

Guide to Accounting for Financial Instruments and Derivatives

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Introduction

Accounting for financial instruments is a very nebulous concept - the amount of standard writing currently going on in this field is both elaborate and hectic. AS 30, AS 31 and AS 32 are Indian Accounting Standards that correspond, respectively, to International Accounting Standard (IAS) 39, IAS 32 and International Financial Reporting Standard (IFRS) 7. IAS 39, for instance, is being adopted in India in its existing form - but there is already an ongoing project to replace IAS 39 in 3 phases. First phase is already done - IFRS 9 implements that. For the second phase, an exposure draft is already there, and for the third, an exposure draft is expected during the year.

What is mark to market accounting?

What is the big change that accounting standards on financial instruments bring about? Clearly, the big change is that fair value accounting, also called mark-to-market accounting, is taking over the age-old historical cost accounting. By the way, "mark-to-market" is a stock market term; "fair value" is more preferable in the accountants' jargon. The accountants' global notion is that assets are stated at their historical costs - we do not book a gain or a loss until we actually realize it. In case of a loss, if the loss is not transient, there may be a case for making a provision, or in case of currently traded assets, write down is allowed if the book value is more than the market value.

However, as it is generally felt that historical costs are less relevant than prevailing values, there is a general consensus, at least for the time being, that fair values provide more current

and relevant information. How long will this view last is by itself a question - there are several strong contrarian views also, particularly owing to the pro-cyclicality of mark-to-market accounting.

Basic structure of AS 30

The key components of AS 30 are as follows:

- What are financial instruments, financial assets and financial liabilities?
 - An important question in this is what derivatives are, as all derivatives are by definition defined as financial assets.
 - Identification of embedded derivatives in non-derivative contracts, and decision whether such derivative requires separation.
- When is a financial instrument recognized on books?
- When is a financial instrument de-recognized from books?
- At what value is a financial instrument recognized at the inception?
- At what value is a financial instrument carried in books over time?
- Will the entity be permitted to adopt hedge accounting for derivatives that seek to hedge risk of assets and liabilities which are not fair-valued?
- If so, what type of hedge is it, and what is the resulting effect of the hedge on the revenue statement/ balance sheet?

What is a financial instrument?

The accounting standards AS 30, 31 and 32 apply to financial instruments. If the asset/liability in question is not financial instrument, there is no question of applying the standard. A financial instrument may be a financial asset or a financial liability. Briefly stated, a right to receive cash, or a right to receive another financial instrument in exchange, is a financial asset. For example, every loan or receivable is a right to receive cash, and hence, is a financial instrument. An equity share is also a right to receive dividends

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and distribution of assets, and hence, is a financial asset. A machine or a building is not, and hence, is a non-financial asset. A convertible bond is not an obligation to pay cash, but an obligation to convert the same into equity - which is also a financial asset. As for understanding whether the asset in question is a financial asset, it is not the functional test that is applied - it is the nature of the asset. For instance, no matter whether the entity in question is trading in shares or holding it as an investment, it is still a financial asset. Correspondingly, an obligation to pay cash or another financial instrument in exchange is a financial liability. However, the entity's own equity instruments are not financial liabilities. Therefore, all obligations to pay cash or exchange other financial instruments, other than what is treated as the entity's own equity instruments, will be treated as financial liabilities.

What is a derivative?

A derivative, as the name implies, is something that derives its value from an "underlying item". There are two other features of derivatives - (a) they require no or minimal initial investment, or at least the investment required is not commensurate with the value of the underlying; (b) they can be net-settled, that is, settled by way of differences rather than actual delivery of the underlying.

Derivatives are essentially options, forwards and swaps. There is yet another form of derivative - futures, but futures are typically exchange-traded and will not be found embedded into non-derivative contracts. There might sometimes be options, forwards or swaps embedded into contracts which are non-derivative contracts. The simplest example is a convertible bond. The convertible bond can be de-composed into two: a non-convertible bond and a call option on equity shares. There might, similarly, be derivative contracts embedded in non-financial contracts too. If there is an embedded derivative whose economic substance is different from the non-derivative asset where it is embedded, then the derivative part requires separation, unless the composite asset is being fair valued.

