THE INSTITUTE OF
CHARTERED ACCOUNTANTS OF SRI LANKA

## SLFRS 09 - Financial Instruments

SAMIRA ANTHONY

## A financial instrument..............................

## Is any contract that gives rise to a financial asset of one entity, and a financial liability or equity instrument of another entity.

This means that items that will be settled through the receipt or delivery of goods or services are not financial instruments, nor typically are tax assets and liabilities as these arise through legal rather than contractual requirements.


## * A financial asset is defined as any asset that is:

## $\checkmark$ Cash

$\checkmark$ A contractual right

- To receive cash or another financial asset from another entity
- To exchange financial assets or financial liabilities with another entity under conditions that are potentially favorable to the entity
$\checkmark$ An equity instrument of another entity
$\checkmark$ A contract that will or may be settled in the entity's own equity instruments and is:
- A non-derivative for which the entity is or may be obliged to receive a variable number of the entity's own equity instruments; or
- A derivative that will or may be settled other than by the exchange of a fixed amount of cash or another financial asset for a fixed number of the entity's
own equity instruments. For this purpose, the entity's own equity instruments do not include puttable equity instruments or instruments that include a contractual obligation for the entity to deliver a pro rata share of its net assets only on liquidation, that do not meet the definition of equity but are classified as such under IAS 32 Financial Instruments: Presentation, nor do they include instruments that are contracts for the future receipt or delivery of an entity's own equity instruments.


## * A financial liability is defined as any liability that is:

A contractual obligation

- To deliver cash or another financial asset to another entity
- To exchange financial assets or financial liabilities with another entity under conditions that are potentially unfavorable to the entity

A contract that will or may be settled in the entity's own equity instruments and is:

- A non-derivative for which the entity is or may be obliged to deliver a variable number of the entity's own equity instruments; or
- A derivative that will or may be settled other than by the exchange of a fixed amount of cash or another financial asset for a fixed number of the entity's own equity instruments. For this purpose, the entity's own equity instruments do not include certain instruments as set out above in the equivalent part of the definition of financial assets.


## * An equity instrument is defined as:

Any contract that evidences a residual interest in the assets of an entity after deducting all of its liabilities.
Certain financial instruments that meet the definition of a financial liability are classified as equity instruments. These are:

- Puttable financial instruments that meet certain specified conditions
- Financial instruments which contain a contractual obligation for the issuing entity to deliver to the holder a pro rata share of its net assets only on liquidation, but liquidation is either certain to occur and outside the control of the entity (eg for a limited life entity) or is uncertain to occur but can be triggered at the option of the instrument holder.


## FINANCIAL ASSETS <br> SLFRS 9 Financial Assets (Classification)



- Investments in other Sources

|  |  | Business Models |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Hold to Collect | Hold collect and Sell | other |
|  | Solely <br> Payments of <br> Principle and <br> Interest <br> (SPPI test) | Amortized Cost | FVTOCI | FVTPL |
| 光 | other | FVTPL | FVTPL | FVTPL |

- Investments in Equity Shares (@ FV only)
- FVTPL
- FVTOCI


## Amortized cost Financial Assets

A financial asset is classified as subsequently measured at amortized cost under IFRS 9 if it meets both of the following criteria:
$>$ 'Hold-to-collect' business model test - The asset is held within a business model whose objective is to hold the financial asset in order to collect contractual cash flows; and
> 'SPPI' contractual cash flow characteristics test - The contractual terms of the financial asset give rise to cash flows that are solely payments of principal and interest (SPPI) on the principal amount outstanding on a specified date.

Examples of financial instruments that are likely to be classified and accounted for at amortized cost under IFRS 9 include:

- Trade receivables
- Loan receivables with 'basic' features
- Investments in government bonds that are not held for trading
- Investments in term deposits at standard interest rates.


## 'Hold-to-collect' business model

To qualify for amortized cost classification, the financial asset must be in a 'hold-tocollect' business model.

That is, it must be in a business model in which the entity's objective is to hold the financial asset to collect the contractual cash flows from the financial asset rather than with a view to selling the asset to realize a profit or loss.

For example, trade receivables held by a manufacturing entity are likely to fall within the 'hold-to-collect' business model, as the manufacturing entity is likely to have the intention to collect the cash flows from those trade receivables.

The 'hold-to-collect' business model does not require that financial assets are always held until their maturity. An entity's business model can still be to hold financial assets to collect contractual cash flows, even when sales of financial assets occur. However, if more than an infrequent number of sales are made out of a portfolio, the entity should assess whether and how the sales are consistent with the 'hold-tocollect' objective. This assessment should include the reason(s) for the sales, the
expected frequency of sales, and whether the assets that are sold are held for an extended period of time relative to their contractual maturities.

## Example - 'Hold-to collect' business model

Entity A sold one of its diverse business operations and currently has CU10 million of cash. It has not yet found another suitable investment opportunity in which to invest those funds so it buys short dated (6 month maturity) high quality government bonds in order to generate interest income. It is not considered likely but, if a suitable investment opportunity arises before the maturity date, the entity will sell the bonds and use the proceeds for the acquisition of a business operation. Otherwise it will hold the bonds to their maturity date.

## Question: Is the 'hold-to-collect' business model test met?

## Answer:

Consideration of the facts and circumstances are required. It is likely that the government bonds would meet the 'hold-to-collect' business model test, as the entity's objective appears to be holding the government bonds and collecting the contractual cash flows which consist of the contractual interest payments and, on maturity, the principal amount. If the bond were to be sold prior to its maturity date, the fair value of the cash flows arising would be similar to those which would be collected by continuing to hold the bonds.

## Note: - For more Examples on Hold - to - Collect model: SLFRS 09

## The 'SPPI' contractual cash flow characteristics test

The second condition for a financial asset to qualify for amortized cost classification is that the financial asset must meet the 'SPPI' contractual cash flow characteristics test. Contractual cash flows are considered to be SPPI if the contractual terms of the financial asset only give rise to cash flows that are solely payments of principal and interest on the principal amount outstanding on specified dates i.e. the contractual cash flows are consistent with a basic lending arrangement.

## Note: - For more Examples on SPPI model:

## SLFRS 09

Paragraph B4.1.13
For more Examples on not for SPPI model:
SLFRS 09
Paragraph B4.1.14

## Example 1 -SPPI test for loan with zero interest and no fixed repayment terms

Parent A provides a loan to Subsidiary B. The loan is classified as a current liability in Subsidiary B's financial statements and has the following terms: - No interest -No fixed repayment terms -Repayable on demand of Parent A.

Question: Does the loan meet the 'SPPI' contractual cash flows characteristic test?
Answer: Yes. The terms provide for the repayment of the principal amount of the loan on demand.

## Example 2 - SPPI test for loan with zero interest repayable in five years

Parent A provides a loan of CU10 million to Subsidiary B. The loan has the following terms: -No interest -Repayable in five years.

Question: Does the loan meet the 'SPPI' contractual cash flows characteristic test?
Answer: Yes. The principal (fair value) is CU10 million discounted to its present value using the market interest rate at initial recognition. The final repayment of CU10 million represents a payment of principal and accrued interest.

Entity B lends Entity C CU5 million for five years, subject to the following terms: -Interest is based on the prevailing variable market interest rate -Variable interest rate is capped at $8 \%$-Repayable in five years. Question: Does the loan meet the SPPI contractual cash flows characteristic test?
Answer: Yes. Contractual cash flows of both a fixed rate instrument and a floating rate instrument are payments of principal and interest as long as the interest reflects consideration for the time value of money and credit risk. Therefore, a loan that contains a combination of a fixed and variable interest rate meets the contractual cash flow characteristics test.

## Example 4 - SPPI test for loan with profit linked element

Entity D lends Entity E CU500 million for five years at an interest rates of 5\%. Entity E is a property developer that will use the funds to buy a piece of land and construct residential apartments for sale. In addition to the 5\% interest, Entity D will be entitled to an additional $10 \%$ of the final net profits from the project.
Question: Does the loan meet the 'SPPI' contractual cash flows characteristic test?
Answer: No. The profit linked element means that the contractual cash flows do not reflect only payments of principal and interest that consist of only the time value of money and credit risk. Therefore, the loan will fail the requirements for amortised cost classification. Entity D will account for the loan at fair value through profit or loss.

## Example 5 - SPPI test: Modified time value of money

Entity B invests in a variable interest rate bond that matures in five years. The variable interest is reset every six months to a 5 year rate. At the time of initial investment, the 6 month interest rate is not significantly different to the 5 year rate.

Question: Can Entity B conclude that the modification is not significant without any additional analysis?

Answer: No. Entity B cannot simply conclude based on the relationship between the 5 year rate and the 6 month rate at the date of initial investment. Rather Entity B must also consider whether the relationship between the 5 year interest rate and the 6 month interest rate could change over the life of the bond such that the contractual (undiscounted) cash flows over the life of the bond could be significantly different from the (undiscounted) benchmark cash flows. Entity B is only required to consider reasonably possible scenarios rather than every possible scenario. If Entity B is unable to conclude that the contractual (undiscounted) cash flows could not be significantly different from the (undiscounted) benchmark cash flows, the financial asset does not meet the SPPI criteria and therefore must be measured at fair value through profit or loss.

## Example 6 - SPPI test for loan with prepayment option

Entity D lends Entity E CU5 million at a fixed interest rate. The loan is repayable in 5 years. Entity E has the option to repay the loan at any time at CU5 million plus any accrued interest plus a prepayment penalty fee of $2.5 \%$ which reduces by $0.5 \%$ for each complete period of one year during which the loan has been outstanding.

## Question: Does the loan meet the 'SPPI' contractual cash flows characteristic test?

Answer: Yes. The prepayment option is not contingent on any future event. The prepayment penalty is considered to be reasonable additional compensation for early contract termination.

## Example 7 - SPPI test for loan with extension option (with rate reset)

Company K lends Company L CU10 million at a fixed market interest rate. The loan is repayable in 5 years. Company $L$ has the right to extend the term for another 3 years. If Company $L$ decides to extend the loan, a variable market interest rate will be charged from year 6 to 8 .

## Question: Does the loan meet the 'SPPI' contractual cash flows characteristic test?

Answer: Yes. Extension options meet the SPPI test if the terms result in contractual cash flows during the extension period that are SPPI on the principal amount outstanding, which may include reasonable additional compensation for the extension of the contract (IFRS 9.B.4.1.11(c)).

## Example 8 - SPPI test for loan with interest rate reset

Company I lends Company J CU5 million at a fixed interest rate of $8 \%$. The loan is repayable in five years. If Company J misses two interest payments, the interest rate is reset to $15 \%$.

Question: Does the loan meet the 'SPPI' contractual cash flows characteristic test?
Answer: Yes, because there is a relation between the missed payment and an increase in credit risk (IFRS 9.B4.1.10).

