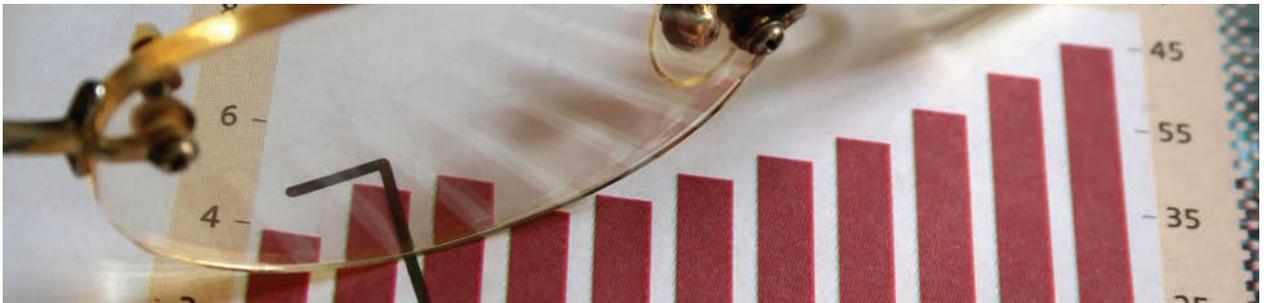


Hedging Currency Risk under IAS 39 - Financial Instruments: Recognition and Measurement



The Institute of Chartered Accountants of India had issued a notification, which was published in this very journal, i.e. *The Chartered Accountant*, in April 2011, on the deferral of AS 30, Financial Instruments: Recognition and Measurement. It was clarified that *the preparers of Financial Statements are encouraged to follow the principles enunciated in accounting treatments contained in AS 30*. This is subject to any existing accounting standard or any regulatory requirement, which will prevail over AS 30. Thus, considering the above exception, an entity can only follow *hedge accounting* only to a certain extent, i.e. only cash-flow hedges, as these are excluded under the existing scope of AS 11. This article brings out the complete aspect of cash-flow hedge covering the 3 Ds of hedge accounting, i.e. definition, designation and documentation, taking a currency forward contract as an example for the concept, accounting and measurement; looking up from IAS 39, from which AS 30 and Ind AS 39 have been drafted. Read on.....

A. Introduction

Entities enter into foreign exchange transactions during its regular course of business. These foreign exchange transactions include purchase and sale of goods and services as well as financing transactions such as foreign currency borrowings to leverage the interest rates of the international market. It is to be noted that these entities continue to operate in India and are thus exposed to foreign exchange fluctuation.

B. Foreign currency exposure in a business

An entity has started a trading business with a \$100 loan, received on 1/4/xx when the rate of INR was 45. Thus, the loan was accounted at ₹4,500. The same amount was invested to buy Goods for trade in Indian market. Assume the repayment period of 12 months and margin of 10%, the entity could recover ₹4,950 (₹4,500 investment and ₹450 profit) over the period of 12 months. If the exchange rate remains constant, there is no risk or exposure to the entity on foreign



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exchange. It will be able to retain ₹450 in its bank account and repay the \$100 loan by giving ₹4,500 to the bank.

In the above case, if the exchange rate is depreciated to ₹50, the expected cash obligation for repayment of \$100 loan will be ₹5,000. In this case, the entity has lost the entire margin earned from its pure business and also overdrawn ₹50 (₹4,950 to ₹5,000).

This is called one side exposure of foreign exchange. If the business was to trade the goods in international market in US\$, it would have been able to get some natural offset on exchange fluctuations. This is because the debtors would have also got converted in INR at a higher rate and thus the loss would have restricted only to the extent of mismatch in foreign currency inflows and outflows.

C. What is hedge?

In simple terms, it is a technique or an approach whereby the entity, in above example, can secure or protect its profit margin even when the exchange rate is depreciated to ₹50. However, if the exchange rate goes to ₹40, the opportunity to take advantage of exchange is lost. Thus, the profit may not increase but remains intact. Oxford Dictionary defines Hedge as a way of protecting oneself against financial loss or other adverse circumstances. Wikipedia defines it as an investment position intended to offset potential losses that may be incurred by a companion investment. In simple language, Hedge (Hedging Technique) is used to reduce any substantial losses suffered by an individual or an organisation.

Hedging is not about gaining or losing. It is about fixing the price risk, like freezing the volatility for the future. It can be on account of interest rates, commodity prices, currency, etc. An entity can protect its profits by entering into various types of derivative contracts. Exposure on foreign currency can be hedged by forward contracts, future contracts and currency options, etc. These contracts can be entered into with various banks that operate derivative portfolio.

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Since the entity buys these contracts to protect its operations from currency fluctuation, these market participants such as banks will charge some fees which are called *premium*. In the above example, the entity could protect its margin by paying a premium, say ₹50, and thus earn a net margin of ₹400.

