

## CHAPTER 16

### FINANCIAL INSTRUMENTS RECOGNITION AND MEASUREMENT (IAS – 39)

#### SCOPE

IAS 39 applies to all types of financial instruments except for the following, which are scoped out of IAS 39:

- interests in subsidiaries, associates, and joint ventures accounted for under IAS 27, IAS 28, or IAS 31; however IASs 32 and 39 apply in cases where under IAS 27, IAS 28, or IAS 31 such interests are to be accounted for under IAS 39 - for example, derivatives on an interest in a subsidiary, associate, or joint venture;
- employers' rights and obligations under employee benefit plans to which IAS 19 applies;
- contracts for contingent consideration in a business combination;
- contracts requiring payment based on climatic, geological, or other physical variable, except derivatives embedded in such contracts are subject to IAS 39;
- rights and obligations under insurance contracts, except IAS 39 does apply to financial instruments that take the form of an insurance (or reinsurance) contract but that principally involve the transfer of financial risks and derivatives embedded in insurance contracts;
- financial instruments that meet the definition of own equity under IAS 32, however, the holder of this instrument will apply this IAS.

**Leases** IAS 39 applies to lease receivables and payables only in limited respects:

- It applies to lease receivables with respect to de-recognition and impairment provisions.
- It applies to lease payables with respect to the de-recognition provisions. IAS 39 applies to derivatives embedded in leases.
- derivatives that are embedded in leases are subject to the embedded derivatives provisions of this Standard

#### **Financial guarantees.**

The financial guarantees are in the scope of IAS from August 2005.

#### **Loan Commitments**

- (a) Loan commitments that the entity designates as financial liabilities at fair value through profit or loss. An entity that has a past practice of selling the assets resulting from its loan commitments shortly after origination shall apply this Standard to all its loan commitments in the same class.
- (b) Loan commitments that can be settled net in cash or by delivering or issuing another financial instrument. These loan commitments are derivatives. A loan commitment is not regarded as settled net merely because the loan is paid out in installments (for example, a mortgage construction loan that is paid out in installments in line with the progress of construction).
- (c) Commitments to provide a loan at a below-market interest rate.

**Contracts to buy or sell financial items** Contracts to buy or sell financial items are also within the scope of IAS 39.

**Contracts to buy or sell non-financial items** Contracts to buy or sell non-financial items are within the scope of IAS 39 if they can be settled net in cash or another financial asset and are not entered into and held for the purpose of the receipt or delivery of a non-financial item in accordance with the entity's expected purchase, sale, or usage requirements. Contracts to buy or sell non-financial items are inside the scope if net settlement occurs. The following situations constitute net settlement:

- the terms of the contract permit either counterparty to settle net;

- there is a past practice of net settling similar contracts;
- there is a past practice, for similar contracts, of taking delivery of the underlying and selling it within a short period after delivery to generate a profit from short-term fluctuations in price, or from a dealer's margin; or
- the non-financial item is readily convertible to cash.

### Definitions

A derivative is a financial instrument:

- Whose value changes in response to the change in an underlying variable such as an interest rate, commodity or security price, or index;
- That requires no initial investment, or one that is smaller than would be required for a contract with similar response to changes in market factors; and
- That is settled at a future date.

### Examples of derivatives

**Forwards:** Contracts to purchase or sell a specific quantity of a financial instrument, a commodity, or a foreign currency at a specified price determined at the outset, with delivery or settlement at a specified future date. Settlement is at maturity by actual delivery of the item specified in the contract, or by a net cash settlement.

**Interest Rate Swaps and Forward Rate Agreements:** Contracts to exchange cash flows as of a specified date or a series of specified dates based on a notional amount and fixed and floating rates.

**Futures:** Contracts similar to forwards but with the following differences: Futures are generic exchange-traded, whereas forwards are individually tailored. Futures are generally settled through an offsetting (reversing) trade, whereas forwards are generally settled by delivery of the underlying item or cash settlement.

**Options:** Contracts that give the purchaser the right, but not the obligation, to buy (call option) or sell (put option) a specified quantity of a particular financial instrument, commodity, or foreign currency, at a specified price (strike price), during or at a specified period of time. These can be individually written or exchange-traded. The purchaser of the option pays the seller (writer) of the option a fee (premium) to compensate the seller for the risk of payments under the option.

**Caps and Floors:** These are contracts sometimes referred to as interest rate options. An interest rate cap will compensate the purchaser of the cap if interest rates rise above a predetermined rate (strike rate) while an interest rate floor will compensate the purchaser if rates fall below a predetermined rate.

### CLASSIFICATION OF FINANCIAL ASSETS

IAS 39 requires financial assets to be classified in one of the following categories:

- Financial assets at fair value through profit or loss.
- Available-for-sale financial assets.
- Loans and receivables.
- Held-to-maturity investments.

Those categories are used to determine how a particular financial asset is recognized and measured in the financial statements.

### At Fair Value through Profit and Loss Account

A financial asset or financial liability at fair value through profit or loss is a financial asset or financial liability that meets either of the following conditions.