## Example 9 - SPPI test for convertible note

## Question:

Does an investment in a convertible note that converts into equity instruments of the issuer meet the 'SPPI' contractual cash flows characteristic test?

## Answer:

No. IFRS 9 requires analysis of the terms of the convertible bond in its entirety. The interest rate in a convertible note typically does not reflect the consideration for the time value of money and the credit risk. The interest rate is usually set lower than the market interest rate. The overall return is also linked to the value of the equity of the issuer such that the conversion feature would potentially enhance the overall return.

## Example 10 - SPPI test for commodity linked note

Question: Does an investment in a bond with contractual interest payments linked to a commodity price (e.g. the price of gold, copper etc.) meet the 'SPPI' contractual cash flows characteristic test?

## Answer:

No, because the interest rate reflects the changes in the specified commodity price and not compensation for the time value of money and credit risk.

## Example 11 - SPPI test for deferred consideration receivable in a business combination

Company O sold one of its subsidiaries to Company P. The purchase consideration consists of a deferred payment of CU10 million payable in two years.
Question: Does the receivable meet the 'SPPI' contractual cash flows characteristic test?

## Answer:

Yes, the initial principal (fair value) is CU10 million discounted at the market interest rate for two years. The payment of CU10 million represents principal and accrued interest.

## Debt instruments at FVOCI

A financial asset is measured at fair value through other comprehensive income (FVOCI) under IFRS 9 if it meets both of the following criteria:

- 'Hold-to-collect and sell' business model test: The asset is held within a business model whose objective is achieved by both holding the financial asset in order to collect contractual cash flows and selling the financial asset, and
- 'SPPI' contractual cash flow characteristics test: The contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.
Examples of financial instruments that may be classified and accounted for at FVOCI under IFRS 9 include:

Investments in government bonds where the investment period is likely to be shorter than maturity
Investments in corporate bonds where the investment period is likely to be shorter than maturity.

It is unlikely that intercompany loans or trade receivables would be classified in the FVOCI category.

## Note: - For more Examples on Hold - to - Collect and Sell model: SLFRS 09 <br> Paragraph B4.1.4C

## Example 1 - 'Hold-to collect' business model test for sale before maturity

Same facts as Example 1: Entity A sold one of its diverse business operations and currently has CU10 million of cash. It has not yet found another suitable investment opportunity in which to invest its funds so it buys medium dated (3 year maturity) high quality government bonds in order to generate interest income. It is considered likely that a suitable investment opportunity will be found before the maturity date, and in that case Entity A will sell the bonds and use the proceeds for the acquisition of a business operation. Otherwise Entity A plans to hold the bonds to their contractual maturity.
Question: Are the criteria for a 'hold-to-collect' or 'hold-to-collect and sell' business model met?

## Answer:

It is likely that the government bonds would not meet the 'hold-to-collect' business model test because it is considered likely that the bonds will be sold well before their contractual maturity. However, it is likely that the investment would meet the 'hold-to-collect and sell' business model test.

## The accounting requirements for debt instruments classified as FVOCI are:

- Interest income is recognized in profit or loss using the effective interest rate method that is applied to financial assets measured at amortized cost
- Credit impairment losses/reversals are recognized in profit or loss using the same credit impairment methodology as for financial assets measured at amortized cost (please refer to Chapter 4 of this publication for further details).
- Other changes in the carrying amount on re-measurement to fair value are recognized in OCl
- The cumulative fair value gain or loss recognized in OCl is recycled from OCl to profit or loss when the related financial asset is derecognized.


## Example 1 - FVOCI for debt instruments

On 1.1.20X1 a financial asset is purchased at its face value of CU1,000. The contractual term is ten years with an annual coupon of $6 \%$. Expected credit losses as determined under the impairment model are CU20. On 31.12.20X1 the fair value of the financial asset decreases to CU950. Expected losses increase by CU10 to CU30. A coupon payment is received. On 1.1.20X2 the financial asset is sold for CU950.

Question: What are the journal entries on initial recognition, 31.12.20X1 and 1.1.20X2 under the FVOCI category?

## Equity investments at FVOCl

$\checkmark$ IFRS 9 requires all equity investments to be measured at fair value.
$\checkmark$ The default approach is for all changes in fair value to be recognized in profit or loss.
$\checkmark$ However, for equity investments that are not held for trading, entities can make an irrevocable election at initial recognition to classify the instruments as at FVOCl , with all subsequent changes in fair value being recognized in other comprehensive income ( OCI ). This election is available for each separate investment.
$\checkmark$ Under this new FVOCl category, fair value changes are recognized in OCI while dividends are recognized in profit or loss.
$\checkmark$ Although it might appear similar to the Available for Sale category in IAS 39, it is important to note that this is a new measurement category which is different.
$\checkmark$ In particular under the new category, on disposal of the investment the cumulative change in fair value is required to remain in OCl and is not recycled to profit or loss. However entities have the ability to transfer amounts between reserves within equity (i.e. between the FVOCI reserve and retained earnings).

## Example 1 - Equity investments classified at FVOCI

Entity X has a 31 December financial year end and pays tax at a rate of $30 \%$. It prepares financial statements on an annual basis (it does not prepare interim financial statements). On 1 January 20X3, Entity X acquires 100 shares of List Co for CU10,000. The journal entry at 1 January 20X3 is as follows:

## Financial instruments at FVTPL

Fair value through profit or loss (FVTPL) is the residual category in IFRS 9. A financial asset is classified and measured at FVTPL if the financial asset is:
$\checkmark$ A held-for-trading financial asset
$\checkmark$ A debt instrument that does not qualify to be measured at amortized cost or FVOCl
$\checkmark$ An equity investment which the entity has not elected to classify as at FVOCI
$\checkmark$ A financial asset where the entity has elected to measure the asset at FVTPL under the fair value option (FVO).
$\checkmark$ Examples of financial instruments that are likely to fall under the FVTPL category include:
$\checkmark$ Investments in shares of listed companies that the entity has not elected to account for as at FVOCI
$\checkmark$ Derivatives that have not been designated in a hedging relationship,
e.g.: Interest rate swaps

Commodity futures/option contracts Foreign exchange futures/option contracts Investments in convertible notes, commodity linked bonds Contingent consideration receivable from the sale of a business.

## Hybrid contracts containing embedded derivatives

A hybrid contract is a financial instrument that contains both a non-derivative host contract and an embedded derivative.
Under IAS 39, the derivative embedded within a hybrid contract is bifurcated from the host contract and accounted for separately if:
$\checkmark$ A separate instrument with the same terms as the embedded derivative would meet the definition of a derivative
$\checkmark$ The economic characteristics and risks of the embedded derivative are not closely related to the economic characteristics and risks of the host contract, and
$\checkmark$ The hybrid (combined) instrument is not measured at FVTPL.
In order to simplify the accounting, IFRS 9 has eliminated the requirement to separately account for embedded derivatives for financial assets. Instead,
IFRS 9 requires entities to assess the hybrid contract as a whole for classification. If the terms of the hybrid contract still meet the criteria for subsequent measurement at amortized cost or FVOCl for debt instruments (see Section 3.1. and 3.2. above) then it is accounted for at amortized cost or FVOCI, otherwise it is measured at FVTPL.
However, the existing requirements for embedded derivatives still apply to financial liabilities, and to contracts for assets that are not within the scope of IFRS 9.

## Example 18-Convertible note receivable: Difference between IAS 39 and IFRS 9

Entity A invests in a CU1,000 convertible note issued by Entity B. The convertible note pays a 5\% annual coupon with a maturity of three years. At any point prior to its maturity, Entity $\mathbf{A}$ has the option to convert the note into 1,000 shares of Entity B.

The market interest rate for a similar instrument without the conversion feature would be 8\%.

## IAS 39

The instrument contains:

- Debt host contract - an annual coupon receivable of 5\% and CU1,000 on maturity, and
- Embedded equity option - option to buy shares at CU1.

The equity option derivative is not closely related to the debt host contract.

The entity therefore has two options:
i. Bifurcate the instrument, that is:

- Equity option at FVTPL
- Host debt contract at amortised cost.


## IFRS 9

No bifurcation, consider the instrument in its entirety:

- The coupon rate is lower than the market interest rate, and therefore does not reflect the consideration for the time value of money and credit risk
- Return is also linked to the value of the equity conversion.

Therefore, the instrument fails the SPPI test for classification at amortised cost.

Accordingly, the entity must account for the entire instrument at FVTPL.
ii. Designate entire contract at FVTPL.

## FINANCIAL LIABILITIES - CLASSIFICATION

The classification and measurement of financial liabilities in accordance with IFRS 9 Financial Instruments remains largely unchanged from IAS 39 Financial Instruments: Recognition and Measurement.

Financial liabilities are either classified as:
> Financial liabilities at amortized cost; or
$>$ Financial liabilities as at fair value through profit or loss (FVTPL).

Financial liabilities are measured at amortized cost unless either:

- The financial liability is held for trading and is therefore required to be measured at FVTPL (e.g. derivatives not designated in a hedging relationship), or
- The entity elects to measure the financial liability at FVTPL (using the fair value option).

In contrast to financial assets, the existing requirements in IAS 39 for the separation of embedded derivatives have been continued for financial liabilities, meaning that financial liabilities to be measured at amortized cost would still need to be analyzed to determine whether they contain any embedded derivatives that are required to be accounted for separately at FVTPL.

Examples of financial liabilities that are likely to be classified and measured either at amortised cost or at FVTPL include:



## FVTPL

(not designated in a hedging relationship)

- Commodity futures/option contracts (not designated in a hedging relationship)
Forelgn exchange future/option contracts (not designated in a hedging relationship)
- Convertible note Ulabilities designated at FVTPL

Contingent consideration payable that arises from one or more business combinations.

## Measurement on initial recognition

## Measurement on initial recognition

The requirements for the initial measurement of financial assets and liabilities under IFRS 9 Financial Instruments were carried forward from IAS 39 Financial Instruments: Recognition and Measurement. At initial recognition a financial instruments is measured at fair value including transaction costs unless the financial instrument is carried at FVTPL, in which case the transaction costs are immediately recognized in profit or loss.
Note: The fair value is determined in accordance with IFRS 13 Fair Value Measurement.


## Day one gains and losses

The best estimate of the fair value at initial recognition is usually the transaction price, represented by the fair value of the consideration given or received in exchange for the financial instrument.
Any difference between the fair value estimated by the entity and the transaction price is recognized:

- In profit or loss, if the estimate is evidenced by a quoted price in an active market; and
- Deferred as an adjustment to the carrying amount of the financial instrument in all other cases.


