On the Accounting for Derivative Instruments under Indian Accounting Standards (Ind-AS)

It is desirable for business entities contemplating the use of financial derivatives for trading and/or hedging purposes to appreciate the nuances associated with the accounting treatment that will be applied for the reporting of such instruments in context of the proposed application. The article addresses this issue and presents the fundamental accounting model on which derivative accounting and reporting is premised under the new Ind-AS environment. Read on to know more…

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1. Introduction

The Ind-AS based accounting for financial instruments (of which financial derivatives constitute a subset) is intriguingly complex, made more so by the involvement of several accounting standards in the analysis of a single transaction. These underpinnings provide the motivation for this

article in which a holistic view of the extant Ind-AS accounting requirements for financial derivatives is presented and analysed.

The Ind-AS accounting standards that are currently relevant to accounting for financial derivatives are: (i) Ind-AS 107, 'Financial Instruments: Disclosure', (ii) Ind-AS 32, 'Financial Instruments: Presentation', and (iii) Ind-AS 109, 'Financial Instruments'. In addition to issues of disclosure addressed in Ind-AS 107, presentation in Ind-AS 32, aspects of classification, recognition & measurement principles and hedge accounting are addressed in Ind-AS 109. Additionally, Ind-AS 113 contains the prescriptions for the ascertainment of 'fair values' of financial instruments. We shall elaborate on the salient provisions of the above standards in the sequel insofar as they relate to the accounting for financial derivatives.

2. What are 'financial derivatives'?

In common parlance, a derivative is a financial instrument that derives its value from an underlying price or index. The formal definition is encapsulated in Appendix A of Ind-AS 109 that identifies a financial instrument as a derivative provided that it possesses all of the following three features namely that (a) its value changes in response to the change in a specified interest rate, financial instrument price, commodity price, foreign exchange rate, index of prices or rates, credit rating or credit index, or other variable, provided in the case of a non-financial variable that the variable is not specific to a party to the contract (sometimes called the 'underlying'); (b) it requires no initial net investment or an initial net investment that is smaller than would be required for other types of contracts that would be expected to have a similar response to changes in market factors and (c) it is settled at a future date.

It follows from the above definition that the following criteria must necessarily be satisfied by a financial instrument to qualify as a financial derivative:

A. One or more underlyings and one or more notional amounts or payment provisions or both exist in the substratum of the contract. The quantum of the settlement or settlements or whether or not a settlement is required at all is determined by these contractual terms. The underlying, for this purpose, can take the form of a specified security price, or interest rate, commodity price, or other market related variable.

B. No initial net investment or an initial net investment that is smaller than would be required for other types of contracts that would be expected to have a similar response to changes in market factors is required for setting up a derivative.

C. Net settlement is required or permitted by the terms of the derivative. Net Settlement can be achieved by a means outside the contract. As an alternative, delivery of an asset is provided for so that the recipient is not in a position substantially different from net settlement.

3. Philosophy of Accounting for Derivatives

There are two basic requirements of Ind-AS insofar as the accounting for derivatives is concerned viz. that they must be (i) initially recognised as assets or liabilities and represented as such in the statement of financial position and (ii) marked to market on a regular basis. However, the accounting impact of changes in value of such instruments consequent to marking to market shall be dependent on the intended purpose for which they are held by the entity and/or whether certain specific conditions have been satisfied in relation to the said purpose.

The current period's income statement shall reflect the gains and losses emanating from the marking to market of financial derivative instruments that are held by an entity for speculative purposes. Where derivative instruments are held by the entity for hedging certain risks on exposures, the accounting treatment is determined by the intrinsic character of the hedge i.e. whether it is a fair value hedge or a cash flow hedge or a net investment hedge. A fair value hedge attempts to minimise variability of earnings due to changes in fair values. It relates to the hedging of a change in the fair value of an asset or a liability or an unrecognised firm commitment, or an identified portion of an asset, liability or a firm commitment that is attributable to a particular risk and could affect the income statement of the current period or be expected to effect the income statement of a future period. The change in fair value desired to be hedged may be caused by variations in interest rates, foreign exchange rates, equity prices or commodity prices. In contrast to a fair value hedge, a cash flow hedge relates to an upcoming, forecasted event. It curtails variability in expected future cash flows from a forecasted future transaction due to the cash flow exposure to market prices etc. Net investment hedges relate to hedging of currency exposures of