- (a) It is classified as held for trading. A financial asset or financial liability is classified as held for trading if it is:
  - (i) acquired or incurred principally for the purpose of selling or repurchasing it in the near term;

- (ii) part of a portfolio of identified financial instruments that are managed together and for which there is evidence of a recent actual pattern of short-term profit-taking; or
  - (iii) a derivative (except for a derivative that is a financial guarantee contract or a designated and effective hedging instrument).
- (b) Upon initial recognition it is designated by the entity as at fair value through profit or loss. An entity may use this designation only when permitted by this IAS under Embedded Derivatives, or when doing so results in more relevant information, because either: -
- i) it eliminates or significantly reduces a measurement or recognition inconsistency (sometimes referred to as 'an accounting mismatch') that would otherwise arise from measuring assets or liabilities or recognizing the gains and losses on them on different bases; or
  - ii) a group of financial assets, financial liabilities or both is managed and its performance is evaluated on a fair value basis, in accordance with a documented risk management or investment strategy, and information about the group is provided internally on that basis to the entity's key management personnel

#### **Available-for-sale financial assets (AFS)**

Available-for-sale financial assets are those non-derivative financial assets that are designated as available for sale or are not classified as

- (a) loans and receivables,
- (b) held-to-maturity investments or
- (c) financial assets at fair value through profit or loss.

#### **Loans and receivables**

are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market other than:

- (a) those that the entity intends to sell immediately or in the near term, which shall be classified as held for trading, and those that the entity upon initial recognition designates as at fair value through profit or loss;
- (b) those that the entity upon initial recognition designates as available for sale; or
- (c) those for which the holder may not recover substantially all of its initial investment, other than because of credit deterioration, which shall be classified as available for sale.

An interest acquired in a pool of assets that are not loans or receivables (for example, an interest in a mutual fund or a similar fund) is not a loan or receivable.

#### **Held-to-maturity investments**

are non-derivative financial assets with fixed or determinable payments and fixed maturity that an entity has the positive intention and ability to hold to maturity other than:

- (a) those that the entity upon initial recognition designates as at fair value through profit or loss;
- (b) those that the entity designates as available for sale; and
- (c) those that meet the definition of loans and receivables.

An entity shall not classify any financial assets as held to maturity if the entity has, during the current financial year or during the two preceding financial years, sold or reclassified more than an insignificant amount of held-to-maturity investments before maturity (more than insignificant in relation to the total amount of held-to-maturity investments) other than sales or reclassifications that:

- (i) are so close to maturity or the financial asset's call date (for example, less than three months before maturity) that changes in the market rate of interest would not have a significant effect on the financial asset's fair value;

- (ii) occur after the entity has collected substantially all of the financial asset's original principal through scheduled payments or prepayments; or
- (iii) are attributable to an isolated event that is beyond the entity's control, is non-recurring and could not have been reasonably anticipated by the entity.

**The amortized** cost of a financial asset or financial liability is the amount at which the financial asset or financial liability is measured at initial recognition minus principal repayments, plus or minus the cumulative amortization using the effective interest method of any difference between that initial amount and the maturity amount, and minus any reduction for impairment or un-collectability.

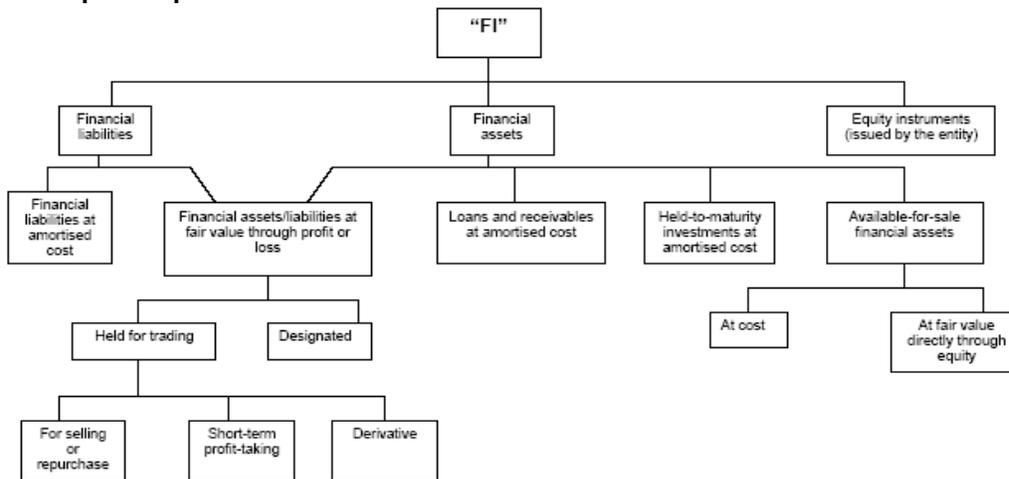
**The effective interest method** is a method of calculating the amortized cost of a financial asset or a financial liability and of allocating the interest income or interest expense over the relevant period. **The effective interest rate is the rate that exactly discounts estimated future cash payments or receipts through the expected life of the financial instrument or, when appropriate, a shorter period to the net carrying amount of the financial asset or financial liability.** When calculating the effective interest rate, an entity shall estimate cash flows considering all contractual terms of the financial instrument but shall not consider future credit losses. The calculation includes all fees and points paid or received between parties to the contract that are an integral part of the effective interest rate, transaction costs, and all other premiums or discounts.