## Note:

The new expected loss impairment model under IFRS 9 requires an entity to recognize 12-month expected credit losses for all financial assets (unless the exemption for trade/lease receivables or contract assets applies (see Section 5.2.1.). However, this adjustment does not represent a day one loss because the fair value is determined first, with credit losses then being deducted. IFRS 9 does not explicitly require the recognition of 12-month expected credit losses immediately after initial recognition, but an entity would need to recognize a loss all
> Trade receivables
IFRS 9 provides an exception for the initial recognition of trade receivables without significant financing component to be recognized at the transaction price instead of fair value. The existence of a significant financing component is determined in accordance with the guidance set out in paragraphs 60-65 of IFRS 15 Revenue from Contracts with Customers.
For trade receivables with a significant financing component, any differences arising from the revenue recognized based on the transaction price in accordance with IFRS 15 and the fair value of the trade receivable is recognized as an expense in profit or loss.
Note:
In practice, short-term receivables and payables with no stated interest rate would continue to be measured at their invoiced amount, because the effect of discounting is likely to be immaterial

## Measurement AFTER initial recognition

$\checkmark$ Financial assets

After initial recognition, financial assets are either measured at amortized cost or at fair value. As with the initial recognition of financial instruments, the fair value is determined by applying the guidance set out in IFRS 13.
IFRS 9 removed the exception from IAS 39 to account for certain equity investments at cost from IAS 39 and requires entity's to measure equity investments at fair value. However, IFRS 9 states that in limited circumstances the cost is an appropriate estimate of the fair value, which may be situations where:

- The most recently available information is not sufficient to measure the fair value; or
- There is a wide range of possible fair value measurements and cost represents the best estimate within that range.
However, cost is never the best estimate for the fair value for quoted equity investments. Furthermore it was noted by the IASB that this exception would never apply to equity investments held by particular entities such as financial institutions and investment funds.


## $\checkmark$ Financial liabilities - General requirements

For the purpose of subsequent measurement financial liabilities are either measured at amortized cost or at FVTPL in accordance with IFRS 13.

## Financial liabilities at FVTPL - changes in own credit risk

In a major change from IAS 39 the new guidance under IFRS 9 requires when an entity designates a financial liability at FVTPL, the changes in fair value that relate to changes in the entity's own credit status are normally presented in other comprehensive income instead of profit or loss.

This is to eliminate the counter intuitive effect that would otherwise arise, that the poorer the financial condition of an entity, the higher the discount rate that will apply
when measuring the fair value of its financial liability and the higher the associated gain will become that will be recognized in profit or loss.

This means that, under IFRS 9, entities will typically have to determine the change in fair value of the financial liability as a whole, and then perform a separate calculation to determine the change in fair value that is attributable to changes in their own credit status, and present those changes in other comprehensive income (OCI), while the remaining fair value changes will be presented in profit or loss.

The cumulative changes in fair value arising from changes in an entity's own credit status that is recognized in OCI are not subsequently recycled to profit or loss when the financial liability is derecognized. However, IFRS 9 permits entities to transfer the amount within equity after Derecognition of the financial liability.

An entity determines the amount of the fair value change attributable to changes in its own credit risk either:
$\checkmark$ As the amount of the change in the fair value that is not attributable to changes in market conditions that give rise to market risk, which includes changes in: Benchmark interest rates

> Prices of other financial instruments
> Commodity prices
> Foreign exchange rates
> Index of prices and rates.
$\checkmark$ Using another method if that method more faithfully represents the related portion of the change in fair value.

If the only significant relevant changes in market conditions are due to changes in an observed benchmark interest rate, the amount attributable to changes in an entity's own credit risk can be estimated using the default method, which is based on the calculation of the financial instrument's internal rate of return (IRR).
Note: The benchmark interest rate is not explicitly defined by IFRS 9. However, usually the benchmark interest rate is a risk-free rate which excludes all changes which are due to changes in an entity's own credit risk. Examples of benchmark rates are interbank rates such as LIBOR or EURIBOR.

Start of reporting period


In the first step, the entity computes the liability's IRR at the start of the reporting period using the fair value of the liability and the liability's contractual cash flows at the start of the reporting period. It deducts from the IRR the observed benchmark interest rate at the start of the period. The result is an instrument specific IRR.

End of reporting period


Secondly, the entity derives the discount rate, which is the sum of the instrument specific IRR (calculated in Step 1) and the benchmark interest rate at the end of the reporting period, in order to calculate the present value of the contractual cash flows.

End of reporting period

| Contractual cash flows (at end of period) |  |
| :---: | :---: |
| $(1+\text { Discount rate })^{-t}$ | Present value of <br> liability's cash flows <br> at period end |

In the third step, the entity determines the present value of the contractual cash flows of the liability at the end of the reporting period, using the discount rate derived in Step 2.


Finally, the entity deducts the present value of the liability's cash flows at the period end as determined under Step 3) from the fair value of the financial liability at the end of the reporting period. The result is the change in the fair value of the financial liability attributable to an entity's own credit risk.

## IMPAIRMENT

The following financial instruments are included within the scope of the impairment requirements in IFRS 9 Financial Instruments:

- Debt instruments measured at amortised cost, e.g.
- Trade receivables,
- Loans receivable from related parties or key management personnel,
- Deferred consideration receivable, and
- Intercompany loans in separate financial statements.
- Debt instruments that are measured at fair value through other comprehensive income (FVOCI)
- Loan commitments (except those measured at FVTPL)
- Financial guarantee contracts (except those measured at FVTPL)
- Lease receivables within the scope of IAS 17 Leases
- Contract assets within the scope of IFRS 15 Revenue from Contracts with Customers
- Receivables arising from transactions within the scope of IAS 18 Revenue and IAS 11 Construction Contracts (if adoption of IFRS 9 is before the adoption of IFRS 15).


## Overview of the new impairment model

IFRS 9 establishes a three stage impairment model, based on whether there has been a significant increase in the credit risk of a financial asset since its initial recognition. These three stages then determine the amount of impairment to be recognized as expected credit losses (ECL) (as well as the amount of interest revenue to be recorded) at each reporting date:

- Stage 1: Credit risk has not increased significantly since initial recognition recognize 12 months ECL, and recognize interest on a gross basis
- Stage 2: Credit risk has increased significantly since initial recognition - recognize lifetime ECL, and recognize interest on a gross basis
- Stage 3: Financial asset is credit impaired (using the criteria currently included in IAS 39 Financial Instruments: Recognition and Measurement) - recognize lifetime ECL, and present interest on a net basis (i.e. on the gross carrying amount less credit allowance).

The recognition of impairment (and interest revenue) is summarised below:

| Stage | 1 | 2 | 3 |
| :--- | :---: | :---: | :---: |
| Recognition of Impairment | 12-month expected <br> credit losses | Lifetime expected credit losses |  |
| Recognition of interest | Effective interest on the gross cariying amount | Effective interest on the <br> net carrying amount |  |

## Recognition of impairment - 12-month expected credit losses

12-month expected credit losses are calculated by multiplying the probability of a default occurring in the next 12 months with the total (lifetime) expected credit losses that would result from that default, regardless of when those losses occur. Therefore, 12-month expected credit losses represent a financial asset's lifetime expected credit losses that are expected to arise from default events that are possible within the 12 month period following origination of an asset, or from each reporting date for those assets in Stage 1.

Note: The distinction between 12-month expected credit losses to be calculated in accordance with IFRS 9 and the cash shortfalls that are anticipated to arise over the next 12 months is important. As an example, the death of a credit card borrower does lead, in a number of cases, to the outstanding balance becoming impaired. Linking this to the accounting requirements, the IFRS 9 model therefore requires the prediction on initial recognition (and at each reporting date) of the likelihood of the borrower dying in the next 12 months and hence triggering an impairment event. Given the very large number of balances, it is likely that this would be calculated on a portfolio basis and not for each individual balance.

## Example 01: portfolio of mortgages and personal loans

Credito Bank operates in South Zone, a region in which clothing manufacture is a significant industry.
The bank provides personal loans and mortgages in the region. The average loan to value ratio for all its mortgage loans is $75 \%$. All loan applicants are required to provide information regarding the industry in which they are employed. If the application is for a mortgage, the customer must provide the postcode of the property which is to serve as collateral for the mortgage loan.

Credito Bank applies the expected credit loss impairment model in IFRS 9 Financial instruments. The bank tracks the probability of customer default by reference to overdue status records. In addition, it is required to consider forward-looking information as far as that information is available.

Credito Bank has become aware that a number of clothing manufacturers are losing revenue and profits as a result of competition from abroad, and that several are expected to close.
Required How should Credito Bank apply IFRS 9 to its portfolio of mortgages in the light of the changing situation in the clothing industry?

## Solution

Credito Bank should segment the mortgage portfolio to identify borrowers who are employed by suppliers and service providers to the clothing manufacturers. This segment of the portfolio may be regarded as being 'in Stage 2', that is having a significant increase in credit risk. Lifetime credit losses must be recognised. In estimating lifetime credit losses for the mortgage loans portfolio, Credito Bank will take into account amounts that will be recovered from the sale of the property used as collateral. This may mean that the lifetime credit losses on the mortgages are very small even though the loans are in Stage 2.

Later in the year, more information emerged, and Credito Bank was able to identify the particular loans that defaulted or were about to default.
Required How should Credito Bank treat these loans?

## Answer

The loans are now in Stage 3. Lifetime credit losses should continue to be recognised, and interest revenue should switch to a net interest basis, that is on the carrying amount net of allowance for credit losses.

## Example 02

Debita Bank applies the expected credit loss impairment model of IFRS 9. At 30 September 20X4, the bank approved a total of $\$ 10$ million overdraft facilities which have not yet been drawn. Debita Bank considers that $\$ 8$ million is in Stage 1 (ie, no significant increase in credit risk). Of that $\$ 8$ million in Stage $1, \$ 4$ million is expected to be drawn down within the next 12 months, with a 3\% probability of default over the next 12 months. Debita Bank considers that $\$ 2$ million is in Stage 2 and $\$ 2$ million is
expected be drawn down over the remaining life of the facilities, with a probability of default of $10 \%$.

## Required

Calculate the additional allowance required in respect of the undrawn overdraft facilities, taking account of the above information.

## Answer

Stage Expected credit loss

$$
\$
$$

Stage $1 \$ 4$ million $\times 3 \% \quad 120,000$
Stage $2 \$ 2$ million $\times 10 \% \underline{200,000}$ 320,000

Under the IFRS 9 model, Debita bank would recognise an additional allowance of $\$ 320,000$ for the undrawn portion of its overdraft facilities.

## Example 03 : trade receivable provision matrix

On 1 June 20X4, Kredco sold goods on credit to Detco for $\$ 200,000$. Detco has a credit limit with Kredco of 60 days. Kredco applies IFRS 9, and uses a pre-determined matrix for the calculation of allowances for receivables as follows.

