attributable to a particular risk associated with all, or a component of, a recognised asset or liability or a highly probable forecast transaction, and could affect profit or loss (paragraph 6.5.2(b) of IFRS 9).

An entity may designate an item in its entirety, or a component of an item, as a hedged item. A risk component may be designated as the hedged item if, based on an assessment within the context of the particular market structure, that risk component is separately identifiable and reliably measurable (paragraph 6.3.7 of IFRS 9).

The Committee's analysis focussed specifically on whether a non-contractually specified real interest rate risk component is separately identifiable and reliably measurable in the proposed cash flow hedging relationship described in the request.

Can a non-contractually specified real interest rate risk component be designated as the hedged item in a cash flow hedging relationship?

With respect to inflation risk, paragraph B6.3.13 of

IFRS 9 states 'there is a rebuttable presumption that unless inflation risk is contractually specified, it is not separately identifiable and reliably measurable and hence cannot be designated as a risk component of a financial instrument. However, in limited cases, it is possible to identify a risk component for inflation risk that is separately identifiable and reliably measurable because of the particular circumstances of the inflation environment and the relevant debt market'.

Based on the requirements for cash flow hedges and non-contractually specified risk components in IFRS 9, the Committee considered that to determine whether the entity could apply cash flow hedge accounting in the fact pattern described in the request, it would be necessary to determine whether the cash flows on the floating rate debt vary due to changes in the real interest rate risk component or inflation risk component.

Unlike a currency (which is a uniform measure in which to present economic activity in a particular environment), inflation varies based on the underlying methodology used to determine actual inflation and can vary within a currency area. For example, there are different rates of inflation within the Eurozone.

The Committee observed that, for variable rate financial instruments, the interest rate is defined in nominal terms for a given currency. Each currency unit of cash flow of a financial asset or liability is exposed to inflation risk. The real rate of interest, however, cannot be paid as a cash flow in currency terms, ie using the swap described in the request as an example, the terms of the swap illustrate that the actual cash flows paid to a counterparty are always in currency or nominal terms.

Therefore, the cash flows of the variable rate financial instrument cannot be

separated into different cash flow streams to determine a real interest rate risk component and an inflation risk component.

The Committee also observed that the cash flows on a floating rate debt (such as LIBOR debt) do not vary directly with changes in the real interest rate or expected inflation. The present value of floating rate LIBOR debt remains constant if discounted with the zero-coupon LIBOR curve. Consequently, changes in the real interest rate or expected inflation lead only to different allocations of the (present) values of the real interest rate risk component and inflation risk component cash flows, which make up the total cash flows on LIBOR debt. This contrasts with fair value changes in a fair value hedge as contemplated in paragraph B6.3.14 of IFRS 9—in that case, a change in the zero-coupon real interest rate curve affects the fair value of the inflation risk component, but does not affect the actual cash flows paid on the hedged item.

When developing IFRS 9, the Board specifically considered inflation risk and put in place restrictions to address its concern that entities might simply impute the terms and conditions of an inflation derivative by projecting them onto the hedged item ‘without proper application of the criteria for designating risk components’ as a hedged item. To appropriately account for hedge (in)effectiveness, IFRS 9 requires an entity to measure the (present) value of the hedged item independently of the measurement of the (present) value of the hedging instrument.

The Committee therefore concluded that, to meet the requirements in IFRS 9 for a cash flow hedge designation, individual cash flow streams based on the identified risk component need to be interchangeable in the respective currency. Cash is by nature a nominal denomination in a respective currency and, although the swap described in the request may have changed the floating interest cash flow profile of the total cash flows, it has not fixed, eliminated or reduced any variability in currency terms. Consequently, the real interest rate risk component cannot be identified as a risk component as described in paragraph 6.3.7 of IFRS 9 in a cash flow hedge.

The Committee concluded that the requirements in IFRS 9 provide an adequate basis for an entity to determine whether a hedge of the variability in cash flows arising from changes in the real interest rate, rather than the nominal interest rate, could be accounted for as a cash flow hedge. Consequently, the Committee [decided] not to add a standard-setting project to the work plan.

Appendix B—Submission

B1. We have reproduced the submission below, and in doing so deleted details that would identify the submitter of this request.

Issue

Application of cash flow hedge accounting under IFRS 9 *Financial Instruments* to hedge variability in cash flows in real terms.

Overview

Entity A issues floating rate LIBOR debt which it swaps to inflation linked debt using an inflation swap that receives LIBOR and pays inflation linked cash flows. The resulting net cash flows of the floating rate LIBOR debt and the inflation swap are the same as when issuing inflation linked debt.