**Classification of Financial Liabilities**

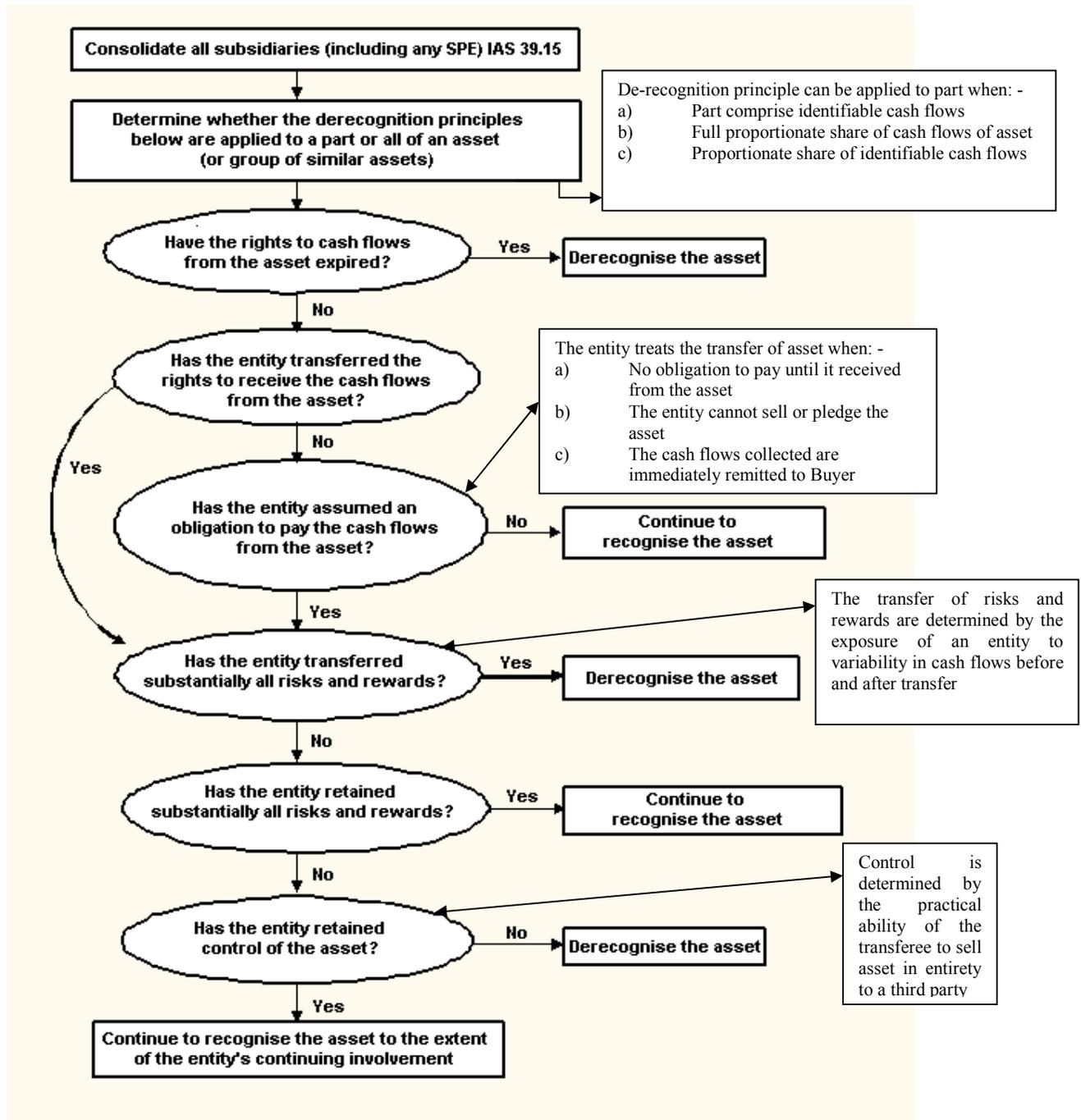
IAS 39 recognizes two classes of financial liabilities:

- Financial liabilities at fair value through profit or loss.
- Other financial liabilities measured at amortized cost using the effective interest method.

**Graphical presentation of assets covered under IAS-32 & 39**



**INITIAL RECOGNITION** is required when the enterprise becomes a party to the contractual provisions of the instrument, subject to the following provisions in respect of regular way purchases. A regular way purchase of financial assets is recognized and de-recognized using either trade date or settlement date accounting. The method used is to be applied consistently for all purchases and sales of financial assets that belong to the same category of financial asset. The choice of method is an accounting policy.



### De-recognition of a Financial Asset

The basic premise for the de-recognition model in IAS 39 is to determine whether the asset under consideration for de-recognition is:

- an asset in its entirety; or
  - specifically identified cash flows from an asset; or
  - a fully proportionate share of the cash flows from an asset; or
  - a fully proportionate share of specifically identified cash flows from a financial asset.
- The various de-recognition steps are summarized below in a decision tree.

### RECOGNITION OF GAIN LOSS ON DERECOGNITION

#### Entire financial asset

- The gain or loss is charged to profit and loss account on de-recognition of the difference
  - a) The carrying amount
  - b) Sum of consideration received and gain/loss recognized in OCI
- The entity transfer the financial asset but retains a servicing contract, which may result in servicing asset or servicing liability
- The entity transfer the financial asset which results in new financial asset or financial liability or servicing liability, all resulting assets/liabilities are recognized at fair value

#### **Entire part of financial asset**

- The previous carrying value of the parts is allocated between part continue to be recognized and de-recognized on relative fair value at date of transfer
- The gain or loss is charged to profit and loss account of the difference of: -
  - a) The carrying value of part de-recognized and;
  - b) The consideration received and gain / loss previously recognized in OCI
- When the fair value is not determinable for separate parts then carrying value of recognized part is fair value of total asset less consideration received for de-recognized asset.

#### **Continuing Involvement in transferred asset**

Substantial risks / rewards neither transferred nor retained but entity control the asset.