Days overdue
Nil
1 to 30
31 to 60
61 to 90
$90+$

Expected loss provision 1\% 5\% 15\% 20\% 25\%

Detco had not paid by 31 July 20X4, and so failed to comply with its credit term, and Kredco learned that Detco was having serious cash flow difficulties due to a loss of a key customer. The finance controller of Detco has informed Kredco that they will receive payment. Ignore sales tax.
Required
Show the accounting entries on 1 June 20X4 and 31 July 20X4 to record the above, in accordance with the expected credit loss model in IFRS 9.

On 1 June 20X4
The entries in the books of Kredco will be:
DEBIT Trade receivables $\$ 200,000$
CREDIT Revenue
$\$ 200,000$

Being initial recognition of sales
An expected credit loss allowance, based on the matrix above, would be calculated as follows:

| DEBIT | Expected credit losses | $\$ 2,000$ |  |
| :--- | :--- | :--- | :--- |
| CREDIT | Allowance for receivables |  | $\$ 2,000$ |

Being expected credit loss: $\$ 200,000 \times 1 \%$

On 31 July 20X4
Applying Kredco's matrix, Detco has moved into the $5 \%$ bracket, because it has exhausted its 60 -day credit limit. (Note that this does not equate to being 60 days overdue!) Despite assurances that Kredco will receive payment, the company should still increase its credit loss allowance to reflect the increased credit risk. Kredco will therefore record the following entries on 31 July 20X4

| DEBIT | Expected credit losses | $\$ 8,000$ |  |
| :--- | :--- | :--- | :--- |
| CREDIT | Allowance for receivables |  | $\$ 8,000$ |

Being expected credit loss: $\$ 200,000 \times 5 \%-\$ 2,000$

## PRACTICE QUESTIONS - Part i

## 01. Example

X purchased a loan on 1 January 20X5 and classified it as measured at amortised cost.

## Terms:

| Nominal value | $\$ 50$ million |
| :--- | :---: |
| Coupon rate | $10 \%$ |
| Term to maturity | 3 years |
| Purchase price | $\$ 48$ million |
| Effective rate | $11.67 \%$ |

## Required

Show the double entry for each year to maturity of the bond. (Ignore loss allowances).

## Answer

An amortisation table is a useful working as a starting point and is prepared as follows:

| Year | Amortised <br> cost b/f | Interest at <br> $\mathbf{1 1 . 6 7 \%}$ | Cash <br> receipt | Amortised <br> cost c/f |
| :--- | :---: | :---: | :---: | :---: |
| 20X5 | 48.00 | 5.60 | $(5.00)$ | 48.60 |
| 20X6 | 48.60 | 5.65 | $(5.00)$ | 49.25 |
| 20X7 | 49.25 | 5.75 | $(55.00)$ | nil |

(The amortised cost at each date would be more correctly described as "gross carrying amount of the financial asset").

The following table summarises the above double entries.
Credit entries are shown as figures in brackets.

|  | Financial |  |  |
| :--- | :---: | :---: | :---: |
|  | Cash | asset | P\&L |
|  | $\$ \mathrm{~m}$ | $\$ \mathrm{~m}$ | $\$ \mathrm{~m}$ |
| 20X5 |  |  |  |
| Purchase of financial asset | $(48.00)$ | 48.00 |  |
| Interest accrual |  | 5.60 | $(5.60)$ |
| Interest receipt | 5.00 | $(5.00)$ |  |
| Amortised cost |  | $\boxed{48.60}$ |  |

20X6

| Brought forward |  | 48.60 |
| :--- | :---: | :---: |
| Interest accrual |  | 5.65 |
| Interest receipt | 5.00 | $(5.00)$ |
|  |  | 49.25 |


| 20X7 |  |  |
| :--- | ---: | :---: |
| Brought forward |  | 49.25 |
| Interest accrual | 5.00 | 5.75 |
| Interest receipt | 50.00 | $(5.00)$ |
| Redemption |  | nil |

Note that in this example the total cash flow interest received is $\$ 15 \mathrm{~m}$ (being 3 receipts of $\$ 5 \mathrm{~m}$ per annum).

The total interest recognised by applying the effective interest rate is $\$ 17 \mathrm{~m}$ (being $\$ 5.6 \mathrm{~m}+$ $\$ 5.65 \mathrm{~m}+\$ 5.75 \mathrm{~m})$.

The $\$ 2 \mathrm{~m}$ difference is the difference between the amount paid for the bond ( $\$ 48 \mathrm{~m}$ ) and the amount received on redemption (50m). The calculation of the effective interest rate takes this into account. Interest recognised using the effective rate includes the total interest received and the difference between the initial outlay and redemption proceeds if any.

In other words, the lender receives a total cash return of $\$ 17 \mathrm{~m}$ on its investment of $\$ 48 \mathrm{~m}$ (being 3 receipts of $\$ 5 \mathrm{~m}$ plus the difference between the initial investment and the redemption proceeds). This has been recognised in the statement of profit or loss (as $\$ 5.6 \mathrm{~m}+\$ 5.65 \mathrm{~m}+$ $\$ 5.75 \mathrm{~m})$.

## 02. Example

X purchased a loan on 1 January 20X5 and classified it as measured at fair value through OCI.
Terms:

| Nominal value | $\$ 50$ million |
| :--- | :---: |
| Coupon rate | $10 \%$ |
| Term to maturity | 3 years |
| Purchase price | $\$ 48$ million |
| Effective rate | $11.67 \%$ |

## Fair values at each year end to maturity are as follows

31 December 20X5
31 December 20X6
31 December 20X7
$\$ 49.2$ million
$\$ 49.5$ million
$\$ 50.0$ million

## Required

Show the double entry for each year to maturity of the bond. (Ignore loss allowances).

## Answer

The amortisation table can be constructed in the usual way and it can be extended to show the cumulative fair value adjustment at each reporting date. This can then be used to calculate the annual fair value adjustment.

| Year | Amortised <br> cost b/f | Interest at <br> $\mathbf{1 1 . 6 7 \%}$ | Cash <br> Ceceipt | Amortised <br> cost c/f | Fair <br> value <br> (given) | Cumulative <br> fair value <br> adjustment |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| 20X5 | 48.00 | 5.60 | $(5.00)$ | 48.60 | 49.20 | 0.60 |
| 20X6 | 48.60 | 5.65 | $(5.00)$ | 49.25 | 49.50 | 0.25 |
| 20X7 | 49.25 | 5.75 | $(55.00)$ | nil | nil | nil |

Only the fair value adjustments are recognised in OCI. Other transactions in respect of the financial asset (e.g. interest) are recognised in $\mathrm{P} \& \mathrm{~L}$ in the usual way.
The following table summarises the necessary double entries.

Credit entries are shown as figures in brackets

|  | $\begin{gathered} \text { Cash } \\ \$ m \end{gathered}$ | Financial asset \$m | $\begin{aligned} & \mathrm{OCI} \\ & \$ \mathrm{~m} \end{aligned}$ | P\&L $\$ \mathrm{~m}$ |
| :---: | :---: | :---: | :---: | :---: |
| 20X5 |  |  |  |  |
| Purchase of financial asset | (48.00) | 48.00 |  |  |
| Interest accrual |  | 5.60 |  | (5.60) |
| Interest receipt | 5.00 | (5.00) |  |  |
| Amortised cost |  | 48.60 |  |  |
| Fair value adjustment |  | 0.60 | (0.60) |  |
|  |  | 49.20 | (0.60) |  |
| 20X6 |  |  |  |  |
| Brought forward |  | 49.20 | (0.60) |  |
| Interest accrual |  | 5.65 |  | (5.65) |
| Interest receipt | 5.00 | (5.00) |  |  |
| Fair value adjustment |  | (0.35) | 0.35 |  |
|  |  | 49.50 | (0.25) |  |
| 20X7 |  |  |  |  |
| Brought forward |  | 49.50 | (0.25) |  |
| Interest accrual |  | 5.75 |  | (5.75) |
| Interest receipt | 5.00 | (5.00) |  |  |
| Fair value adjustment |  | (0.25) | 0.25 |  |
| Redemption | 50.00 | (50.00) |  |  |
|  |  | nil | nil |  |

Note that the balances carried down for the financial asset are at fair value.

## 03. Example

X purchased a loan on 1 January 20X5 and classified it as measured at fair value through OCI.
The amortised cost table and the fair value adjustments in the first two years were as follows:

| Year | Amortised <br> cost b/f | Interest at <br> $\mathbf{1 1 . 6 7 \%}$ | Cash <br> paid | Amortised <br> cost c/f | Fair <br> value | Cumulative <br> fair value <br> adjustment |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| 20X5 | 48.00 m | 5.60 m | $(5 \mathrm{~m})$ | 48.60 m | $\$ 49.2 \mathrm{~m}$ | 0.6 |
| 20X6 | 48.60 m | 5.65 m | $(5 \mathrm{~m})$ | 49.25 m | $\$ 49.5 \mathrm{~m}$ | 0.25 |

X sold the asset for $\$ 50 \mathrm{~m}$ on 10 January 20X7.
The journal entry to record the disposal is as follows:

|  | $\$ \mathrm{~m}$ | $\$ \mathrm{~m}$ |
| :--- | :---: | :---: |
| DR Cash | 50 |  |
| CR Investment |  | 49.5 |
| CR P\&L |  | 0.5 |
|  |  |  |
| and | 0.25 |  |
| DR OCI |  | 0.25 |

The total profit recognised on disposal is $\$ 0.75 \mathrm{~m}(\$ 0.5 \mathrm{~m}+\$ 0.25 \mathrm{~m})$.
This is the amount that would have been recognised on disposal of the asset if it had been measured at amortised cost. $(\$ 50 \mathrm{~m}-\$ 49.25 \mathrm{~m}=\$ 0.75 \mathrm{~m})$.

## 04. Example

X purchased a loan on 1 January 20X5 and classified it as measured at fair value through OCI. In this case assume that the bond is denominated in a foreign currency (FC).

The loan is a monetary asset so it must be retranslated at the closing rate at each reporting date.

## Terms:

| Nominal value | FC50 million |
| :--- | :---: |
| Coupon rate | $10 \%$ |
| Term to maturity | 3 years |
| Purchase price | FC48 million |
| Effective rate | $11.67 \%$ |


| Other information | Fair values | Exchange rates <br> $(\mathbf{F C 1}=\mathbf{\$})$ |
| :--- | :---: | :---: |
| 1 January 20X5 | - | 5 |
| Average for 20X5 | FC49.2 million | 6 |
| 31 December 20X5 | - | 7 |
| Average for 20X6 | FC49.5 million | 7.5 |
| 31 December 20X6 | - | 8 |
| Average for 20X7 | FC50.0 million | 6 |
| 31 December 20X7 |  | 7 |

## Required

Show the double entry for each year to maturity of the bond.
Only the fair value adjustments are recognised in OCI. Other transactions in respect of the financial asset (e.g interest, and foreign exchange differences) are recognised in P\&L in the usual way.