net investments in foreign operations. For fair value hedges, the treatment is twofold viz. (i) accounting for the derivatives is done in the same manner as for derivatives held for speculative purposes i.e. they are marked to market and the changes in valuation due to marking to market are carried to the current period's income statement and (ii) the underlying exposures are also marked to market due to the risks being hedged; and the resulting changes must flow through current income as well with corresponding adjustments to the carrying amounts of the relevant hedged items. The accounting for cash flow hedges is also two fold. Step 1 entails the determination of the gain or loss on the hedging instrument and the hedged item on the reporting date to evaluate the results of the hedge and segregate such gain/loss on the hedging instrument into the effective and ineffective components respectively. Step 2, then, dictates the accounting treatment of these two components viz. (i) the ineffective component of the hedge results is required to be carried to current income; and (ii) the effective portion is initially posted to other comprehensive income (OCI hereinafter) as "cash flow hedge reserve" and later reclassified to income in the same time frame in which the forecasted cash flow affects earnings. Exposures relating to investments in foreign operations generate translation gains or losses which are carried to the currency translation account (CTA) in shareholders' equity without being reflected in the entity's income statement. The subsequent treatment is similar to that for cash flow hedges and shall be elaborated in the sequel.

4. The extended accounting framework

A. General Procedure

The cardinal accounting provisions in relation to derivatives are that derivatives must be (a) recognised as assets or liabilities and recorded in the statement of financial position at their fair market value (b) changes in such fair market value shall be (i) carried through the earnings statement or (ii) posted directly to OCI depending on (i) how the derivative is used by the entity and (ii) whether requisite conditions have been met that allow 'special accounting' for such situations.

B. Derivatives held for trading/speculation

In situations where the entity (i) holds derivatives for trading and/or speculation or (ii) has not documented any special designated hedge relationship, the derivatives are required to be recognised as assets/liabilities at their fair market value and thereafter carried at such valuation with the changes therein percolating to the current period's income statement i.e. carried at fair value through profit or loss (FVTPL).

C. Derivatives held for hedging

In cases where such derivative instruments are held by the entity for purposes of hedging, the entity can claim accounting for such derivatives and the item being hedged under 'hedge accounting'. However, recourse to hedge accounting is not automatic; it is elective at the choice of the hedging entity, but nevertheless, subject to the fulfillment of certain stringent conditions. In other words, an entity that meets the criteria for hedge accounting may, nevertheless, choose to adopt or opt out of the hedge accounting framework.

The standard mandates satisfaction of specific requirements both at the inception of the hedge and on an ongoing basis, if such hedge accounting is to be availed. Even in instances, where, notwithstanding initial fulfillment of the required criteria, the entity fails to meet the ongoing requirements at a later point in time, hedge accounting is no longer appropriate.

In fact, the derivative is required to be marked to market through earnings in the event that, as of the trade date of the derivative contract, the requisite conditions for hedge accounting are not met whence the hedge could not be applied forthwith. However, the hedging entity may

meet the mandates post trading of the derivative, at which instant, hedge accounting could be initiated.

It is reiterated that derivatives that are not intended for use as hedges or in respect of which requisites of hedge accounting are not satisfied by the hedging entity or the entity otherwise opts out of using hedge accounting must be marked to market through earnings.