- The related asset and liability is recognized to the extent: -
  - Involvement in the form of guarantee, the asset will be recognized at lower of carrying value of asset and maximum consideration to be payable
  - Involvement in the form of written/purchased call option the amount of asset transferred which the entity may purchase
  - Involvement in the form of written put option then at lower of fair value of asset transferred and option exercise price
- The liability will be recognized according to applicable provisions of IAS- 39. However, the associated liability is measured in such a way that the net carrying value of asset transferred and liability is the: -
  - Amortized cost of the rights/obligations retained by the entity (asset is measured at amortized cost.
  - Fair value of the rights and obligations retained (asset transferred is measured at FV)

#### **INITIAL MEASUREMENT**

Initially, financial assets and liabilities should be measured at fair value including transaction costs, except for assets and liabilities measured at fair value through profit or loss.

#### **MEASUREMENT SUBSEQUENT TO INITIAL RECOGNITION**

Subsequently, financial assets and liabilities including derivatives should be measured at fair value, with the following exceptions:

- Loans and receivables, held-to-maturity investments, and non-derivative financial liabilities should be measured at amortized cost using the effective interest method.
- Investments in equity instruments with no reliable fair value measurement (and derivatives indexed to such equity instruments) should be measured at cost.
- Financial assets and liabilities that are designated as a hedged item or hedging instrument are subject to measurement under the hedge accounting requirements of the IAS 39.
- Financial liabilities that arise when a transfer of a financial asset does not qualify for derecognizing, or that are accounted for using the continuing-involvement method, are subject to particular measurement requirements.

#### **GAINS AND LOSSES**

- A gain or loss on a financial asset or financial liability classified as at fair value through profit or loss shall be recognized in profit or loss.

- A gain or loss on an AFS shall be recognized in other comprehensive income, except for impairment losses, until the financial asset is derecognized. At that time the cumulative gain or loss previously recognized in other comprehensive income shall be reclassified from equity to profit or loss as a reclassification adjustment. However, interest calculated using the effective interest method is recognized in profit or loss. Dividends on an AFS equity instrument are recognized in profit or loss when the entity's right to receive payment is established.
- For financial assets and financial liabilities carried at amortized cost, except designated hedged items a gain or loss is recognized in profit or loss when the financial asset or financial liability is derecognized or impaired, and through the amortization process.
- If an entity recognizes financial assets using settlement date accounting, any change in the fair value of the asset to be received during the period between the trade date and the settlement date is not recognized for assets carried at cost or amortized cost. For assets carried at fair value, however, the change in fair value shall be recognized in profit or loss or in equity, as appropriate.

### **RECLASSIFICATION OF FINANCIAL ASSETS**

Note the following points:

- Do not reclassify a financial asset into or out of the category of financial assets "carried at FV through profit or loss" except provided as follows: -

#### **Reclassification out of FVTPL and AFS (Amendments)**

- A financial asset within the scope of these amendments can only be reclassified out of FVTPL or AFS if specified criteria are met. The criteria vary depending on whether the asset would have met the definition of 'loans and receivables' (L&R) had it not been classified as at FVTPL or AFS at initial recognition.
- A debt instrument that would have met the definition of L&R (if it had not been required to be classified as held for trading at initial recognition) may be reclassified out of FVTPL if the entity has the intention and ability to hold the asset for the foreseeable future or until maturity.
- A debt instrument classified as AFS that would have met the definition of L&R (if it had not been designated as AFS) may be reclassified to the L&R category if the entity has the intention and ability to hold the financial asset for the foreseeable future or until maturity.
- Any other debt instrument, or any equity instrument, may be reclassified from FVTPL to AFS, or from FVTPL to HTM (in the case of debt instruments only), if the financial asset is no longer held for the purpose of selling in the near term – but only in 'rare' circumstances.

#### **Measurement at the reclassification date**

All reclassifications must be made at the fair value of the financial asset at the date of reclassification. Any previously recognized gains or losses cannot be reversed. The fair value at the date of reclassification becomes the new cost or amortized cost of the financial asset, as applicable.

#### **Measurement after the reclassification date**

- The existing requirements in IAS 39 for measuring financial assets at cost or amortized cost apply after the reclassification date (with one exception – see below). Therefore, for financial assets measured at amortized cost, a new effective interest rate will be determined at the date of reclassification. In the case of reclassifications of a fixed rate debt instrument to L&R and HTM, this effective interest rate will be used as the discount rate for future impairment calculations.

- For reclassifications out of AFS, IAS 39 requires the amounts previously recognized in other comprehensive income (OCI) to be reclassified to profit or loss either through the effective interest rate (if the instrument has a maturity) or at disposal (if the instrument has no maturity – i.e. it is perpetual). Amounts deferred in equity may also need to be reclassified to profit or loss if there is an impairment loss.
- The one exception to the existing measurement requirements is for reclassified debt instruments. If, after reclassification, an entity increases its estimate of recoverability of future cash flows, the carrying amount is not adjusted upwards as is currently required by IAS 39.AG8 for changes in estimates of cash flows. Instead, a new effective interest rate is determined and is applied from that date forward. Hence, the increase in the recoverability of cash flows is recognized over the expected life of the financial asset.
- “HTM” to “AFS” at FV. Re-measure the asset at FV. The difference between CV and FV on the date of reclassification is recognized directly in equity.
- “AFS” at FV to “HTM” or “AFS” at cost. Upon reclassification, the CV of the “AFS” at FV instrument becomes its amortized cost or cost as appropriate under the new classification.
- For reclassification “AFS” at FV to “HTM”, any previous gain or loss on that asset that has been recognized directly in equity should be amortized to profit or loss over the remaining life of the “HTM” asset.
- For reclassification “AFS” at FV to “AFS” at cost, it is likely to be an equity instrument. Any previous gain or loss on that asset that has been recognized directly in equity should remain in equity until the asset is sold when it should be recycled through income.
- For reclassification from “AFS” at cost to “AFS” at FV. The difference between CV and FV should be recognized in equity and recycled to income when the asset is sold.