The exchange difference is calculated as a balancing figure in a translation of the amortised cost working.

## Answer

An amortisation table is constructed in the usual way in the foreign currency ( $\$$ in this case).

| Year | Amortised <br> cost b/f | Interest at <br> $\mathbf{1 1 . 6 7 \%}$ | Cash <br> receipt | Amortised <br> cost c/f | Fair <br> value <br> (given) | Cumulative <br> fair value <br> adjustment |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| 20X5 | 48.00 | 5.60 | $(5.00)$ | 48.60 | 49.20 | 0.60 |
| 20X6 | 48.60 | 5.65 | $(5.00)$ | 49.25 | 49.50 | 0.25 |
| 20X7 | 49.25 | 5.75 | $(55.00)$ | nil | nil | nil |

Each row of the amortisation table is then translated into the reporting currency using appropriate rates and the exchange difference calculated as a balancing figure needed to ensure that the row sums to the amortised cost carried forward balance.

The fair value difference is calculated in the usual way and can be translated into the reporting currency at the year-end rate.


The following table summarises the above double entries.
Credit entries are shown as figures in brackets

|  | $\begin{gathered} \text { Cash } \\ \$ \mathrm{~m} \end{gathered}$ | Financial asset \$m | $\begin{gathered} \text { OCI } \\ (\mathrm{FV} \text { adj }) \\ \$ \mathrm{~m} \end{gathered}$ | $\begin{array}{r} \mathrm{P} \& \mathrm{~L} \\ \$ \mathrm{~m} \end{array}$ |
| :---: | :---: | :---: | :---: | :---: |
| 20X5 |  |  |  |  |
| Initial recognition of |  |  |  |  |
| financial asset | (240.00) | 240.00 |  |  |
| Interest accrual |  | 33.60 |  | (33.60) |
| Interest receipt | 35.00 | (35.00) |  |  |
| Exchange gain on asset |  | 101.60 |  | (101.60) |
| Fair value adjustment |  | 4.20 | (4.20) |  |
|  |  | 344.40 | (4.20) |  |
| 20X6 |  |  |  |  |
| Brought forward |  | 344.40 | (4.20) |  |
| Interest accrual |  | 42.38 |  | (42.38) |
| Interest receipt | 40.00 | (40.00) |  |  |
| Exchange gain on asset |  | 51.42 |  | (51.42) |
| Fair value adjustment |  | (2.20) | 2.20 |  |
|  |  | 396.00 | (2.00) |  |
| 20X7 |  |  |  |  |
| Brought forward |  | 396.00 | (2.00) |  |
| Interest accrual |  | 40.25 |  | (40.25) |
| Interest receipt | 30.00 | (30.00) |  |  |
| Exchange gain on asset |  | (104.25) |  | 104.25 |
| Fair value adjustment |  | (2.00) | 2.00 |  |
| Redemption | 300.00 | (300.00) |  |  |
|  |  | nil | nil |  |

## 05. Example

An equity investment is purchased for $\$ 30,000$ plus $1 \%$ transaction costs on 1 January 20X6.

At the end of the financial year (31 December 20X6) the investment is revalued to its fair value of $\$ 40,000$.

On 11 December 20X7 it is sold for $\$ 50,000$.

## Required

Explain the accounting treatment for this investment.

## Answer

1 January 20X6 The investment is recorded at cost at $\$ 30,000$ and transaction costs of $\$ 300$ are expensed to profit or loss.

31 December 20X6 The investment is revalued to its fair value of $\$ 40,000$. There is a gain of $\$ 10,000(\$ 40,000-\$ 30,000)$.

11 December 20X7 The journal entry to record the disposal is as follows:

|  | $\$$ | $\$$ |
| :--- | :---: | :---: |
| DR Cash | 50,000 |  |
| CR Investment |  | 40,000 |
| CR Profit or loss |  | 10,000 |

## 06. Example

An equity investment is purchased for $\$ 30,000$ plus $1 \%$ transaction costs on 1 January 20X6.
The company made an irrevocable decision to designate the investment as at fair value through OCI.

At the end of the financial year (31 December) the investment is revalued to its fair value of $\$ 40,000$.

On 11 December 20X7 it is sold for $\$ 50,000$.

## Required

Explain the accounting treatment for this investment.

## Answer

1 January 20X6 The investment is recorded at $\$ 30,300$. This is the cost plus the capitalised transaction costs.

31 December 20X6 The investment is revalued to its fair value of $\$ 40,000$. There is a gain of $\$ 9,700(\$ 40,000-\$ 30,300)$. This gain of $\$ 9,700$ is included in other comprehensive income for the year and may be accumulated in a separate reserve.

## 11 December 20X7

The journal entry to record the disposal is as follows:

|  | $\$$ | $\$$ |
| :--- | :---: | :---: |
| DR Cash | 50,000 |  |
| CR Investment |  | 40,000 |
| CR P\&L |  | 10,000 |

Amounts previously recognised in OCI in respect of equity instruments for which an irrevocable designation has been made must not be reclassified to P\&L.

## Classification and measurement of financial liabilities

## 01. Example

A company issues a bond (borrows) for $\$ 1$ million.
The company designates the bond as measured at fair value through profit or loss.

## Situation 1

Suppose at the end of the first year the company's credit risk had improved. This would make the company's debt more desirable to investors causing its fair value to increase say to $\$ 1.1$ million.

In the absence of the above rule the double entry to reflect the fair value change would be:

Dr P\&L $\$ 0.1$ million
$\mathrm{Cr} \quad$ Liability $\quad \$ 0.1$ million

In other words, the improvement in the company's economic situation would result in the recognition of an expense in its $\mathrm{P} \& \mathrm{~L}$ account.

## Situation 2

Suppose at the end of the first year the company's credit risk had deteriorated. This would make the company's debt less desirable to investors causing its fair value to decrease say to $\$ 0.9$ million.

In the absence of the above rule the double entry to reflect the fair value change would be:

Dr Liability $\quad \$ 0.1$ million
$\mathrm{Cr} \quad$ P\&L $\quad \$ 0.1$ million
In other words, the deterioration in the company's economic situation would result in the recognition of a gain in the P\&L account.

The requirement to recognise change in fair value due to a change in the entity's own credit risk in other comprehensive income is an attempt to reduce the perceived effect of the above.

## 02. Example

X issued a loan on 1 January 20X5 and classified it as measured at amortised cost.

## Terms:

| Nominal value | $\$ 50$ million |
| :--- | :---: |
| Coupon rate | $10 \%$ |
| Term to maturity | 3 years |
| Issue price | $\$ 48$ million |
| Effective rate | $11.67 \%$ |

## Required

Show the double entry for each year to maturity of the bond. (Ignore loss allowances).

## Answer

An amortisation table is a useful working as a starting point and is prepared as follows:

| Year | Amortised <br> cost b/f | Interest at <br> $\mathbf{1 1 . 6 7 \%}$ | Cash <br> payments | Amortised <br> cost c/f |
| :---: | :---: | :---: | :---: | :---: |
| 20X5 | 48.00 | 5.60 | $(5.00)$ | 48.60 |
| 20X6 | 48.60 | 5.65 | $(5.00)$ | 49.25 |
| 20X7 | 49.25 | 5.75 | $(55.00)$ | nil |

This is the same as the table from the lender's viewpoint except the interest is an expense rather than income and the cash flows are outflows rather than inflows.

The following table summarises the above double entries.
Credit entries are shown as figures in brackets.

|  | $\begin{gathered} \text { Cash } \\ \$ \mathrm{~m} \end{gathered}$ | Financial liability \$m |
| :---: | :---: | :---: |
| $20 \times 5$ |  |  |
| Proceeds of issue | 48.00 | (48.00) |
| Interest accrual |  | (5.60) |
| Interest receipt | (5.00) | 5.00 |
| Amortised cost |  | (48.60) |
| $20 \times 6$ |  |  |
| Brought forward (48.60) |  |  |
| Interest accrual Interest receipt |  | (5.65) |
|  | (5.00) | 5.00 |
|  |  | (49.25) |
| 20X7 |  |  |
| Brought forward |  | (49.25) |
| Interest accrual |  | (5.75) |
| Interest receipt | (5.00) | 5.00 |
| Redemption | (50.00) | 50.00 |
|  |  | nil |

## 03. Example

On $1_{\text {st }}$ January Year 1, P Ltd gave a guarantee of a $\$ 50 \mathrm{~m}$ loan taken by its subsidiary, S Ltd on that date.

S Ltd was to repay the loan in four equal annual instalments (to cover the $\$ 50 \mathrm{~m}$ principal together with related interest) on $31_{\text {st }}$ December in Years 1 to 4 .

Under the terms of the guarantee, P Ltd would be called on to repay the principal amount of the loan in the event of $S$ Ltd defaulting on any of these payments.

The fair value of the guarantee at inception was assessed as $\$ 1.6 \mathrm{~m}$.
P Ltd's reporting date is 31 December.

## Situation 1

S Ltd makes all payments in accordance with the terms of the loan.
P Ltd would account for the guarantee as follows (ignoring time value):

## 1st January Year 1 (initial recognition)

Dr P\&L \$1.6m
$\mathrm{Cr} \quad$ Liability $\$ 1.6 \mathrm{~m}$

## 31st December Years 1 to 4

Dr Liability $\quad \$ 0.4 \mathrm{~m}$
$\mathrm{Cr} \quad$ P\&L $\quad \$ 0.4 \mathrm{~m}$

The amortisation of the guarantee over its life reflects the recognition of income (through reduction of the liability) as the service is provided.

## Situation 2

S Ltd made the first payment in accordance with the loan but failed in Year 2.

## 1st January Year 1 (initial recognition)

Dr P\&L \$1.6m
$\mathrm{Cr} \quad$ Liability $\quad \$ 1.6 \mathrm{~m}$

## 31st December Year 1

Dr Liability $\$ 0.4 \mathrm{~m}$ $\mathrm{Cr} \quad \mathrm{P} \& L$ $\$ 0.4 \mathrm{~m}$

## 31st December Year 2

Dr P\& \$36.3m
$\mathrm{Cr} \quad$ Liability $\$ 36.3 \mathrm{~m}$
( $\$ 50 \mathrm{~m}-\$ 12.5 \mathrm{~m}$ (Year 1 repayment) - \$1.2m (financial liability brought forward from year $1)$.