D. Motivations for adopting 'hedge accounting'

Access by an entity to hedge accounting requires satisfaction of strict criteria. Hence, it merits discussion on why entities would like to adopt hedge accounting. Adoption of this form of accounting enables the value changes impact of the derivative to be synchronised in the earnings statement with the corresponding impact of the exposure being hedged. This ensures that the earnings statement is more faithfully representative of the economic reality. It is quite possible that if such a firm (that uses derivatives for hedging) is not allowed or opts out of hedge accounting, then the impacts of value changes of the derivatives and the hedged items could find their way into the income statements of different periods and therefore fail to setoff each other, causing enhanced unjustified earnings volatility in each of these periods.

E. General requirements for adopting 'hedge accounting'

There are two fundamental requirements which need to be met by an accounting entity that desires to avail hedge accounting in respect of any hedging relationship created by it. They are (i) proper documentation designating the hedging relationship; and (ii) high 'effectiveness' of the hedge.

(i) Documenting the hedging relationship

The exposure being hedged as well as the hedging instrument must qualify as permissible hedged and hedging items respectively and such hedging relationships must be formally documented as designated hedges by the hedging entity. Such documentation needs to be done at the commencement of the hedge, when it desires to avail special hedge accounting. The objective and strategy need to be explicitly stated together with the procedure to be

adopted for assessing hedge effectiveness. It is also necessary to unambiguously set forth the identity of the hedged item and the hedging instrument as well as the nature of the risk being hedged.

The assessment of hedge effectiveness should be precisely as documented. If the reporting entity desires to change these testing methods, even on the premise of improving results, the original hedge must be de-designated and a new hedge set up and documented as such. Furthermore, if the reporting entity decides to use different methods for assessing effectiveness of similar hedges, such action needs to be explicitly justified.

(ii) Issue of 'hedge effectiveness'

A second requirement for enabling an entity the choice of hedge accounting is that the hedge should be demonstrated to be highly effective. The satisfaction of 'high effectiveness' criterion was usually construed in terms of the 80/125 percent offset requirement. However, this prescription has been replaced in Ind-AS 109 by a principles based effectiveness test comprising of the following: (i) there should be an economic relationship between the hedged item and the hedging instrument; (ii) credit risk should not be the dominant factor contributing to the value changes that result from the economic relationship; and (iii) the hedge ratio that is actually adopted by the entity for the purposes of hedging shall be used for setting up the hedging relationship in context of hedge accounting.

Qualitative, quantitative approaches or both in tandem may be adopted for vindicating the existence of an 'economic relationship'. However, if a hedging relationship persistently returns some ineffectiveness, the onus of establishing existence of continued economic relationship as well as the appropriateness of the hedge ratio would lie on the entity's management.

In the context of assessment of the effect of credit risk, a combination of relative and absolute assessment is envisaged. Small changes in value due to credit risk that may exceed the changes due to the hedged risk are allowed to be ignored. Furthermore, assessment of the effect of credit risk would usually be achieved qualitatively on the basis of the discretion and judgment of the entity's management.

Finally, the hedge ratio used for accounting should be the same as that used for risk management purposes. Nevertheless, entities are free to designate hedging relationships for quantities different from those that they actually hedge. Besides, a hedge ratio that minimises ineffectiveness is not envisaged. However, intentional imbalancing is not permitted. This is to prevent entities from taking recourse to a mismatch of weightings between the hedged item and the hedging instrument for the purpose of achieving an accounting outcome that is inconsistent with the purpose of hedge accounting. However, an essentially perfect hedge relationship is not envisaged. This provision is only to avoid instances of weightings of the hedging instruments and hedged item actually used being willfully so selected as to introduce or to avoid accounting ineffectiveness. For instance, if the hedging instrument is available only in standardised contract sizes because of which it is impracticable to exactly meet its nominal quantity requirement, thereby causing some under-hedging, this debarring provision would not be invoked.

Hedge effectiveness needs to be assessed on a prospective basis in relation to each period that the entity desires to avail hedge accounting. Pre-facto testifying of hedge effectiveness vindicates the expectation of high effectiveness before the event. It is usually the practice that effectiveness assessment tests are performed at the inception of the hedge and, at a minimum, quarterly thereafter for continuance of the hedge accounting during the succeeding quarter. In the event of an imperfect hedge, the prospective effectiveness testing must demonstrate that, notwithstanding being an imperfect hedge, such hedge is expected to serve as a highly effective one. It may be noted that Ind-AS 109 has dispensed with the need for retrospective assessment of effectiveness.