Inflation demand is limited to a number of (principally pension) counterparties. These do not necessarily provide the most competitive credit spreads on bond purchases, which is why entities have routinely issued vanilla bonds where credit spreads are more competitive and then swapped to inflation using derivatives.

Entity A is looking to designate an inflation swap in an IFRS 9 cash flow hedge accounting relationship, hedging LIBOR debt for changes in real rates, i.e. fixing the cash flows in real terms (the real rate is defined as the rate of return adjusted for the effects of inflation). See *Appendix A Breakdown of nominal rates, inflation rates and real rates* for further detail.

Background - Exposure to changes in inflation and the fixing of cash flows in 'real terms' where an entity can issue inflation linked debt

Entity A's revenue is inflation linked, however, as is often the case, inflation is not a separately identifiable component of revenue and therefore, cannot be designated in a hedge accounting relationship. To economically hedge its exposure to inflation linked income, Entity A sometimes issues inflation linked debt where the rate of interest payable on the debt is a fixed percentage of the principal of the debt, but where the principal increases by the rate of inflation. Consequently, Entity A is exposed to the rate of inflation on its interest expense which acts as a natural hedge of its inflation linked revenue. In effect, the inflation linked debt ensures a fixed interest expense in *real terms* which economically matches its income fixed in *real terms*. See *Appendix B Mechanics of inflation linked debt*.

The reason that the payments on an inflation linked debt instrument are designed to increase by the rate of inflation is to ensure that the value of the interest and principal payments are fixed in *real terms* (see below for further explanation of *real* versus *nominal* terms). As such, every cash flow on the bond is "inflation protected". The purchaser of a conventional bond knows with certainty what cash flows to expect in nominal terms, but not what the real (post-inflation) value of those cash flows will be (since future inflation levels are unknown). By contrast, the purchaser of the inflation-linked bond knows what real return to expect, but not what the cash flows will be in nominal terms.

Entity A accounts for its inflation linked debt at amortised cost. The inflation linking feature is considered to be closely related to the debt host contract and not accounted for separately.

Entity A considers the inflation linked debt as a floating rate instrument and accrues interest on the inflation linked bond using the effective interest rate determined based on current inflation and not by looking forward to expectations of future inflation. Under this approach (ignoring transaction costs), the amortised cost of an inflation linked bond originally issued at par will be equal to par plus accrued (actual) inflation up to the reporting date.

In this scenario, Entity A has achieved a natural hedge of its income (revenue) and expense (interest expense) which are both accrued at a fixed rate plus inflation (assuming they are perfectly matched). Consequently, hedge accounting is not a relevant consideration.

However, as mentioned above, due to demand for inflation linked debt being limited, entities instead often issue LIBOR debt which they swap to inflation using inflation swaps. Without the application of hedge accounting, the fair value movements on the swaps cause volatility in the income statement.

Key assumption

Entity A operates in an economic environment where the real rate component of nominal interest rates is considered to be liquid, separately identifiable and reliably measurable, because this can be directly observed at any time from quoted prices in the government bond market where a quarter of bond issuances by nominal value are inflation linked (supported further by corporate inflation bond issuances). Consequently, the real rate component of LIBOR interest is considered to be eligible for hedge accounting under IFRS 9, thus, the below conditions are met.

IFRS 9.B6.3.13 There is a rebuttable presumption that unless inflation risk is contractually specified, it is not separately identifiable and reliably measurable and hence cannot be designated as a risk component of a financial instrument. However, in limited cases, it is possible to identify a risk component for inflation risk that is separately identifiable and reliably measurable because of the particular circumstances of the inflation environment and the relevant debt market.

IFRS 9.B6.3.14 determines that it is possible to identify a risk component for inflation risk that is separately identifiable and reliably measurable when “an entity issues debt in an environment in which inflation-linked bonds have a volume and term structure that results in a sufficiently liquid market that allows constructing a term structure of zero-coupon real interest rates. This means that for the respective currency, inflation is a relevant factor that is separately considered by the debt markets.”

Proposed hedge accounting: LIBOR debt + inflation swap

Entity A's income is fixed in *real* terms, therefore the risk management objective of the hedge that swaps the LIBOR cash flows for inflation linked cash flows is to also fix Entity A's interest expense in *real* terms, to align net interest cash flows to the income fixed in *real* terms.