This results in a liability at the end of year of $\$ 37.5 \mathrm{~m}(\$ 1.2 \mathrm{~m}+36.3 \mathrm{~m})$ being $3 / 4$ of the initial loan of $\$ 50 \mathrm{~m}$.

## Impairment of financial assets

## 01. Example

X purchased a loan on 1 January 20X5 and classified it as measured at amortised cost.

## Terms:

| Nominal value | $\$ 50$ million |
| :--- | ---: |
| Coupon rate | $10 \%$ |
| Term to maturity | 3 years |
| Purchase price | $\$ 48$ million |
| Effective rate | $11.67 \%$ |

Loss allowances (estimated in accordance with IFRS 9):
1 January 20X5
31 December 20X5
31 December 20X6
31 December 20X7 (principal repaid)
\$1 million
$\$ 1.5$ million
$\$ 1.2$ million
nil

## Required

Show the double entry for each year to maturity of the bond.

## Answer

The amortisation table and the double entry for the financial asset are not affected by the existence of the loss allowance.

Accounting for the loss allowance sits alongside the accounting treatment for the financial asset.
(The amortised cost at each date would be more correctly described as "gross carrying amount of the financial asset").

The amortisation table is prepared as follows (in the same way as before):

| Year | Amortised <br> cost b/f | Interest at <br> $\mathbf{1 1 . 6 7 \%}$ | Cash <br> receipt | Amortised <br> cost c/f |
| :--- | :---: | :---: | :---: | :---: |
| 20X5 | 48.00 | 5.60 | $(5.00)$ | 48.60 |
| 20X6 | 48.60 | 5.65 | $(5.00)$ | 49.25 |
| 20X7 | 49.25 | 5.75 | $(55.00)$ | nil |

The loss allowance is established as a credit balance in the statement of financial position and is remeasured at each reporting date. In this example there are no changes to the loss allowance over the life of the bond.

The redemption of the loan brings certainty that no loss is incurred so the loss allowance is released to $\mathrm{P} \& \mathrm{~L}$ when this happens.

The following table summarises the above double entries.
Credit entries are shown as figures in brackets.
$\left.\begin{array}{cccr} & \begin{array}{c}\text { Financial } \\ \text { Cash } \\ \text { asset }\end{array} & \begin{array}{c}\text { Loss } \\ \text { allowance } \\ \$ \mathrm{~m}\end{array} & \$ \mathrm{~m}\end{array} \begin{array}{r}\text { P\&L } \\ \$ \mathrm{~m}\end{array}\right)$

## 20X6

Brought forward
Interest accrual
Interest receipt
5.00

Remeasurement of loss allowance

20X7
Brought forward
Interest accrual
Interest receipt
Redemption
Remeasurement of loss allowance

| 5.00 | $\begin{gather*} 48.60  \tag{5.65}\\ 5.65 \\ (5.00) \end{gather*}$ | (1.50) |
| :---: | :---: | :---: |
|  |  | 0.30 |
|  | 49.25 | (1.20) |
|  | 49.25 | (1.20) |
| $\begin{array}{r} 5.00 \\ 50.00 \end{array}$ | $\begin{gather*} (5.00)  \tag{5.75}\\ (50.00) \end{gather*}$ |  |
|  | O | 1.20 |
|  | nil | nil |

## 02. Example

X purchased a loan on 1 January 20X5 and classified it as measured at fair value through OCI.

## Terms:

| Nominal value | $\$ 50$ million |
| :--- | :---: |
| Coupon rate | $10 \%$ |
| Term to maturity | 3 years |
| Purchase price | $\$ 48$ million |
| Effective rate | $11.67 \%$ |

## Fair values at each year end to maturity are as follows

31 December 20X5
$\$ 49.2$ million
31 December 20X6
31 December 20X7

Loss allowances (estimated in accordance with IFRS 9):

1 January 20X5
31 December 20X5
31 December 20X6
31 December 20X7 (principal repaid)
\$1 million
$\$ 1.5$ million
\$1.2 million
nil

## Required

Show the double entry for each year to maturity of the bond.

## Answer

The amortisation table and the double entry for the financial asset are not affected by the existence of the loss allowance.

Accounting for the loss allowance sits alongside the accounting treatment for the financial asset.
(The amortised cost at each date would be more correctly described as "gross carrying amount of the financial asset").

The amortisation table is prepared as follows (in the same way as before):

| Year | Amortised <br> cost b/f | Interest at <br> $\mathbf{1 1 . 6 7 \%}$ | Cash <br> receipt | Amortised <br> cost c/f | Fair <br> value <br> (given) | Cumulative <br> fair value <br> adjustment |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 20X5 | 48.00 | 5.60 | $(5.00)$ | 48.60 | 49.20 | 0.60 |
| 20X6 | 48.60 | 5.65 | $(5.00)$ | 49.25 | 49.50 | 0.25 |
| 20X7 | 49.25 | 5.75 | $(55.00)$ | nil | nil | nil |

The loss allowance on financial assets at FVOCI is not recognised as a separate balance but is recognised in OCI.

The following table has split out the OCI into two columns in order make it easier to keep track of the double entries.

Credit entries are shown as figures in brackets

|  | $\begin{gathered} \text { Cash } \\ \$ \mathrm{~m} \end{gathered}$ | Financial asset \$m | $\begin{gathered} \text { OCI } \\ (\mathrm{FV} \text { adj) } \\ \$ \mathrm{~m} \end{gathered}$ | $\begin{gathered} \text { OCI } \\ \text { (loss all.) } \\ \$ \mathrm{~m} \end{gathered}$ | P\&L \$m |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 20X5 |  |  |  |  |  |
| Initial recognition of: <br> financial asset <br> (48.00) 48.00 |  |  |  |  |  |
| Interest accrual |  | 5.60 |  |  | (5.6) |
| Interest receipt | 5.00 | (5.00) |  |  |  |
| Fair value adjustment |  | 0.60 | (0.60) |  |  |
| Remeasurement of loss |  |  |  |  |  |
| allowance |  | 49.20 | (0.60) | (1.50) |  |
| 20X6 |  |  |  |  |  |
| Brought forward |  | 49.20 | (0.60) | (1.50) |  |
| Interest accrual |  | 5.65 |  |  | (5.65) |
| Interest receipt | 5.00 | (5.00) |  |  |  |
| Fair value adjustment (0.35) 0.35 |  |  |  |  |  |
| Remeasurement of loss |  |  |  |  | (0.30) |
|  |  | 49.50 | (0.25) | (1.20) |  |
| 20X7 |  |  |  |  |  |
| Brought forward |  | 49.50 | (0.25) | (1.20) |  |
| Interest accrual |  | 5.75 |  |  | (5.75) |
| Interest receipt | 5.00 | (5.00) |  |  |  |
| Fair value adjustment |  | (0.25) | 0.25 |  |  |
| Redemption | 50.00 | (50.00) |  |  |  |
| Remeasurement of loss |  |  |  |  |  |
|  |  | nil | nil | nil |  |

## 03. Example

X purchased a loan on 1 January 20X5 and classified it as measured at fair value through OCI.

Terms:

| Nominal value | $\$ 50$ million |
| :--- | :---: |
| Coupon rate | $10 \%$ |
| Term to maturity | 3 years |
| Purchase price | $\$ 48$ million |
| Effective rate | $11.67 \%$ |


| Other information | Fair values | Loss <br> allowances | Exchange <br> rates |
| :--- | :---: | :---: | :---: |
| 1 January 20X5 | $\$ 48$ million | $\$ 1$ million | 5 |
| Average for 20X5 | - | - | 6 |
| 31 December 20X5 | $\$ 49.2$ million | $\$ 1.5$ million | 7 |
| Average for 20X6 | - | - | 7.5 |
| 31 December 20X6 | $\$ 49.5$ million | $\$ 1.2$ million | 8 |
| Average for 20X7 | - | - | 7 |
| 31 December 20X7 | $\$ 50.0$ million | nil | 6 |

## Required

Show the double entry for each year to maturity of the bond.

## Answer

An amortisation table is constructed in the usual way in the foreign currency ( $\$$ in this case).

A working is also needed to identify the exchange difference on the loss allowance.

## Amortisation table

| Year | Amortised <br> cost b/f | Interest at <br> $\mathbf{1 1 . 6 7 \%}$ | Cash <br> receipt | Fair <br> Amortised <br> cost $\mathbf{c / f}$ | Cumulative <br> value <br> (given) | fair value <br> adjustment |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 20X5 | 48.00 | 5.60 | $(5.00)$ | 48.60 | 49.20 | 0.60 |
| 20X6 | 48.60 | 5.65 | $(5.00)$ | 49.25 | 49.50 | 0.25 |
| 20X7 | 49.25 | 5.75 | $(55.00)$ | nil | nil | nil |

Translation of amortisation table into reporting currency

| Year | AC b/f | $\begin{aligned} & \text { Int. at } \\ & \mathbf{1 1 . 6 7 \%} \end{aligned}$ | Cash receipt | Exch. diff | AC c/f | Fair value (given) | Cumulative fair value adjustment |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 20X5 | 48.00 | 5.60 | (5.00) |  | 48.60 | \$49.20 | 0.60 |
| Rate | 5 | 6 | 7 |  | 7 | 7 | 7 |
|  | 240.00 | 33.60 | -35.00 | 101.6 | 340.20 | 344.40 | 4.20 |
| 20X6 | 48.60 | 5.65 | (5.00) |  | 49.25 | \$49.50 | 0.25 |
| Rate | 7 | 7.5 | 8 |  | 8 | 8 | 8 |
|  | 340.20 | 42.38 | -40.00 | 51.42 | 394.00 | 396.00 | 2.00 |
| 20X7 | 49.25 | 5.75 | (5.00) |  | 50.00 | \$50.00 | nil |
| Rate | 8 | 7 | 6 |  | 6 | 6 | 6 |
|  | 394.00 | 40.25 | -30.00 | -104.25 | 300.00 | 300.00 | nil |

Exchange difference on loss allowance

| Year | Loss at start | Remeasurement | Exch. diff | Loss at end |
| :--- | :--- | :---: | :---: | :---: |
| 20X5 | 1.00 | 0.50 |  | 1.50 |

Rate | 5 | 6 |  | 7 |
| :---: | :---: | :---: | :---: |
|  | 3.00 | 3.00 | $\mathbf{2 . 5 0}$ |

| 20X6 | 1.50 | $(0.30)$ |  | 1.20 |
| :--- | :---: | :---: | :---: | :---: |
| Rate | 7 | 7.5 |  | 8 |
|  | 10.50 | $(2.25)$ | $\mathbf{1 . 3 5}$ | 9.60 |


| 20X7 | 1.20 |
| :--- | :---: |
| Rate | (1.20) |
|  | nil |
|  | 8 |
| 9.60 | 7 |
|  | $(8.40)$ |

