Are Banks Ready for Hedge Accounting?

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The effort to fully adopt International Financial Reporting Standards (IFRSs) has far reaching implications for banks, particularly the standards on financial instruments and the valuation and hedge accounting rules contained therein. Recent experience of European Banks, which had to apply IFRS, confirms that this was a common and significant adjustment across all European banks that had to move from their respective local GAAPs to IFRSs starting 2005. These standards not only will decide how banks account for financial instruments but also have an impact on their regulatory capital, how they operate, how they hedge, and even the kind of financial instruments that will be used by them. This is a typical case of the tail wagging the dog. As India converges itself towards these standards, we need to understand the implications of these standards with regard to banks. In this article the author has considered the issues surrounding Hedge Accounting, under IAS 39.

At the outset, it may be mentioned that often a bank may have achieved a highly effective economic hedge, yet it may not be able to apply hedge accounting, since it may not have complied with the onerous hedging rules prescribed in the standard. When a transaction does not qualify for hedge accounting, it would result in the effect of the underlying hedge item and hedge transaction appearing in different periods causing a mismatch and income statement volatility. This happens very often in the case of banks. For example, UK domiciled bank has a portfolio of swiss franc denominated loans. UK bank decides to designate a series of euro versus sterling foreign exchange contracts as a hedging instrument of the foreign exchange risk on the loans. Under IAS 39, UK bank cannot use a borrowing in one currency to hedge a net investment denominated in another. Though conceptually it appears possible to use a hedge instrument denominated in one currency to hedge an exposure in another currency, the hedge effectiveness test will generally fail. This would mean that the effect of the hedged item and the hedged instrument would be felt in different years, causing a mismatch and income statement volatility.

Hedged item

A hedged item can be a recognized asset or liability, unrecognized firm commitment or highly probable forecasted transaction. The hedged item should create an exposure that can be separately and reliably measured. Thus intra-group transactions that do not create an income statement exposure cannot constitute a hedged item in the consolidated financial statements. Similarly, a bank's own equity instrument cannot be a hedged item since there is no risk that affects income statement.

Overall business risks, such as loss of customers due to increase in competition, cannot be a hedged item since it cannot be reliably measured. A contingent asset or liability that is not recognized in the financial statements cannot be a hedged item, since the hedged item has to be a recognized asset/liability or a highly probable forecasted transaction.

A held-to-maturity (HTM) investment cannot be hedged with respect to interest rate risk. In an HTM investment, a bank is indifferent to changes in interest rates since it does not intend to dispose of the investment before its maturity. The fair value at maturity is unaffected by changes in interest rates. Similarly investment in an associate which is equity accounted in the consolidated financial statements cannot be a hedged item with respect to fair value hedging. This is because under the equity method, in the income statement, the investor's share

of the investee's net income or loss is accounted, rather than its fair value changes.

In respect of a financial asset or liability, it is possible to hedge only, for example: (a) part of the life of a bond (the first 5 years of 10-year fixed rate debt issued by the bank), or (b) only the risk-free interest rate on a loan by a bank to a customer, or (c) 50% of an available-for-sale equity security, or (d) 75% of the foreign exchange risk on a firm commitment.

Example:

Big Bank wishes to issue a 5-year fixed rate debt. Based on market rates of interest and Big Bank's credit rating, it is able to issue debt at 6.5 per cent. This comprises a 5-year risk free interest rate of 4.5 per cent, and a credit spread of 2 per cent. Can Big Bank designate the debt as a hedged item only with respect to interest rate excluding the credit spread? Yes.

Hedging Instrument

Derivatives such as forwards, options, futures, collars, swaps, etc are eligible to qualify as hedging instruments. Only those hedging instruments executed with an external party qualify as hedging instruments. Derivatives generally would not qualify as hedged items. In other words, one cannot use a derivative to hedge a derivative. Non-derivative financial instruments too sometimes qualify as hedging instrument, only for purposes of hedging foreign exchange risks. For example, a borrowing denominated in a foreign currency can be designated to hedge a revenue commitment in the same foreign currency.