It is emphasised that the accounting regulators have left significant discretion to the entity's management on the specific methodologies for assessing compliance with the various criteria of hedge effectiveness. This makes the devising of such methodologies and tests an exceedingly complex and nontrivial exercise. Reporting entities would do well to obtain the views of their auditors prior to initiating any hedging transactions. The cardinal issue is that such test measures must relate the gains or losses of the hedging instrument to those variations in the value of the hedged item that are due to the risk being hedged.

It is important to note that efficiency of a hedge depends on its outcome in terms of the gains or losses generated by the hedging instrument offsetting those emanating from the hedged item due to the risk being hedged. The fact that the hedging instrument performed as planned or not is not the decisive criterion. Situations may exist where the hedging instrument may behave as planned and yet the hedge, by virtue of the degree of offsettings, may not necessarily be efficient.

F. Classification of Hedges and Accounting

On hedge accounting being allowed to and availed of by an entity, subsequent accounting treatment depends on the nature of the hedge. For this purpose, hedges have been classified as (i) cash flow hedge, (ii) fair value hedge, and (iii) hedge of net investments in foreign operations.

(a) Cash Flow Hedge

A cash flow hedge is a hedge of an upcoming, forecasted event. The exposure intended to be hedged involves the risk of an uncertain (i.e. variable) cash flow. The performance of the hedge must be assessed and the extent to which it is effective and not so must both be ascertained. The ineffective component of the hedge results must be written off forthwith to the income statement. The component that is effective is carried to OCI, to be subsequently

transferred to income in synchronisation with the time frame over which the forecasted cash flow influences income. The accounting scheme for cash flow hedges under Ind-AS 109 is shown in Figure 1 and Table 1.

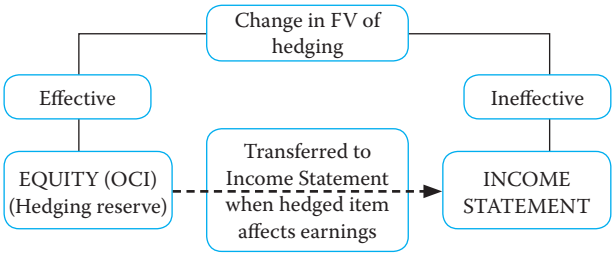

Figure 1

Table 1: Journal entries for cash flow hedge

Description		
Gain (loss) on the hedging instrument- effective portion	Debit (Credit) Statement of Financial Position - Financial assets (liabilities) - Hedging Instrument	Credit (Debit) OCI- Cash flow hedge reserve
Gain (loss) on the hedging instrument- ineffective portion	Debit (Credit) Statement of Financial Position - Financial assets (liabilities) - Hedging Instrument	Credit (Debit) Income Statement

The cash flow reserve is required to be adjusted at each reporting date to the lower of the following (in absolute amounts) viz. (a) the cumulative gain or loss on the hedging instrument from inception of the hedge and (b) the cumulative change in fair value of the hedged item from inception of the hedge. Any adjustment required to balance the cash flow reserve as calculated above is recognised in profit or loss. This adjustment reflects the ineffectiveness of the cash flow hedge.

In the event of discontinuance of hedge accounting, any balance outstanding on this count in OCI would not normally be withdrawn unless there is sufficient likelihood that, by the end of the originally specified time period, the forecasted transaction will not occur.

Cash flow hedges are primarily allowed in situations where the entity faces a prospective transaction in which the amount paid or received is uncertain and thereby subject to risk e.g. planned purchases or sales of assets, planned issue of debt or deposits, planned purchases or sales of foreign currencies, interest rate risk relating to floating or variable interest rates, currency risk due to prospective cash flows not being denominated in the functional currency.