D. Hedge Accounting

“A hedging instrument is a designated derivative or (for a hedge of the risk of changes in foreign currency exchange rates only) a designated non-derivative financial asset or non-derivative financial liability whose fair value or cash flows are expected to offset changes in the fair value or cash flows of a designated hedged item.

A hedged item is an asset, liability, firm commitment, highly probable forecast transaction or net investment in a foreign operation that (a) exposes the entity to risk of changes in fair value or future cash flows and (b) is designated as being hedged”. (Paragraph 9 of IAS 39)

The objective of hedge accounting is to offset the gain/loss of the hedge instrument with that of the hedge item.

A hedge taken for a forward contract can be of two types namely cash-flow hedge and fair-value hedge. The governing factor for identifying the correct type of designation is dependent on the hedge item and goes with the objective of hedge accounting.

“Cash flow hedge is a hedge of the exposure to variability in cash flows that:

- (i) is attributable to a particular risk associated with a recognised asset or liability (such as all or some future interest payments on variable rate debt) or a highly probable forecast transaction and*
- (ii) could affect profit or loss.*

Fair value hedge is a hedge of the exposure to changes in fair value of a recognised asset or liability or an unrecognised firm commitment, or an identified portion of such an asset, liability or firm commitment, that is attributable to a particular risk and could affect profit or loss.” (Paragraph 86 of IAS 39)

“A hedge of the foreign currency risk of a firm commitment may be accounted for as a fair value hedge or as a cash flow hedge.” (Paragraph 87 of IAS 39)

This designation allows parking of MTM gains and losses in hedging reserve without impacting the profit & loss account. It goes in line with hedge accounting which looks for an offset of MTM. Since the transaction will happen in future, there is no offset available in current period results.

Following is a brief accounting difference between cash-flow hedge and fair-value hedge:

Sr. No	Cash-Flow hedge	Fair-Value hedge
1.	Fair-value adjustment or mark to market (MTM) adjustment is parked in Other Comprehensive Income (OCI), net of Deferred tax.	Fair-value adjustment or mark to market adjustment is accounted in Income statement.
2.	These are typically hedges of items not on the balance sheet.	These are typically hedges for items on the balance sheet.
3.	It is a hedge for a future transaction and thus MTM does not impact present profitability.	It is a hedge of a balance sheet exposure and thus MTM is accounted in income statement to offset the MTM of the hedged item.
4.	The MTM deferred in OCI is recycled to Income statement when the hedged item is accounted in books.	There is no deferment of MTM in this case.

Entities can choose to account for these hedges as a *cash-flow hedge*. This designation allows parking of MTM gains and losses in hedging reserve without impacting the profit & loss account. It goes in line with hedge accounting which looks for an offset of MTM. Since the transaction will happen in future, there is no offset available in current period results. It is more logical to defer the impact till the transaction happens.

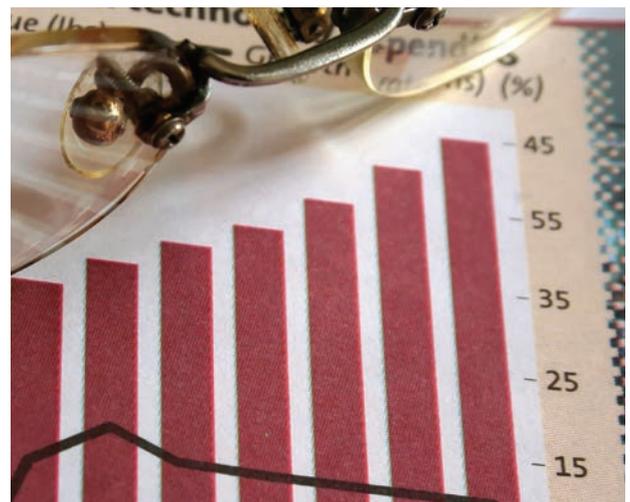
IAS 39 paragraph 87 permits the hedge of foreign currency risk of a firm commitment to be accounted for as cash flow hedge or as fair value hedge.

The documentation, accounting treatment and hedge effectiveness testing can be done on the assumption that the hedge is entered into prior to booking the asset and related liability in the accounts, i.e. there is only a commitment at the point the hedge is entered into.

E. Hedge Documentation

Every derivative entered into by each entity within the group must be documented in full at the inception of the derivative as under:

- The *nature of the risk* being hedged by the units is assumed to be foreign exchange risk associated with the purchase.
- Insert the *date of designation* being the date the derivative has been entered into.
- Identify and record the *hedging instrument*. In this case, it would be forward/future foreign exchange contract.
- Identify and record the *hedged transaction*. The identification must be explicit – e.g. reference should be made to the particular purchases contract.
- Demonstrate that the hedge will be highly *effective*. If the critical terms, e.g. currency, amount, maturity, etc., of the hedging instrument and hedged transaction are the same, changes in cash flows attributable to the risk being hedged are expected to be completely offset or in the range of 80% to 125%, by the hedging forward/futures contract.
- **Monitor effectiveness:** The monitoring should be carried out every month and requires evidence that the hedge is still considered to be entirely effective.