A proportion of derivative e.g. 50% of notional amount can be designated as a hedging instrument. Whilst proportion of derivative can be designated as a hedging instrument, a components of a derivative cannot be separately designated, as the factors that cause a change in the derivative's fair value are deemed to be co-dependent and not separately measurable. For example, a cross currency interest rate swap must be designated both with respect to foreign currency risk and interest rate risk.

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It is not possible to designate a hedging instrument only for a portion of its life. Thus if a forward matures in 12 months, it has to be designated for 12 months.

A written option cannot be used for hedging purposes since it is speculative in nature, and generally increases risk exposure. However, a written option combined with a purchased option, where no net premium is received, and the notional amount of written option is not greater than the purchased option, would qualify for hedging.

Example:

A bank may purchase an interest rate cap to protect itself from interest rate increase. However, simultaneously to reduce the hedging cost, it writes an interest rate floor option. This is typically an interest rate collar arrangement and would qualify as a hedging instrument for the purposes of hedging interest rate risk.

It is possible to use two or more derivatives, or proportions thereof, as the hedging instrument for the same hedged item. For example, an interest rate swap and a currency forward could be designated together to hedge a loan in a foreign currency. It is also possible to hedge more than one risk using one instrument. For example, a cross currency interest rate swap must be designated both with respect to foreign currency risk and interest rate risk.

Portfolio or Net Hedging

Portfolio and net hedging is difficult to apply under the standard since hedging rules require perfect matching of the hedged item and the hedging instrument. Under the standard, hedging a portfolio requires that (a) the individual asset/liabilities in the portfolio share the same characteristic with respect to the hedged risk, and (b) the change in the fair value attributable to the hedged risk for each individual item in the portfolio is expected to be approximately proportional to the overall change in fair value attributable to the hedged risk of the group.

Example

Big Bank has payables of $100 million, and receivables of $80 million. Instead of entering into two separate derivatives,

Big Bank wishes to hedge the net $20 million position for US$ exchange rate risk. Whilst the standard does not allow Big Bank to designate the net position as the hedged item, Big Bank can instead designate the $20 million of payables as the hedged item.

Banks and similar financial institutions often manage this risk on a net basis, usually in time buckets which group assets and liabilities by the earlier of expected maturity or re-pricing date. Such entities assess the interest rate risk in all interest-bearing financial assets and liabilities and determine the net exposures. This is because there may be some natural offsets within a bank's balance sheet already, particularly so for banks and other financial institutions. Therefore, it is only for the net risk positions that the bank may decide to obtain derivatives or other instruments to provide an economic hedge.

For hedge accounting purposes, a net position may not be designated as the hedged item. However, a bank still may be able to apply hedge accounting if the hedge relationship is designated in a way that meets the criteria set forth in IAS 39. Generally the bank needs to select (one or a group of) specified assets or liabilities, cash flows or forecasted transactions that are part of the net position, and designate these as the hedged item. This is explained in the example below.

Example

A bank monitors its interest rate risk exposures through reviewing gaps within repricing bands of net asset or liability positions of a single currency. For illustration purposes, only the first three months are illustrated.

	Less than 1 month	1 to 2 months	2 to 3 months
Assets			
Treasury bills	100	200	300
Placements with banks	300	600	400
Loans	5,200	5,250	6,600
Bonds	200	100	200
Assets in the repricing band	5,800	6,150	7,500
Liabilities			
Customer deposits	4,100	2,600	3,600
Deposits from banks	2,000	3,100	3,000
Bills, commercial paper issued	300	200	400
Liabilities in the repricing band	6,400	5,900	7,000
Net position for the currency	(600)	250	500

Under a net position-hedging scenario, if the bank wishes to hedge the entire 600 net liability exposure in the first time band, it could do so through a derivative instrument for the repricing band of less than one month. However, rather than documenting the net position as the hedged item, the bank could designate 600 of customer deposits in the less than one-month band, and hedge accounting could be applied.