Recognition of a financial asset or liability

As a financial asset is a right or liability

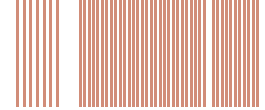
pertaining to cash flows, the date of recognition should be the date on which the entity becomes entitled to, or obligated to, the cash flows and not the actual date of the inflow or outflow. Timing of recognition of financial asset is also dependent whether accounting is done by trade date or settlement date.

De-recognition of financial asset

The rules on de-recognition of financial assets look simple, but they are very complicated and they become particularly pertinent in case of transactions like securitization or transfers of financial assets. The broad rule is that in order to de-recognize financial assets from the books of the seller, a mere legal sale of the asset is not enough, it should be backed by either transfer of risks and rewards, or surrender of control by the seller. For example, Bank A sells a portfolio of loans either to Bank B or to the capital market. It is quite obvious for the seller to continue to retain risk, or retain rewards, or both - for example, typical credit enhancement may be a first loss risk retained by the seller. Residual profits, that is, the actual returns from the asset minus a predetermined rate normally flow back to the seller. In such a case, a transfer of risks and rewards has not taken place, and that brings us to step 2 in the analysis.

Step 2 is - even if a transfer of risks/rewards has not taken place in entirety, has the seller surrendered control over the asset the way it would happen in a commercial transaction of sale? In a commercial transaction of sale, a sale would pass on to the buyer the right to freely transfer or pledge the acquired asset. If the seller has restrained that right of the buyer, or the buyer does not have a practical ability to re-sell the asset, then the sale is disregarded, and the asset is not de-recognized from the books of the seller.

If an asset is not removed from the books of the seller, there is no sale treatment at all, and hence, there is no question of booking a gain or loss on the sale. The asset continues in the books of the seller, and to the extent of money received by the so-called sale, a loan liability is brought up. It is also important to note that if the seller has not been able to put an asset off the balance sheet, then the buyer will not be able to put the asset on the balance sheet.



De-recognition of financial liability

An entity should remove a financial liability (or a part of a financial liability) from its balance sheet when, and only when, it is extinguished - i.e., when the obligation specified in the contract is discharged or cancelled or expired.

Initial and subsequent valuation of financial instruments

At what value is initial measurement done?

Initially, all financial assets are measured at fair values. Unless there are reasons to suggest the contrary, the purchase or acquisition price of a financial asset, or the contractual value of a liability, is its fair value also.

Classification of financial assets and liabilities

For the purpose of whether or not fair valuation is to be done, financial assets and liabilities are classified as:

- **Financial assets**
 - ❑ Loans and receivables
 - ❑ Hold to maturity investments (HTM investments)
 - ❑ Available for sale assets (AFS assets)
 - ❑ Trading assets
- **Financial liabilities**
 - ❑ Trading liabilities
 - ❑ Non-trading liabilities

Each of the terms mentioned above have defined meanings; let us understand each.

Loans and receivables

The word “receivables” is simple - any sum of money that has become a receivable or fallen due. Loans mean loans originated by the enterprise, and not held in marketable form. A loan portfolio acquired by Bank A from Bank B is not; therefore, fit to be put into this category. If loans are originated with intent of selling, then also it is not fit to be put into this category.

Hold to maturity (HTM) investments

These are investment that (a) have a specified maturity, and (b) are intended, by way of a positive intent, to be held to maturity. Equities, for example, cannot be classified as HTM as

equity does not have any specified maturity at all. The entity must have the ability and positive intent to hold the instrument to maturity. The classification of an instrument as HTM should be done very carefully.