Sample documentation for hedging a foreign currency exposure on firm commitment for purchase of raw material is as below:

Company: XYZ Limited.
Functional Currency: INR

A	Hedging Objective	The objective of the transaction is to hedge currency exchange fluctuations in respect of <i>firm commitment</i> for any foreign currency denominated purchase, which is initially off balance sheet and then converts to a hedge of the foreign currency payable, once the purchase is recognised on the balance sheet.
B	Date of Designation(date of entering a forward contract)
C	Type of Hedge	<i>Cash-flow hedge</i> till the Hedge item is off Balance Sheet and subsequently <i>fair-value hedge</i> when the liability is accounted in balance sheet.
D	Hedging Instrument	Forward foreign exchange contract (attach confirmation for details regarding the counterparty, the buy currency and amount, the maturity date, as well as other relevant details.
E	Hedged Item	The forward contract is designated as a hedge of The firm commitment to purchase at US\$..... on X.X.200X and subsequent foreign currency exposure of the accounts payable in US\$ on X1.X1.200X1.
F	Hedged Period(Forward contract settlement date.)
G	How Hedge Effectiveness will be Assessed	As the critical terms of the forward contract and the hedged transaction are the same, changes in cash flows attributable to the risk being hedged are expected to be completely offset by the hedging forward/futures. If the critical terms of the forward contract and the hedged transaction do not match, hedge effectiveness will be assessed prospectively and retrospectively by comparing the underlying cash flow being hedged against the hedged amount for that specific period being hedged.
H	How Hedge Effectiveness will be Measured	Effectiveness will be measured by using hypothetical derivative approach. The entity chooses to apply dollar offset method of testing the effective under hypothetical derivative approach.

COMPLETED BY: _____ DATE: _____

F. Accounting Example

Start date	Maturity	Fwd Rate	Spot Rate	Derivative		Underlying	
				MTM	Cum MTM	MTM	Cum MTM
15-04-2011	31-05-2011	43.00	42.50*	-	-	-	-
30-04-2011	31-05-2011	43.50	43.00*	0.50	0.50	-	-
31-05-2011	15-07-2011	44.00	43.75	0.25	0.75	-	-
15-06-2011	15-07-2011	44.25	43.50	0.25	1.00	-	-
30-06-2011	15-07-2011	45.25	45.00	1.00	2.00	(1.50)	(1.50)
15-07-2011	15-07-2011	45.00	45.00	(0.25)	1.75	-	(1.50)

* Only for completeness, not relevant for accounting schema.

- **At the date of the inception of hedging contract:**
The contract has zero value; therefore, no entry is required. The commitment is also not yet recognised.
Example: A forward cover is taken on 15-04-2011 with maturity of 31-05-2011 @ ₹43/\$
- for \$100. There would be no accounting entry as on 15-04-2011.
- **At the end of reporting period before recognising the operation asset/liability in the books of account:** The commitment is not yet recognised but MTM gain/loss on cover till the date of period

closing would be recognised in hedging reserve (Equity).

Example: As on 30-04-2011, forward cover for maturity of 31-05-2011 is available @ ₹43.50/\$, thus MTM gain of ₹0.50/\$ would be accounted as under.

30-04-2011	Debit	Derivative Asset	50
	Credit	Hedging Reserve	50

- **At the date of Rollover of Forward Cover:** The commitment is not yet recognised hence the cover rolled forward. The rolled forward contract is treated as a new contract part of the existing hedge strategy.

Example: As on 31-05-2011, liability still not recognised hence the cover rolled forward @ ₹44 for maturity of 15-07-2011, when the spot rate was ₹43.75, thus following entries are passed:

- For booking MTM gain on cover (43.75/\$ - 43.50/\$)

31-05-2011	Debit	Derivative Asset	25
	Credit	Hedging Reserve	25
- Rollover gain received from bank (spot value – original forward value)

31-05-2011	Debit	Bank	75
	Credit	Derivative Asset	75

[Paragraph 101 a of IAS 39: “.....replacement or rollover of a hedging instrument into another hedging instrument is not an expiration or termination if such replacement or rollover is part of the entity’s documented hedging strategy”.]

- **At the date of recognising the operational asset/liability in the books of account:** The commitment recognised in books @ rate mentioned in bill of lading and the change in fair value of forward contract from the date of inception to the date of recognising commitment is allocated cost of raw material.