#### **IMPAIRMENT AND UN-COLLECTABILITY OF FINANCIAL ASSETS**

- Impairment losses are incurred only if there is objective evidence as a result of one or more events that occurred after the initial recognition of the asset. The amount of the loss is measured as the difference between the asset's CV and the PV of estimated cash flows discounted at the financial asset's original effective interest rate.
- Impairment of HTM investments and loans and receivables carried at amortized cost is recognized through profit or loss. Any reversal of the loss is also recognized through profit or loss.
- Impairment losses on “available for sale” financial assets carried at cost should not be reversed.
- Impairment losses on “available for sale” financial assets carried at FV should be removed from equity and recognized in profit or loss even though the financial asset has not been de-recognized. Reversal through profit or loss is allowed if the instrument is a debt instrument but not if it is an equity instrument.

#### **IAS 39 PROVIDES A HIERARCHY TO BE USED IN DETERMINING THE FAIR VALUE FOR A FINANCIAL INSTRUMENT:**

- Quoted market prices in an active market are the best evidence of fair value and should be used, where they exist.
- If a market for a financial instrument is not active, an entity establishes fair value by using a valuation technique that makes maximum use of market inputs and includes

recent arm's length market transactions, reference to the current fair value of another instrument that is substantially the same, discounted cash flow analysis, and option pricing models.

- An acceptable valuation technique incorporates all factors that market participants would consider in setting a price and is consistent with accepted economic methodologies for pricing financial instruments.
- If there is no active market for an equity instrument and the range of reasonable fair values is significant and these estimates cannot be made reliably, then an entity must measure the equity instrument at cost less impairment.

#### **DE-RECOGNITION OF A FINANCIAL LIABILITY**

A financial liability should be removed from the balance sheet when, and only when, it is extinguished, that is, when the obligation specified in the contract is either discharged, cancelled, or expired.

Where there has been an exchange between an existing borrower and lender of debt instruments with substantially different terms, or there has been a substantial modification of the terms of an existing financial liability, this transaction is accounted for as extinguishments of the original financial liability and the recognition of a new financial liability.

A gain or loss from extinguishments of the original financial liability is recognized in the income statement.

#### **HEDGE ACCOUNTING**

Hedge accounting recognizes symmetrically the offsetting effects on net profit or loss of changes in the fair values of the hedging instrument and the related item being hedged.

IAS 39 permits hedge accounting under certain circumstances provided that the hedging relationship is:

Formally designated and documented, including the entity's risk management objective and strategy for undertaking the hedge, identification of the hedging instrument, the hedged item, the nature of the risk being hedged, and how the entity will assess the hedging instrument's effectiveness; and

Expected to be highly effective in achieving offsetting changes in fair value or cash flows attributable to the hedged risk as designated and documented, and effectiveness can be reliably measured.

#### **Hedging Instruments**

All derivative contracts with an external counterparty may be designated as hedging instruments except for some written options.

An external non-derivative financial asset or liability may not be designated as a hedging instrument except as a hedge of foreign currency risk.

A proportion of the hedging instrument may be designated as the hedging instrument. Generally, specific cash flows inherent in a derivative cannot be designated in a hedge relationship while other cash flows are excluded. However, the intrinsic value and the time value of an option contract may be separated, with only the intrinsic value being designated. Similarly, the interest element and the spot price of a forward can also be separated, with the spot price being the designated risk.

#### **Hedged Items**

A hedged item can be:

- a single recognized asset or liability, firm commitment, highly probable transaction, or a net investment in a foreign operation;
- a group of assets, liabilities, firm commitments, highly probable forecast transactions, or net investments in foreign operations with similar risk characteristics;
- a held-to-maturity investment for foreign currency or credit risk (but not for interest risk or prepayment risk);

a portion of the cash flows or fair value of a financial asset or financial liability; or a non-financial item for foreign currency risk only or the risk of changes in fair value of the entire item.

in a portfolio hedge of interest rate risk (**Macro Hedge**) only, a portion of the portfolio of financial assets or financial liabilities that share the risk being hedged.

### **Effectiveness**

IAS 39 requires hedge effectiveness to be assessed both prospectively and retrospectively. To qualify for hedge accounting at the inception of a hedge and, at a minimum, at each reporting date, the changes in the fair value or cash flows of the hedged item attributable to the hedged risk must be expected to be highly effective in offsetting the changes in the fair value or cash flows of the hedging instrument on a prospective basis, and on a retrospective basis where actual results are within a range of 80% to 125%.

All hedge ineffectiveness is recognized immediately in the income statement.

### **CATEGORIES OF HEDGES**

**A fair value hedge** is a hedge of the exposure to changes in fair value of a recognized asset or liability or a previously unrecognized firm commitment to buy or sell an asset at a fixed price 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.

The gain or loss from the change in fair value of the hedging instrument is recognized immediately in profit or loss. At the same time the carrying amount of the hedged item is adjusted for the corresponding gain or loss with respect to the hedged risk, which is also recognized immediately in net profit or loss.

**A 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 recognized 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.

The portion of the gain or loss on the hedging instrument that is determined to be an effective hedge is recognized directly in equity and recycled to the income statement when the hedged cash transaction affects profit or loss.