Trading assets

Assets for which there is a ready and liquid quoted market, which are acquired for the purpose of short-term trade, and where mark-to-market valuations are possible on every trading day, are trading assets. Assets do not fall under this category merely because there is a market for the asset - the entity must have acquired the asset for short term trading intent.

Available for sale assets (AFS):

This is the residual category for assets - anything which is not a loan and receivable, or is not positively intended to be held to maturity, or is not a part of trading stock, is held for sale asset. That is, if opportunity or need arises, the entity will be willing to sell the asset.

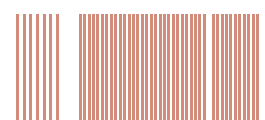
Trading and Non-trading liabilities

Liabilities having a liquid market which are issued for re-acquisition in the short term, for example, to take advantage of an increase in interest rates, may be classified as trading liabilities. A good example is issuance of certificates of deposit by banks. All liabilities other than trading liabilities are non-trading in nature.

At what value should subsequent measurement be done?

The valuation approaches are essentially the following:

- **Fair value through Profit and Loss Account (FVTPL):**
 - ❑ All derivatives
 - ❑ All trading assets
 - ❑ All non-trading liabilities
- **Fair value through Other Comprehensive Income (FVTOCI):**
 - ❑ Available for sale assets, other than unquoted equity
- **Amortized cost**
 - ❑ All loans and receivables
 - ❑ All HTM investments



FVTPL

FVTPL basically means that the asset/liability will be regularly fair-valued, and will be carried in books at fair values, and the changes in fair values are taken to current P&L. That would mean historical values become completely irrelevant. For instance, Mr. X is holding a portfolio of equities as a part of his trading book. Mr. X records the gain/loss in the books due to fluctuation in the market prices of his portfolio on a regular basis. The returns by way of dividends are also a part of the trading profits/losses. Since FVTPL treatment is meant only for assets/liabilities for which quotes are readily available, there should not be any difficulty in marking these instruments to market on regular basis. In fact, it is in context of traded instruments only that the word “mark-to-market” has relevance - for other assets, the word “fair value” would be more appropriate.

All derivatives, including embedded derivatives that have been separated, require FVTPL. This is one of the reasons why derivatives require a separate treatment (the other reason is the possibility that a derivative may be a hedging instrument). For example, in case of a convertible bond, the embedded equity option being a derivative will be treated under FVTPL and the remaining investment in fixed income bonds may be classified as AFS.

FVTOCI

The difference between FVTPL and FVTOCI is simple and apparent: in the latter case, the asset is fair valued, but the gain or loss on valuation is not taken to current profit. It is kept in “other comprehensive income” in the shareholders’ equity. What this means is that these gains/losses do not affect current reported profits - nevertheless, they affect the balance sheet and net worth of the entity. Assets get reflected at fair values - hence, unrealized gains remain in Other Comprehensive Income (OCI). These gains/losses are brought into current profit/loss when the asset in question is sold. All ‘Available for Sale (AFS)’ assets are valued on FVTOCI. An exception is made in case of unquoted equity, where determination of fair value is difficult and therefore, historical cost valuation is permitted.

Amortized cost

Loans are carried in books at amortized cost. Amortized value of the loan is computed by applying “effective interest rate” or Internal Rate of Return (IRR) of the loan. In case of HTM investments, of course, the amortized value may be different from the nominal value of the investment, as the investment may have been acquired at more, or less, than the par value.

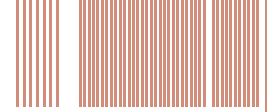
Derivatives - Hedging treatment

The standard provides that in case of a derivative which is a hedging instrument, against an on-balance sheet item (a hedged item), if the conditions of “hedge effectiveness” are satisfied, the hedged item and the hedging instrument may both be FVTPL-ed.