Example: As on 15-06-2011, following set of entries would be passed

- To record an asset
Raw material booked at the BL rate of ₹43.5/\$.

15-06-2011	Debit	Cost of Raw Material	4,350
	Credit	Operational Liability	4,350

Paragraph 98 b of IAS 39 says: It removes the associated gains and losses that were recognised in other comprehensive income in accordance with paragraph 95, and includes them in the initial cost or other carrying amount of the asset or liability.

- To record the fair value of the derivative
The change in fair value of the forward contract is recognised in cost of raw material as the forward cover of maturity of 15-07-2011 is available @ ₹44.25/\$. (44.25/\$ - 44.00/\$)

15-06-2011	Debit	Derivative Asset	25
	Credit	Hedging Reserve	25

- To transfer to fair value gain relating to asset from equity to profit & loss account

15-06-2011	Debit	Hedging Reserve	100
	Credit	Cost of Raw material*	100

*Note: Head of profit & loss account would depend upon the nature of underlying for which the cover the taken.

[Paragraph 98 b of IAS 39: “It removes the associated gains and losses that were recognised in other comprehensive income in accordance with paragraph 95, and includes them in the initial cost or other carrying amount of the asset or liability.”]

- **At the end of reporting period after recognising the purchase in the books of account:** The commitment recognised revalued @ closing rate and MTM gain/loss on cover till the date of period closing would be recognised in profit and loss account.

Example: As on 30-06-2011, closing rate is ₹45 and forward cover of maturity of 15-07-2011 is available @ ₹45.25/\$, following entry would be passed

- Revalue liability @ closing rate

30-06-2011	Debit	Forex Fluctuation	150
	Credit	Operational Liability	150
- To record the fair value of the derivative
The change in fair value of the forward contract is recognised in finance cost as the forward cover of maturity of 15-07-2011 is available @ ₹45.25/\$.

30-06-2011	Debit	Derivative Asset	100
	Credit	MTM Derivative Asset	100

- **At the settlement of liability:** Account the net settlement of liability and cover.

Example: As on 15-07-2011, following entry would be passed

- Record the payment of the liability and net settlement of the forward contract

15-07-2011	Debit	Operational Liability	4,500
	Credit	Bank	4,500

15-07-2011	Debit	MTM on Derivative asset	25
	Debit	Bank	100
	Credit	Derivative Asset	125

Note: Under the existing Indian GAAP, forward premium is amortised over the period of forward contract unlike IAS 39, where premium is also fair-valued for balance maturity along with spot rate at each reporting date.

Accounts at a Glance:

Derivative Asset Account

Date	Particulars	Dr. Amt	Per \$	Date	Particulars	Cr. Amt	Per \$
30-04-2011	To H. Reserve	50.00	0.50	15-06-2011	By Bank	75.00	0.75
31-05-2011	To H. Reserve	25.00	0.25	15-07-2011	By P&L	25.00	0.25
15-06-2011	To H. Reserve	25.00	0.25	15-07-2011	By Bank	100.00	1.00
30-06-2011	To P&L	100.00	1.00				
		200.00	2.00			200.00	2.00

Hedging Reserve	Dr/(Cr)
Derivative asset credit	(50)
Derivative asset credit	(25)
Derivative asset credit	(25)
Less: Transferred to P&L	100

Profit & Loss account	Dr/(Cr)
Purchase	4,350
Hedging Reserve	(100)
Fx fluctuation	150
MTM	(100)
MTM	25
Cost of Raw Material	4,325

Bank account	Dr/(Cr)
Derivative credit	(75.00)
Derivative credit	(100)
Liability debit	4,500
Cost of Raw Material	4,325

Liability Account	Dr/(Cr)
Purchase	4,350
Fx fluctuation	150
Bank	(4,500)

Hedged Rate per dollar	\$
Original Forward Rate	43.00
Premium on new contract	0.25
Effective outflow per dollar	43.25



Commercial Analysis: It can be seen in the above example that the organisation had an exposure on import of raw material. The exposure started from the date when it entered into a firm commitment and ended when the actual outflow is made.

The exchange rate has been volatile during the period, as it moved upwards from ₹42.5 per dollar as on 15-04-2011 to ₹45 per dollar as on 15-07-2011. The company decided to fix its outflow on the date of its commitment and entered into a forward contract to buy dollars @ ₹43.5 per \$1. Subsequently, the same contract was rolled over for meeting the scheduled payment to the creditor by incurring ₹0.25 premium per dollar bought. The company’s exposure was hedged by two contracts at the effective cost of ₹43.25 per dollar. These types of two contracts are common, where the underlying exposure is longer. The company’s cost of raw material has not been impacted on account of the volatilities in foreign exchange rate and is accounted at ₹4,325.

The above entries hold true even when the entity has a commitment for capital asset. The raw material account in the above example will be replaced by the fixed-asset account. ■