If the hedged cash flows result in the recognition of a non-financial asset or liability, the entity can choose to adjust the basis of the asset or liability for the amount deferred in equity. This option has the status of an accounting policy and must be applied consistently to all such hedges.

**A hedge of a net investment in a foreign operation** as defined in IAS 21 is accounted for similarly to a cash flow hedge.

**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.

### **Discontinuation of Hedge Accounting**

Hedge accounting must be discontinued prospectively if:

- the hedging instrument expires or is sold, terminated, or exercised;
- the hedge no longer meets the hedge accounting criteria - for example it is no longer effective;
- for cash flow hedges the forecast transaction is no longer expected to occur; or
- the entity revokes the hedge designation.

If hedge accounting ceases for a cash flow hedge relationship because the forecast transaction is no longer expected to occur, gains and losses deferred in equity must be taken to the income statement immediately. If the transaction is still expected to occur and the hedge relationship ceases, the amounts accumulated in equity will be retained in equity until the hedged item affects profit or loss.

If a hedged financial instrument that is measured at amortized cost has been adjusted for the gain or loss attributable to the hedged risk in a fair value hedge, this adjustment is

amortized to profit or loss based on a recalculated effective interest rate on this date such that the adjustment is fully amortized by the maturity of the instrument. Amortization may begin as soon as an adjustment exists and must begin no later than when the hedged item ceases to be adjusted for changes in its fair value attributable to the risks being hedged.

### **EXAMPLES TO THE IAS**

#### **Example (Effective Interest Rate Method)**

Debt is issued for \$1,000. The debt is redeemable at \$1,250. The term of the debt is five years and interest is paid at 5.9% p.a. (Effective interest rate 10%)

Required: - Prepare amortization schedule using effective interest rate method and determine interest cost of each period to be charged to Profit and Loss Account?

#### **Example-Held to maturity investments (Amortized Cost)**

A debt security has a stated principal amount of £5,000. This will be repaid in five years at an interest rate of 6% per year, payable annually at the end of each year. The company purchases the security on 1 January 20X4, at a discount, for £4,670. The company classifies the debt security as held-to-maturity. (Effective interest rate is 7.65%)

Required: - Prepare amortization schedule using effective interest rate method and determine interest income of each period to be charged to Profit and Loss Account?

#### **Example (Held for trading)**

A debt security that is held for trading is purchased for £6,000. Transaction costs are £400.

Required: - Provide accounting treatment for transaction cost and at what value the investment to be recognized?

#### **Example (Held for sale)**

A bond classified as available-for-sale is purchased for £5,500 and transaction costs are £500.

Required: - Provide accounting treatment for transaction cost and at what value the investment to be recognized?

#### **Examples (Financial assets at fair value through profit or loss)**

A company acquires, for cash, 500 shares at £5 per share and classifies them as at fair value through profit or loss. At the year-end, the quoted price increases to £6. The company sells the shares for £3,400 just after the year-end.

Required: - Provide necessary journal entries to be passed at initial recognition, balance sheet date and on disposal of investment if investment is held for trading and / or held for sale?

#### **Example (Call option purchased)**

A company enters into a call option contract on 1 July 20X6. The contract gives it the right to purchase 5,000 shares issued by another company on 1 December 20X6, at a price of £15 per share. The company's year-end is 31 October 20X6. The cost of each option is £1. On 31 October 20X6, the value of each option is £1.50. The share price on this date is £16.

Required: - Provide necessary journal entries to be passed at initial recognition, balance sheet date and on exercise of option?

#### **Example (Embedded Derivative)**

A company invests in a convertible debt instrument at a cost of £25,000. The fixed interest rate is 7% and it can be converted into ordinary shares in 10 years' time, at the company's option, or, the capital can be repaid at £25,000. The investment is classed as available-for-sale.

Required: - Provide necessary journal entries to be passed at initial recognition?

#### **Example - fair value hedge**

A company purchases a debt instrument that has a principal amount of £1 million at a fixed interest rate of 6% per year. The instrument is classed as an available-for-sale financial asset. The fair value of the instrument is £1 million.

The company is exposed to a risk of the decline in the fair value of the instrument if the market interest rate increases because of the fixed interest rate.

The company enters into an interest rate swap. It exchanges the fixed interest rate payments it receives on the bond for floating interest rate payments, in order to offset the risk of a decline in fair value. If the derivative hedging instrument is effective, any decline in the fair value of the bond should be offset by opposite increases in the fair value of the derivative instrument. The company designates and documents the swap as a hedging instrument. On entering into the swap, the swap has a fair value of zero.

Assuming market interest rates have increased to 7%, the fair value of the bond will have decreased to £960,000. The Swap has a fair value of £ 39,000 at the same date.

Required: - Provide necessary journal entries to be passed?

### **Example –cash flow hedge**

A company trades in £ sterling. It expects to purchase a piece of plant for 1 million euros in one year from 1 May 20X6. In order to offset the risk of increases in the euro rate, the company enters into a forward contract to purchase 1 million euros in 1 year for a fixed amount (£650,000). The forward contract is designated as a cash flow hedge. At inception, the forward contract has a fair value of zero. At the year-end of 31 October 20X6, the euro has appreciated and the value of 1 million euros is £660,000. The machine will still cost 1 million euros so the company concludes that the hedge is 100% effective.

Required: - Provide necessary journal entries to be passed at the date of settlement and what will be the treatment of any gain on the contract?

## **CLASSIFY THE FOLLOWING INSTRUMENTS**

### **1 Investment in marketable bond**

Tamara acquires a bond. The bond is listed and matures in 18 months. Management has purchased the bond because it expects the price to increase in the short-term. It intends to sell the bond whenever it believes the price has peaked, but definitely within the next 30 days.

