IFRIC POTENTIAL AGENDA ITEM 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 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 = \(100\times \frac{\text{RPI}(t)}{\text{RPI}(0)}\)
- Principal at maturity = \(100\times \frac{\text{RPI}(M)}{\text{RPI}(0)}\)
- 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*\(\text{RPI}(t)/\text{RPI}(0)\) = 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.