The net interest expense as a result of this hedge (i.e., LIBOR + inflation swap) will remain variable in *nominal* terms, which is the same as the situation for inflation linked debt (and the inflation linked

revenue). However, the interest will be fixed in *real* terms, which is also the same as the situation for inflation linked debt.

To reflect the effects of its risk management objective in its financial statements, Entity A wishes to apply cash flow hedge accounting where cash flows of LIBOR debt are designated in a cash flow hedge with the inflation swap where the hedged risk is variability due to changes in the real rate, hence the cash flows are fixed in real terms.

The above designation can be seen as reflecting the risk management objective of entering into LIBOR debt and an index linked derivative instrument by matching and fixing the net cash flows servicing debt to the income fixed in real terms.

QUESTION: Can Entity A apply cash flow hedge accounting when the effect of entering into a swap transaction is that the the cash flows on the LIBOR debt are fixed in real terms?

View 1: Yes

For a cash flow hedge, IFRS 9 does not require the designated hedged cash flows (i.e., LIBOR in this case) to be fixed fully or fixed in nominal terms, provided the hedged risk component is fixed by the hedge.

IFRS 9 defines a cash flow hedge in IFRS 9.6.5.2(b) as “a hedge of the exposure to variability in cash flows that is attributable to a particular risk associated with all, or a component of, a recognised asset or liability (such as all or some future interest payments on variable-rate debt) or a highly probable forecast transaction, and could affect profit or loss”.

Based on the above definition, under IFRS 9 (and historical practice under IAS 39), it is not necessary for a cash flow hedge to fix the designated cash flows of the hedged item in nominal terms. Furthermore, it is often the case that cash flows are not fully fixed by a risk management strategy that qualifies for cash flow hedge accounting.

Relevant examples would include:

Example 1

Cash flow hedge accounting is permitted for a GBP entity that swaps EURIBOR variable rate debt for EUR fixed rate debt using a EUR interest rate swap where it receives EURIBOR and pays EUR fixed. An entity may enter into such a hedge because it has EUR denominated income which is economically hedged by fixed rate EUR debt. In this scenario, the entity remains exposed to variable cash flows, in GBP, on the package of debt plus swap because of the unhedged FX risk. However, when assessed and measured in EUR, the variable cash flows have been fixed in EUR (i.e., the floating rate EUR debt has effectively been swapped into fixed rate EUR debt).

Example 2

Cash flow hedge accounting is permitted to hedge FX risk for a GBP entity that swaps EURIBOR debt for GBP LIBOR debt using a cross-currency interest rate swap where it receives EURIBOR and pays GBP LIBOR. In this scenario, the entity remains exposed to variable cash flows both in EUR terms and in GBP terms.

The hedge does not fix the cash flows of the hedged item in any way. However, it does address the FX risk because the net cash flows are GBP denominated.

The examples above clarify that as long as the risk management objective is met, it is not necessary to fully fix the designated cash flows to achieve cash flow hedge accounting. Similarly, if the risk management objective of the hedge is to fix the LIBOR interest cash flows in real terms, then it is not necessary to fix the cash flows in nominal terms.

View 2: No

For a cash flow hedge, it is necessary for the cash flows attributable to the hedged risk component to be fixed in nominal terms in a particular currency – it is not appropriate for the hedge to fix the cash flows in real terms

The effect of the proposed hedge is to swap one set of variable cash flows (LIBOR) for another set of variable cash flows (inflation linked cash flows). Although when assessed in real terms, the effect is to fix the cash flows on the LIBOR debt, as defined in IFRS 9, cash flow hedge accounting does not explicitly permit the hedge of a cash flow risks in real terms to qualify for hedge accounting.

The analogy to designated hedged risk components in a particular currency that qualify for hedge accounting, which is also not explicitly permitted under IFRS 9, but accepted market practice, is not appropriate because valuing an item in real terms is not equivalent to valuing an item in a particular currency – all hedges must be assessed in nominal terms in an entity's functional currency or in the foreign currency in which the hedged item is already denominated.

Furthermore, the only relevant examples in IFRS 9 of designating a variable to variable cash flow in a hedge accounting relationship are fixing the gas oil component of a natural gas supply contract, the crude oil component of jet fuel and the futures contract component of a coffee supply contract (IFRS 9 B6.3.10 a, b and c). In each case the designation is in nominal terms.