(b) Fair Value Hedge

A fair value hedge involves the hedging of the carrying value of an underlying exposure (that may be an asset, liability or firm commitment) due to some risk component. This carrying value needs to be adjusted (marked to market) by an amount attributable to the risk being hedged. Such adjustment flows through current income. Correspondingly, the total gain or loss on the derivative, as the hedging instrument, is also recorded in earnings. This constitutes the basic accounting philosophy of fair value hedges. It is discretionary for the hedging entity to identify the whole or a specific portion of any potential item for setting up a fair value hedge. Fair value hedge accounting is schematically depicted in Figure 2 and Table 2.

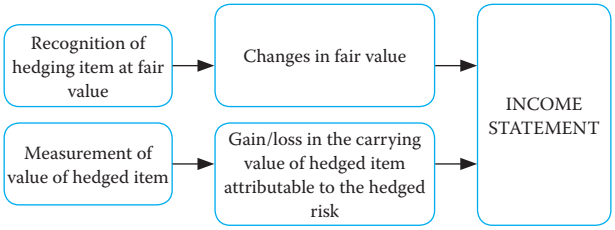

Figure 2

Table 2: Journal entries for fair value hedge

Description		
Hedging instrument		
Gain (Loss) on the hedging instrument	Debit (Credit) Statement of Financial Position - Financial assets (liabilities) - Hedging Instrument	Credit (Debit) Income Statement- Fair value (FV) gain (loss) on hedging instrument
Hedged item		
Gain (Loss) on the hedged item	Debit (Credit) Statement of Financial Position - Hedged item (e.g. inventories)	Credit (Debit) Income Statement- Gain (loss) on the hedged item

On discontinuance of hedging relationship, no further basis adjustments to the original hedged item would be made although gains or losses of the derivative will continue to be recorded in earnings.

Fair value hedges are allowed to hedge exposures such as price exposures for fixed rate assets, price exposures for firm commitments associated with prospective purchases or sales, price exposures associated with the market value of inventory items, price exposures on available-for-sale securities, interest exposures associated with the opportunity cost of fixed rate debt etc.

(c) Hedging of net investments in foreign operations

For the purposes of hedging of currency exposures relating to net investments in foreign operations, special hedge accounting is allowed. Such exposures generate translation gains or losses which are carried to the currency translation account (CTA) in shareholders' equity without being reflected in the entity's income statement. The accounting standard allows for the designation as hedges of these exposures, appropriate positions in derivatives and non-derivatives (i.e. assets or liabilities denominated in the same currency as that of the net investment). The results of such hedges need to be segregated into the effective and the ineffective components respectively. Ineffective portions are carried forthwith to the income statement whereas effective results are to be recognised in the same manner as a translation adjustment, coincident with the recognition of the net investment gains or losses.

On discontinuance, gains or losses of the derivative—if that derivative is still retained—will be recorded in earnings.

It may be noted that Ind-AS 109 does not allow terminating a hedge relationship voluntarily. Such relationship gets discontinued only if the risk management objective changes, the hedge expires or the hedging relationship is no longer eligible for hedge accounting.

5. Conclusion

Accounting for financial derivatives under the contemporary accounting framework is, indeed, challenging. In part, the complexities may be attributed to the fact that the required procedures depend on the purpose for which such derivatives are held by the reporting entity rather than their intrinsic nature. Added to this is the fact that, in instances where such derivatives are held for hedging of risks, hedge accounting does not devolve on the reporting entity by default. Such hedge accounting, that, in essence, enables derivatives' gains or losses to be reflected concurrently with the income effects of the associated hedged item, is allowed only on meeting the requisites of (i) complete and correct documentation and (ii) high effectiveness of the hedge demonstrated on a prospective basis. Further, these qualifications need to be met on an ongoing basis. It follows as a corollary that the accounting treatment of a derivative may change over its life and we may have a situation where a derivative may be accounted via hedge accounting for some part of the holding period and not for the remaining part. ■