In order to illustrate this, suppose that the bank designates a swap (pay-fixed, receive-variable) as a cash flow hedge of the interest payable on 600 of liabilities that re-price each month, such as the bottom layer of the customer deposits. The bank must establish that it is highly probable that greater than 600 of customer deposits with similar characteristics will be available each month the swap is outstanding. The customer deposits designated should share the same exposure to the risk that is being hedged, e.g. the exposure to a benchmark interest rate risk. The bank could perform statistical analysis to document this shared risk basis. Forecasting of cash flows should be part of the asset and liability management process of forecasting the repricing cash flows of the bank, and supported by the history of actual repricing cash flows. High probability of the expected cash flows could be supported if customer deposits of far more than 600 are available. The same approach described here may be used for the other repricing bands noted above.

Forecasting of cash flows should be part of the asset and liability management process of forecasting the repricing cash flows of the bank, and supported by the history of actual repricing cash flows.

The above approach may be useful in some cases, although it is arbitrary in that the hedged item (for accounting purposes) is not the net position (i.e. the real economic risk) that the bank wants to manage. Further, this approach may not be practical for entities that have an ongoing interest rate risk management program and have large volumes of netted interest rate positions. This is typically the case for financial institutions.

Documentation

At the inception of the hedge, formal documentation of the hedge relationship must be established. The documentation should comprise:

- The bank's risk management strategy and objective for undertaking the hedge
- Identification of the hedging instrument
- Identification of the hedged item and hedged risk
- Identification of the type of hedge relationship - cash flow, fair value of net investment
- How the bank plans to assess hedge effectiveness?
- The date of designation

Until the necessary documentation is in place, a bank cannot apply hedge accounting. There can be no retrospective designation of a hedge relationship. Documentation has been made a critical aspect of hedge accounting to prevent hindsight benefit and the possibility of manipulating results.

Hedge Effectiveness

Hedge accounting is permitted, only if hedge is expected to be effective. The actual results of hedge effectiveness must be within a range of 80 to 125% offset for hedge accounting to be applied. Effectiveness must be measured on an ongoing basis and the hedge relationship proved to have been highly effective throughout the financial reporting period.

Different methods may be applied for determining hedge effectiveness; however, the method applied should be the one that is documented at the inception and should be consistently applied. The method should be carefully selected; for example, hedge effectiveness tested on a cumulative basis rather than on a period by period basis would reduce the risk of hedge being proven ineffective. This is because in the cumulative method, the effectiveness and ineffectiveness during various periods on a cumulative basis cross out each other, and overall keeps the hedge effective. A bank can use several mathematical techniques that may be used to measure hedge effectiveness, including ratio analysis, dollar-offset method, variance reduction method, regression analysis. The method should be chosen carefully so as to secure the application of hedge accounting. It is generally noticed that regression analysis provides a much better scope than the dollar offset method, for application of hedge accounting.

Conclusion

Though EU carve out and subsequent amendments to IAS 39 has eased the hedging rules, relating to portfolio hedging of interest rate risk, application of hedge accounting continues to be a nightmarish exercise for banks that apply IFRS. As can be seen, there are too many rules that need to be fulfilled in order to apply hedge accounting. IFRS's, which are completely fair value centric, see hedge accounting as an exception, which should be allowed only if stringent rules are complied with. The rules also prevent application of hedge accounting retrospectively; and hence benefit of hindsight is not available. A standard of this nature will have wide ramification for all Indian enterprises, and particularly banks and other financial institutions. The standard will pose challenges of high magnitude not only related to accounting, but also systems and business related. Indian banks should ready themselves to this great challenge, since the financial instrument standard is round the corner. ❐

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