The following table summarises the above double entries.
Credit entries are shown as figures in brackets

|  | Financial | OCI | OCI |  |
| :---: | :---: | :---: | :---: | ---: |
| Cash | asset | $(\mathrm{FV} \mathrm{adj})$ | $($ loss all.) | P\&L |
| $\$ \mathrm{~m}$ | $\$ \mathrm{~m}$ | $\$ \mathrm{~m}$ | $\$ \mathrm{~m}$ | $\$ \mathrm{~m}$ |

## 20X5

Initial recognition of:
financial asset
(240.00) 240.00
loss allowance
(5.00)

Interest receipt
$35.00 \quad$ (35.00)
Exchange gain on asset 101.60
(101.60)

Fair value adjustment
4.20
(4.20)

Remeasurement of loss
allowance
Exchange loss on loss allowance

|  | $(2.50)$ |  |
| :--- | :--- | :--- |
| 344.40 | $(4.20)$ | $(10.50)$ |

20X6
Brought forward
Interest accrual
$344.40 \quad$ (4.20) (10.50)

Interest receipt
42.38
$40.00 \quad$ (40.00)
Exchange gain on asset
51.42
(42.38)

Fair value adjustment
Remeasurement of loss
allowance
Exchange loss on loss allowance

## 20X7

Brought forward
$396.00 \quad$ (2.00) (9.60)
Interest accrual
Interest receipt
40.25

Exchange gain on asset
(30.00)
(104.25)
2.25
(51.42)

Fair value adjustment
Redemption
Remeasurement of loss allowance
(2.00)
2.00
(300.00)

Exchange gain on loss allowance

|  |  | 1.20 |
| :---: | :---: | :---: |
| nil | nil | nil |1.35

## 04. Example

Company X invests in a bond.
The bond has an issue value of $\$ 1$ million and pays a coupon rate of $5 \%$ interest for two years, then $7 \%$ interest for two years.
Interest is paid annually on the anniversary of the bond issue.
The bond will be redeemed at par after four years.
The effective rate for this bond is $5.942 \%$

At the end of the second year it becomes apparent that the issuer has financial difficulties and it is estimated that Company X will only receive 60 c in the dollar of the future cash flows.
At the end of year 2 the amortised cost is:

| Year | Amortised cost <br> brought forward | Interest at <br> $\mathbf{5 . 9 4 2 \%}$ | Cash <br> receipt | Amortised cost <br> carried forward |
| :--- | :---: | :---: | :---: | :---: |
| 1 | $1,000,000$ | 59,424 | $(50,000)$ | $1,009,424$ |
| 2 | $1,009,424$ | 59,983 | $(50,000)$ | $1,019,407$ |

The recoverable amount is calculated as follows:

| Year | Future cash flows | Discount factor |  |
| :--- | :---: | :---: | ---: |
| $(@ \mathbf{5 . 9 4 2 \%})$ |  |  |  |
| 3 | $70,000 @ 60 \%=42,000$ | 0.9439 | 39,644 |
| 4 | $1,070,000 @ 60 \%=642,000$ | 0.891 | 572,022 |
| Recoverable amount |  | 611,666 |  |
| Carrying amount |  | $1,019,407$ |  |
| Impairment |  | 407,741 |  |

Note that the recoverable amount could have been calculated easily as $60 \%$ of the carrying amount:

$$
60 \% \text { of } 1,019,407=611,644 \text { ( } 22 \text { difference due to rounding) }
$$

## Future revenue recognition

Interest is recognised in the future by applying the effective rate to the new amortised cost (after the recognition of the impairment loss).

The amortisation table becomes as follows:

| Year | Amortised cost <br> brought forward | Interest at <br> $\mathbf{5 . 9 4 2 \%}$ | Cash <br> receipt | Amortised cost <br> carried forward |
| :--- | :---: | :---: | :---: | :---: |
| 1 | $1,000,000$ | 59,424 | $(50,000)$ | $1,009,424$ |
| 2 | $1,009,424$ | 59,983 | $(50,000)$ | $1,019,407$ |
|  |  |  |  | $(407,741)$ |
|  |  |  |  | 611,666 |
|  |  |  | $(42,000)$ | 606,011 |
| 2 | 611,666 | 36,345 | $(642,000)$ | nil |

## 05. Example

Suppose in the above example there was a loss allowance of $\$ 100,000$ recognised on the asset before the impairment event.

The necessary double entries would be as follows:

|  | Debit | Credit |
| :--- | :---: | :---: |
| Statement of profit or loss | 307,741 |  |
| Loss allowance | 100,000 |  |
| Financial asset |  | 407,741 |

## 06. Example

X Plc has total trade receivables of $\$ 30,000,000$.
The trade receivables do not have a significant financing component.
The loss allowance recognised at the end of the previous year was $\$ 500,000$.
X Plc has constructed the following provision matrix to calculate expected lifetime losses of trade receivables.

|  | Number of days past due (overdue) |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | More |  |  |  |  |  |  |  |
| Default rate | Current | 1 to 30 | 31 to 60 | 61 to 90 | than 90 |  |  |  |  |  |  |
|  | $0.3 \%$ | $1.6 \%$ | $3.6 \%$ | $6.6 \%$ | $10.6 \%$ |  |  |  |  |  |  |

Required: Calculate the lifetime expected credit loss, show the necessary double entry to record the loss and state the amounts to be recognised in the statement of financial position (given the gross carrying amounts that relate to each time slot).

## Answer

The expected lifetime credit loss is measured as follows:

|  | Gross carrying <br> amount of trade <br> receivables | Default rate <br> $\%$ | Lifetime <br> expected credit <br> loss |
| :--- | :---: | :---: | :---: |
| Current | $15,000,000$ | 0.3 | $\$$ |
| 1 to 30 days | $7,500,000$ | 1.6 | 45,000 |
| 31 to 60 days | $4,000,000$ | 3.6 | 120,000 |
| 61 to 90 days | $2,500,000$ | 6.6 | 144,000 |
| More than 90 | $1,000,000$ | 10.6 | 165,000 |
|  | $30,000,000$ |  | 106,000 |

X plc must recognise a loss provision of $\$ 580,000$.

The following double entry would be necessary to increase the opening loss provision to this amount:

|  | Debit | Credit |
| :--- | ---: | :---: |
| Statement of profit or loss | 80,000 |  |
| Loss allowance |  | 80,000 |

The trade receivables would be presented at an amount net of this allowance in the statement of financial position ( $\$ 30,000,000-\$ 580,000=\$ 29,420,000$ ).

## PRACTICE QUESTIONS - Part ii

## Example: 01

## Compound instruments

SA issues 1,000 convertible bonds on 1 January 20X1 at par. The bond is redeemable in three years' time at its par value of $\$ 2,000$ per bond.

- The bonds pay interest annually in arrears at an interest rate (based on nominal value) of 6\%.
- Each bond can be converted at the maturity date into $125 \$ 1$ shares.
- The prevailing market interest rate for three-year bonds that have no right of conversion is 9\%


## Required

(a) Show the presentation of the compound instrument in the financial statements at inception.
(b) Show the presentation of the compound instrument at the period end, 31 December 20X1.

| 3-year discount factors: | Simple | Cumulative |
| :---: | :---: | :---: |
| $6 \%$ | 0.840 | 2.673 |
| $9 \%$ | 0.772 | 2.531 |

## Example 02

1/1/2014 , a company purchases a debt instrument for its fair value of Rs. 1000 mn . (Mature on $31^{\text {st }}$ December 2018). Company intends to hold it to maturity. The principle amount of the instrument was Rs. $1,250 \mathrm{mn}$ and its carries fixed interest at $4.72 \%$ that is paid annually. The effective rate of interest is $10 \%$.

Demonstrate how company should account for this instrument

## Example 03

Grainger has a portfolio of loans of $\$ 5$ million which was originally recognised on 1 May 20X0. These loans mature in 10 years and carry an interest rate of $16 \%$. Grainger estimates that no loans will default in the first 2 years, but from the third year onwards, loans will default at an annual rate of about $9 \%$. If the loans default as expected, the rate of return from the portfolio will be approximately $9.07 \%$.

## Example: 04

## Accounting for a financial liability at FVTPL

- On 1 January 20X1 S issued three year $5 \% \$ 30,000$ loan notes at nominal value when the effective rate of interest is also $5 \%$. The loan notes will be redeemed at par. The liability is classified at FVTPL. At the end of the first accounting period market interest rates have risen to $6 \%$.
Required
- Explain and illustrate how the loan is accounted for in the financial statements of S in the year ended 31 December 20X1.


## Example: 05

## Accounting for financial liabilities at amortised cost

- L Ltd raises finance by issuing zero coupon bonds at par on the first day of the accounting period with a nominal value of $\$ 10,000$. The bonds will be redeemed after two years at a premium of $\$ 1,449$. The effective rate of interest is $7 \%$. Required
- Explain and illustrate how the loan is accounted for in the financial statements of L Ltd.


## Example: 06

## Accounting for financial liabilities at amortised cost

- B Ltd raises finance by issuing $\$ 20,0006 \%$ four year loan notes on the first day of the current accounting period. The loan notes are issued at a discount of $10 \%$ and will be redeemed after three years at a premium of $\$ 1,015$. The effective rate of interest is $\underline{12 \%}$. The issue costs were $\$ 1,000$.
Required
- Explain and illustrate how the loan is accounted for in the financial statements of B Ltd.


## Example 07

- On 1 January 20X1 DP issues preference shares at $\$ 1$ million par value. There is no redemption date attached to the shares. Under the terms of issue, DP has the option of determining the level of distribution to the holders of the preference shares, and the issue document refers to the possibility that in some years no distribution will be made.

In this example, the financial instrument will be classified as equity.

## Example 08

- On 1 January 20X1 EQ issues $7 \%$ preference shares at $\$ 1$ million par value. There is no redemption date attached to the shares. The preference shares are cumulative in nature, that is, if EQ cannot make the distribution of $7 \%$ of par value, the distribution liability is carried forward to a future year.

In this example the distribution cannot be avoided (although it can be deferred). Therefore, the instrument is classified as debt.

## Example 9

Diamond is looking at ways that it may improve its liquidity. One option is to sell some of its trade receivables to a debt factor. The directors are considering two possible alternative agreements as described below:

1. Diamond could sell $\$ 40$ million receivables to a factor with the factor advancing $80 \%$ of the funds in full and final settlement. The factoring is non-recourse except that Diamond has guaranteed that it will pay the factor a further $9 \%$ of each receivable which is not recovered within six months. Diamond believes that its customers represent a low credit risk and so the probability of default is very low. The fair value of the guarantee is estimated to be $\$ 50,000$.
2. Alternatively, the factor would advance $20 \%$ of the $\$ 40$ million receivables sold. Further amounts will become payable to Diamond but are subject to an imputed interest charge so that Diamond receives progressively less of the remaining balance the longer it takes the factor to recover the funds. The factor has full recourse to Diamond for a six-month period after which Diamond has no further obligations and has no rights to receive any further payments from the factor.