### **2 Investment in equity shares**

Tamara acquires 5% of the equity shares in Go, a start-up business in the Netherlands, which it believes has good prospects. She expects Go to be listed within 2 years and hopes to make a substantial return on its investment over 3-5 years.

### **3 Investment in debt security**

Tamara has invested surplus cash in a bond denominated in euros. The maturity of the bond is 3 years and management intends to hold the bond to maturity, when it will use the proceeds for a planned acquisition in Germany.

### **4-Fixed interest debt**

Tamara issues a CHF 10m fixed-interest note with a three-year term.

### **5 Trade Receivable**

Tamara has sold goods to a customer, which is invoiced in Singapore Dollars. The Customer is expected to pay for the goods in 30 days.

### **6 Short position in securities**

Tamara hears a rumour that the share price of Black Dog will fall within the next 3 days. She borrows Black Dog shares from a broker for 5 days and immediately sells them in the market. On day 5, she intends to buy shares at a lower price in the market and return them to the broker.

## **DETERMINE THE DERECOGNITION OF FOLLOWING INSTRUMENTS**

Question 1

Star sells part of its short-term trade receivable portfolio. There is full recourse in the event of default.

Can Star derecognise the trade receivable sold?

### Question 2

Sun sells a non-readily obtainable equity security to Satellite. At the same time, Sun also enters into a forward purchase agreement with Satellite to reacquire the equity security in 6 months time at its then current market price.

Can Sun derecognise its investment in the equity security?

### Question 3

Aton owns 10,000 shares in Kot, a quoted undertaking. Aton transfers these shares to the bank, on the following terms:

The consideration received by Aton is \$20,000. Aton has a call option to buy the shares from the bank. The repurchase will take place at fair value at the date that the option is exercised.

Should Aton recognise the asset?

### Question 4

Aton owns 10,000 shares in Small, an unquoted undertaking. The shares have a carrying value of \$20,000. A transfers these shares to a bank, on the following terms:

The consideration received by Aton is \$20,000. Aton has a call option to buy the shares from the bank for \$25,000 in three years time.

Should Aton recognise the asset?

## **PRACTICE QUESTIONS**

### **Q-1**

Ambush, a public limited company, is assessing the impact of implementing the revised IAS39 'Financial Instruments: Recognition and Measurement'. The directors realize that significant changes may occur in their accounting treatment of financial instruments and they understand that on initial recognition any financial asset or liability can be designated as one to be measured at fair value through profit or loss (the fair value option). However, there are certain issues that they wish to have explained and these are set out below.

Required:

- (a) Outline in a report to the directors of Ambush the following information:
  - (i) How financial assets and liabilities are measured and classified, briefly setting out the accounting method used for each category. (Hedging relationships can be ignored.) (10 marks)
  - (ii) why the 'fair value option' was initially introduced and why it has caused such concern. (5 marks)
- (b) Ambush loaned \$200,000 to Bromwich on 1 December 2003. The effective and stated interest rate for this loan was 8 per cent. Interest is payable by Bromwich at the end of each year and the loan is repayable on 30 November 2007. At 30 November 2005, the directors of Ambush have heard that Bromwich is in financial difficulties and is undergoing a financial re-organization. The directors feel that it is likely that they will only receive \$100,000 on 30 November 2007 and no future interest payment. Interest for the year ended 30 November 2005 had been received. The financial year end of Ambush is 30 November 2005.

Required:

- (i) Outline the requirements of IAS 39 as regards the impairment of financial assets. (6 marks)
- (ii) Explain the accounting treatment under IAS39 of the loan to Bromwich in the financial statements of Ambush for the year ended 30 November 2005. (4 marks)

### **Q-2**

Artright, a public limited company, produces artefacts made from precious metals. Its customers vary from large multinational companies to small retail outlets and mail order customers.

- (i) On 1 December 2003, Artright has a number of finished artefacts in inventory which are valued at cost \$4 million (selling value \$5.06 million) and whose precious metal content was 200,000 ounces. The selling price of artefacts produced from a precious metal is determined substantially by the price of the metal. The inventory value of finished artefacts is the metal cost plus 5% for labour and design costs. The selling price is normally the spot price of the metal content plus 10% (approximately). The management were worried about a potential decline in the price of the precious metal and its effect on the selling price of the inventory. Therefore it sold futures contracts for 200,000 ounces in the metal at \$24 an ounce at 1 December 2003. The contracts mature on 30 November 2004.

The management have designated the futures contracts as cash flow hedges of the anticipated sale of the artefacts. Historically this has proved to be highly effective in offsetting any changes in the selling price of the artefacts. The finished artefacts were sold for \$22.8 per ounce on 30 November 2004. The costs of setting the futures contracts in place were negligible.

The metal's spot and futures prices were as follows:

	Spot price \$ per ounce	Futures price per ounce for delivery 30 November 2004 \$
11 December 2003	23	24
30 November 2004	21	21

- (ii) The artefacts produced by the company require special packaging materials in order to store and deliver the product. Artright has entered into a one year contract with a local supplier to deliver these materials on a quarterly basis until the end of the contract on 30 November 2005. The agreed price of each delivery is £100,000 sterling (UK pounds) payable quarterly.