Reasons for IFRIC to address the issue:

a. *Is the issue widespread and has, or is expected to have, a material effect on those affected?*

Yes. The fact pattern outlined is typical of an entity where income has been fixed in real terms but keeps the ultimate cash flows in the future variable for changes in inflation. This protects the entity (and the end customer) across numerous economic cycles in the same way as Governments issues inflation linked debt that performs in relation to the economic cycle.

Under IAS 39 and, so far, under IFRS 9, these inflation linked derivative instruments have been accounted for at fair value through the income statement and have had a material impact on the financial statements of all of the entities that have traded them.

b. *Would financial reporting be improved through the elimination, or reduction, of diverse reporting methods?*

Yes. In light of the ongoing material impact to entities across various regulated industries, we believe that clarity is needed so that entities may align their risk management activities with the requirements of IFRS 9, improving the quality and consistency of reporting and reducing the need for diverse reporting methods.

c. Can the issue be resolved efficiently within the confines of IFRS Standards and the Conceptual Framework for Financial Reporting?

Yes. We believe that consideration by the Committee is needed in this instance and that it can be resolved efficiently within the confines of IFRS Standards and the Conceptual Framework for Financial Reporting.

d. Is the issue sufficiently narrow in scope that the Interpretations Committee can address this issue in an efficient manner, but not so narrow that it is not cost-effective for the Interpretations Committee to undertake the due process that would be required when making changes to IFRS Standards?

Yes. We believe this issue is sufficiently narrow in scope that it can be addressed in an efficient manner. The issue represents a pertinent risk management alignment concern for regulated entities, consideration of this issue would have pervasive impacts on these entities' risk management activities. Entities impacted range from listed clients, private entities and quasi-government entities.

e. Will the solution developed by the Interpretations Committee be effective for a reasonable time period? The Interpretations Committee will not add an item to its agenda if the issue is being addressed in a forthcoming Standard and/or if a short-term improvement is not justified.

Yes. As IFRS 9 became effective for periods beginning on or after 1 January 2018, we are not aware of any IASB project that will address this type of hedge accounting relationship further.

Appendix A – Breakdown of nominal rates, inflation rates and real rates

The *nominal* interest rate is the rate of interest that is typically used to quote the yield or return on assets and liabilities and is a rate that is not adjusted for the effects of inflation. This contrasts with the *real* rate which is the rate of return adjusted for the effects of inflation.

As every cash flow on an inflation linked bond (i.e., interest and principal) is linked to inflation (i.e., inflation protected), the fixed interest rate on an inflation linked bond at inception is the *real* rate (i.e., 2% in the example above). Put another way, if the effects of inflation were adjusted for on the inflation linked bond the rate of return would be 2% on a principal of 100 (i.e., the rate in real terms is 2%). Consequently, the real rate can be readily identified from the inflation linked bond market by reference to the yield on quoted inflation linked bonds.

It should be noted that the relationship between the real rate component and the inflation component of nominal interest rates is multiplicative (i.e., not additive), as illustrated by the Fisher equation:

$$(1+n) = (1+i)*(1+r)$$

i=the inflation rate; r=the real rate and n is the nominal interest rate.

LIBOR is a nominal rate because the rate is not adjusted for the effects of inflation.

Appendix B – Mechanics of inflation linked debt

An example of inflation linked debt is debt with the following terms:

Principal at issue=	100
Principal at each interest payment date =	100*[RPI(t)/RPI(0)]
Principal at maturity =	100*[RPI(M)/RPI(0)]
Interest rate (real rate) =	2%

Where:

RPI(0) = Inflation index at commencement of debt

RPI(t) = Inflation index at each (6 monthly) interest payment date

RPI(M) = Inflation index at maturity

For example, the inflation index at commencement of the debt (RPI(0)) may be set to 100, which then increases due to changes in economic conditions over time (t). The first interest payment date will be when (t) = 6 months. If RPI is 101 at this point, the principal balance will be $100 * RPI(t) / RPI(0) = 100 * 101 / 100 = 101$, i.e., the principal increases by the rate of inflation. The interest rate of 2% would then be applied to 101 on the first payment date. The interest payment at 12 months would be 2% multiplied by the principal when (t) = 12. If the index is 103 at this point, the principal will be 103. As the fixed rate of interest of 2% is applied to an accreting principal, the interest coupon increases by the rate of inflation (cumulative). At maturity, the accreted principal is settled. Note that the contractual rate on a conventional fixed rate bond of the same term would be higher than the 2% fixed (real) rate on the inflation linked bond because the rate is inclusive of both fixed inflation and fixed real interest rates based on economic conditions prevailing at the issuance date.