Just saying that a derivative is a hedge, is not enough. The hedge has to be established as effective. “Effective” means the value of the derivative moves opposite or symmetrical to the value of the hedged item, and the anticipated changes in the two values take a proportion of 80:125. For example, if the value of the derivative gains by 4, and the value of the asset declines by 5, the proportion is 80:100, which is acceptable. If the value of the derivative gains by 4, and the value of the asset declines by 7, the proportion is 80:140, which means the hedge is not effective. It may be noted that it is not the entire value of an asset or liability that can be designated as a hedged item. For example, the change in the value of a loan may happen due to interest rate change, as also credit quality of the loan.

Types of hedges

Hedges are commonly classified as fair value hedges and cash flow hedges. A hedge against the variability of cash flows is a cash flow hedge. For example, if I am carrying a floating rate liability, the fact that the base rate may go up will affect my cash flows. To hedge the same, I may enter into a floating-to-fixed Interest Rate Swap (IRS). This transforms my cash flows from variable to fixed cash flows - hence, it is a cash flow hedge. Lots of forex derivatives are also cash flow hedges. On the other hand, a hedge against fair value of an asset or liability is a fair value hedge. Simplest example is a fixed-to-floating IRS, or credit default swap, etc.



In case of fair value hedges, what affects the entity is the change in fair value. As much as the hedge is effective, it would offset exactly against changes in the fair value of the hedged item. Hence, the effective part of the change in fair value of the hedging derivative, and the hedged item, are both taken to profit and loss statement, where they neutralize each other.

If the hedge is a cash flow hedge, the effect on revenue is only to the extent the cash flows have changed during the year. For example, if I convert a floating rate liability into fixed rate by floating-to-fixed IRS, the current revenue is affected only by the increased interest for the accounting period that has come into the profit and loss statement. However, the change in the fair value of the IRS includes valuation of cash flows for the entire term of the swap. So, changes in the fair value of the cash flow hedging derivative are taken to OCI, from where they are periodically released as the changes in interest cost going to profit and loss statement affecting current revenues.

There is a third type of hedge - net investment in foreign enterprise, but being relatively uncommon, we omit discussion on that in this article.

Fair value

The above discussion gives a broad and extensive idea about what assets, liabilities, and derivative contracts require fair valuation.

What is fair value? If the value of an instrument is available in a ready and liquid market, the market value is the fair value. In case of instruments where market values are not available, or the market is not liquid, the



valuation techniques rely on discounted cash flow (DCF) techniques.

In case of derivatives, fair valuation techniques for valuation of options/swaps or forwards, as may be applicable, shall be applied. Since fair valuation may involve substantial extent of assumptions, AS 32 corresponding to IFRS 7 requires the fair values to be classified into three different levels based on transparency of the valuation.

Impairment

Fair valuation is not all that AS 30 requires. It requires continuous monitoring of impairment losses too. There are some significant differences between impairment and fair valuation that need to be understood:

- First, impairment relates to an expected cash flow itself, whereas fair valuation relates to the fair value of a cash flow. For example, fair value of a fixed rate loan may go down due to upward movement of interest rates. Credit spreads for the borrower going up might lead to fair value coming down. However, impairment relates to apprehended losses on collection of the cash flow itself. If a loan, or portfolio of loans, may suffer losses due to bad debts or delinquencies, that is a case of impairment.
- Impairment relates to assets only, whereas fair valuation pertains to both assets and liabilities.
- Impairment cannot lead to a gain - fair valuation can be a gain or a loss.

Impairment will affect assets being carried at cost, amortized cost, or FVTOCI. In case of assets being carried at cost or amortized cost, loss due to impairment will be taken to current P&L, and effective rate of return will be recomputed based on re-estimated cash flows. In case of assets being FVTOCI-ed, to the extent of impairment loss, the gain if any lying into OCI will be brought into current profit and loss statement. In case of assets that are FVTPL-ed, presumably the changes in market value have captured all impairment losses too.

References: AS 30 "Financial Instruments: Recognition and Management"

AS 31 "Financial Instruments: Presentation"

AS 32 "Financial Instruments: Disclosures".