- (iii) Artright has a mail order business. The customers pay for their goods on a loan basis over a period which varies from six months to 24 months. The average life of a loan is 12 months and the effective interest rate on the loans is 10% per annum. Most of the loans are repaid on time and of those that do not pay on time, any delay in payment is not penalized by extra interest payments. Artright currently has as at 30 November 2004 loans outstanding of \$2 million (principal) on which interest of \$150,000 is expected to be earned from 1 December 2004. The amounts due are \$1.05 million on 31 May 2005 and \$1.1 million on 30 November 2005. The company estimates that it will receive cash repayments of \$1 million on 31 May 2005 and \$1.04 million on 30 November 2005.

Also one of Artright's customers had experienced financial difficulties and as at 1 December 2003, a receivable of \$200,000 had been converted into a fixed interest loan of 10%. The loan was repayable over two years and at 30 November 2004; the customer had paid \$100,000 to Artright. The accrued interest for the year was \$16,500. Because of the continuing problems of the customer, at 30 November 2004 the loan was rescheduled over a further three years at an interest rate of 10%, and the annual repayments subsequently reduced. The management of Artright feel that the customer will be able to meet the payments under the restructured loan agreement.

- (iv) The company also trades with multi-national corporations. Artright often has cash flow problems and factors some of its trade receivables. On 1 November 2004 it sold trade receivables of \$500,000 to a bank and received a cash settlement of \$440,000 for these trade receivables. The portfolio of trade receivables sold is due from some of the company's best customers who always pay their debts but are quite slow payers. Because of the low risk of default, Artright has guaranteed 12% of the

balance outstanding on each receivable and the fair value of this guarantee is thought to be \$12,000.

Required: Using the principles of IAS39 'Financial Instruments: recognition and measurement':

- (a) Discuss whether the cash flow hedge of the sale of the inventory of artefacts is effective and how it would be accounted for in the financial statements for the year ended 30 November 2004. (6 marks)
- (b) Discuss the nature of the contracts to purchase packaging materials. (4 marks)
- (c) Discuss, with suitable calculations, the potential impairment of the mail order receivables and the loan to the customer. (10 marks)
- (d) Discuss whether the sale of the trade receivables would result in them being derecognized in the balance sheet at 30 November 2004 and how the sale of the trade receivables would be recorded. (5 marks)

### Q-3

The directors of Aron, a public limited company, are worried about the challenging market conditions which the company is facing. The markets are volatile and illiquid. The central government is injecting liquidity into the economy.

The directors are concerned about the significant shift towards the use of fair values in financial statements. IAS 39 'Financial Instruments: recognition and measurement' defines fair value and requires the initial measurement of financial instruments to be at fair value. The directors are uncertain of the relevance of fair value measurements in these current market conditions.

Required:

- (a) Briefly discuss how the fair value of financial instruments is determined, commenting on the relevance of fair value measurements for financial instruments where markets are volatile and illiquid. (4 marks)
- (b) Further they would like advice on accounting for the following transactions within the financial statements for the year ended 31 May 2009:
  - (i) Aron issued one million convertible bonds on 1 June 2006. The bonds had a term of three years and were issued with a total fair value of \$100 million which is also the par value. Interest is paid annually in arrears at a rate of 6% per annum and bonds, without the conversion option, attracted an interest rate of 9% per annum on 1 June 2006. The company incurred issue costs of \$1 million. If the investor did not convert to shares they would have been redeemed at par. At maturity all of the bonds were converted into 25 million ordinary shares of \$1 of Aron. No bonds could be converted before that date. The directors are uncertain how the bonds should have been accounted for up to the date of the conversion on 31 May 2009 and have been told that the impact of the issue costs is to increase the effective interest rate to 9.38%. (6 marks)
  - (ii) Aron held 3% holding of the shares in Smart, a public limited company. The investment was classified as available-for-sale and at 31 May 2009 was fair valued at \$5 million. The cumulative gain recognised in equity relating to the available-for-sale investment was \$400,000. On the same day, the whole of the share capital of Smart was acquired by Given, a public limited company, and as a result, Aron received shares in Given with a fair value of \$5.5 million in exchange for its holding in Smart. The company wishes to know how the exchange of shares in Smart for the shares in Given should be accounted for in its financial records. (4 marks)
  - (iii) The functional and presentation currency of Aron is the dollar (\$). Aron has a wholly owned foreign subsidiary, Gao, whose functional currency is the zloti. Gao owns a debt instrument which is held for trading. In Gao's financial statements for the year ended 31 May 2008, the debt instrument was carried at its fair value of 10 million

zloti. At 31 May 2009, the fair value of the debt instrument had increased to 12 million zloti. The exchange rates were:

Zloti to \$1

31 May 2008 3

31 May 2009 2

Average rate for year to 31 May 2009 2.5

The company wishes to know how to account for this instrument in Gao's entity financial statements and the consolidated financial statements of the group. (5 marks)

- (iv) Aron granted interest free loans to its employees on 1 June 2008 of \$10 million. The loans will be paid back on 31 May 2010 as a single payment by the employees. The market rate of interest for a two-year loan on both of the above dates is 6% per annum. The company is unsure how to account for the loan but wishes to classify the loans as 'loans and receivables' under IAS 39 'Financial Instruments: recognition and measurement'.

(4 marks)

Required:

Discuss, with relevant computations, how the above financial instruments should be accounted for in the financial statements for the year ended 31 May 2009.

Note. The following discount and annuity factors may be of use.

Year	Discount factors			Annuity factors		
	6%	9%	9.38%	6%	9%	9.38%
1	0.9434	0.9174	0.9142	0.9434	0.9174	0.9174
2	0.8900	0.8417	0.8358	1.8334	1.7591	1.7500
3	0.8396	0.7722	0.7642	2.6730	2.5313	2.5142

(25 marks)