Required:
If Diamond decides to go ahead with the debt factoring arrangements, explain the financial reporting principles involved and advise how each of the above arrangements would impact upon the financial statements of future years. (10 marks)

Answers
IFRS 9 Financial Instruments requires Diamond to consider the commercial substance rather than the legal form of the debt factoring arrangements. IFRS 9 suggests that the trade receivables should be derecognised from the financial statements of Diamond when the following conditions are met:
(i) When Diamond has no further rights to receive cash from the factor.
(ii) When the risks and rewards of ownership relating to the receivables have substantially been transferred to the factor.
(iii) When Diamond has no further control over the trade receivables.

With agreement one there is a sharing of the risks and rewards of ownership as the factoring is non-recourse except that Diamond retains an obligation to refund the factor $9 \%$ of irrecoverable debts.

It can be seen, however, that substantially all the risks and rewards of ownership have passed to the factor. The probability of an individual default is low given that there is low credit risk and the factor would suffer the vast majority of the loss arising from any default.
Diamond also has no further access to the rewards of ownership as the initial $\$ 32$ million ( $80 \% \times \$ 40$ million) is in full and final settlement. Furthermore, the factor has assumed full control over the collectability of the receivables. The trade receivables should be derecognized from the financial statements of Diamond and $\$ 8$ million, being the difference between the value of the receivables sold and the cash received, should be charged as an irrecoverable debt expense against the profits of Diamond.

The guarantee should be treated as a separate financial liability in accordance with IFRS 9. This would initially be measured at its fair value of $\$ 50,000$. Risks and rewards of ownership do not initially pass to the factor in relation to agreement two. The factor has full recourse to Diamond for a six-month period so the irrecoverable debt risk is still with Diamond. Furthermore, Diamond still has the right to receive further cash payments from the factor, the amounts to be received being dependent on when and if the customers pay the factor. Diamond therefore still has the risks associated with slow payment by their customers. The receivables must not initially be derecognised from their financial statements with the $\$ 8$ million ( $20 \% \mathrm{x} \$ 40 \mathrm{~m}$ ) proceeds being treated as a short-term liability from the factor. The receivables and liability balances would gradually be reduced as the factor recovered the cash from Diamond's customers which would be adjusted for the imputed interest and expensed in profit or loss. Should there be any indication of impairment during the sixmonth period, the receivables should be credited with a corresponding charge to profit or loss.
Following six months the risks and rewards of ownership have passed to the factor and the balances on the loan and the receivables would be offset. The remaining balance following offset within the receivables of Diamond should be expensed in profit or loss as an irrecoverable debt.

## Example 10

(i) Skye has B shares in issue which allow the holders to request redemption at specified dates and amounts.

The legal charter of Skye states that the entity has a choice whether or not to accept the request for repayment of the $B$ shares. There are no other conditions attached to the shares and Skye has never refused to redeem any of the shares up to the current year end of 31 May 2017. In all other respects the instruments have the characteristics of equity.

Skye also has preference shares in issue which are puttable by the holders at any time after 31 May 2017. Under the terms of the shares, Skye has to satisfy the obligation for the preference shares only if it has sufficient distributable reserves. Local legislation is quite restrictive in defining the profits available for distribution as dividends.
The directors of Skye wish advice on how to account for the above financial instruments in the company's financial statements at 31 May 2017. (5 marks)
(ii) Skye faces a claim for infringement of the intellectual property rights of a competitor company. On 31 May 2017, Skye agreed to settle the claim and has paid $\$ 15$ million to the competitor plus a variable amount of $2 \%$ based upon future sales. The variable amount represents compensation for the use of the intellectual property in the past $(0.5 \%)$ and for its use in the future ( $1.5 \%$ ). The directors of Skye have recently heard that the ED Conceptual Framework has changed the definition of a liability and now feel that there is no future liability arising on the settlement of the claim as it has paid the compensation due to date.
The directors of Skye, however, still require advice on the matter. (4 marks)

## Required:

Advise the directors of Skye on how the above transactions should be dealt with in its financial statements with reference to relevant International Financial Reporting Standards.

## Answer

(i)

IAS 32 Financial Instruments: Presentation states that a liability is a contractual obligation to deliver cash or another financial asset to another entity and that equity is any contract which evidences a residual interest in the assets of an entity after deducting all of its liabilities. In this case, Skye has no obligation to transfer cash or another asset to the holders of the instruments and therefore the $B$ shares should be classed as equity. The fact that Skye has not refused redemption in the past does not cause the B shares to be classified as a liability.

The preference shares create an obligation for Skye because of the put option clause in the agreement. The fact that Skye may not be in a position to satisfy the put option feature because of insufficient distributable reserves does not negate the fact that Skye has an obligation.
(ii)

The ED Conceptual Framework says that a liability is a present obligation of the entity to transfer an economic resource as a result of past events. A present obligation is an obligation to transfer economic resources which the entity has no practical ability to avoid and has arisen from a past event, that is, economic benefits already received or activities already conducted.
The future sales-linked compensation is a mechanism for determining the amount of past and future use of the intellectual property. Therefore because part of the settlement is a variable amount to pay for past usage (even though this is based on future sales) Skye should recognise a financial liability under IFRS 9 at 31 May 2017. It is a present obligation as a result of a past event and this principle is the basis of the definition of a liability not only in the ED but also in the existing Conceptual Framework. As regards the sales-linked payment relating to future use, the liability arises as new sales are realised and represents an executory contract under IAS 37 Provisions, Contingent Liabilities and Contingent Assets.

In these circumstances, Skye should not recognise a liability as the variable amount is based upon future sales, unless the executory contract is deemed to be onerous.

## Example 11

A company lends $\$ 1$ million at $0 \%$ repayable in 12 months.
A market based interest rate for such a loan is $10 \%$ and a 1 year discount rate would be $1 / 1.1$ $=0.909$

The fair value of the loan on initial recognition $=\$ 1 \mathrm{~m} \times 0.909090=\$ 909,091$.
The double entry on initial recognition should be:

| Dr | Financial asset | $\$ 909,091$ |
| :--- | :--- | :--- |
| Dr | $\mathrm{P} \& \mathrm{~L}$ (loss) | $\$ 90,909$ |
|  | Cr | Cash |

## Example 12

A bond has an issue value of $\$ 1$ million and pays a coupon rate of $5 \%$ interest for two years, then $7 \%$ interest for two years (this is known as a stepped bond).

Interest is paid annually on the anniversary of the bond issue.
The bond will be redeemed at par after four years.
The effective rate for this bond is $5.942 \%$
The following calculation proves that the IRR of the bond is $5.9423 \%$.

| Time | Description | Cash flows | Discount factor <br> $(@ 5.9423 \%)$ | Present <br> value |
| :--- | :---: | :---: | :---: | :---: |
| 0 | Amount <br> borrowed | $1,000,000$ | 1 | $1,000,000$ |
| 1 | Interest | $(50,000)$ | 0.94391 | $(47,196)$ |
| 2 | Interest | $(50,000)$ | 0.89097 | $(44,548)$ |
| 3 | Interest | $(70,000)$ | 0.84099 | $(58,868)$ |
| 4 | Interest | $(70,000)$ | 0.79382 | $(55,567)$ |
| 4 | Repayment of | $(1,000,000)$ | 0.79382 | $(793,821)$ |
|  | capital |  |  | nil |

The amortised cost model uses the effective rate to determine the interest to be charged in profit and loss in each period. The interest recognised in profit and loss each year is not the cash paid. The interest recognised is calculated by applying the effective rate to the outstanding balance on the bond at the beginning of the period.

The calculation or amortised cost can be set out in an amortisation table as follows:

| Year | Amortised cost <br> brought forward | Interest <br> at 5.942\% |  | Cash paid | Amortised cost <br> carried forward |
| :--- | :---: | :---: | :---: | :---: | :---: |
| 1 | $1,000,000$ | 59,424 |  | $(50,000)$ | $1,009,424$ |
| 2 | $1,009,424$ | 59,983 |  | $(50,000)$ | $1,019,407$ |
| 3 | $1,019,407$ | 60,577 |  | $(70,000)$ | $1,009,984$ |
| 4 | $1,009,984$ | 60,016 |  | $(70,000)$ | $1,000,000$ |
|  |  | 240,000 |  |  |  |
|  |  |  |  |  |  |

The bond is initially recorded at cost (\$1 million) and by the end of year 1 it has an amortised cost of $\$ 1,009,424$.

The total interest paid over the four years is $\$ 240,000$. However, it is charged to the profit or loss each year at the effective rate $(5.942 \%)$ on the outstanding balance, not as the actual interest paid on the bonds in cash each year.

The balance at the end of the bond's life would be nil because of the repayment of the principal. This has not been shown above to emphasise that the total interest recognised in profit or loss and the total cash interest is the same figure $(\$ 240,000)$.

Note that at each year end the amortised cost is the present value of the future cash flows discounted at the effective rate.

Thus the amortised cost on initial recognition is:

| Time | Description | Cash flows | Discount factor <br> $(@ 5.9423 \%)$ | Present <br> value |
| :--- | :---: | :---: | :---: | :---: |
| 1 | Interest | $(50,000)$ | 0.94391 | 47,196 |
| 2 | Interest | $(50,000)$ | 0.89097 | 44,548 |
| 3 | Interest | $(70,000)$ | 0.84099 | 58,868 |
| 4 | Interest | $(70,000)$ | 0.79382 | 55,567 |
| 4 | Repayment of <br> capital | $(1,000,000)$ | 0.79382 | 793,821 |
|  |  |  | $1,000,000$ |  |

The amortised cost at the end of the first year is:

| Time | Description | Cash flows | Discount factor | Present |
| :--- | :---: | :---: | :---: | :---: |
| 1 | Interest | $(50,000)$ | 0.94391 | value |
| 2 | Interest | $(70,000)$ | 0.89097 | 47,196 |
| 3 | Interest | $(70,000)$ | 0.84099 | 52,368 |
| 3 | Repayment of | $(1,000,000)$ | 0.84099 | 840,869 |
|  | capital |  |  | $1,009,424$ |

## As a financial liability (from the borrower's viewpoint)

The borrower would calculate the effective rate ( $5.942 \%$ ) and construct the amortisation table (repeated here for your convenience) as follows:

| Year | Amortised cost brought forward | Interest at $5.942 \%$ | Cash paid | Amortised cost carried forward |
| :---: | :---: | :---: | :---: | :---: |
| 1 | 1,000,000 | 59,424 | $(50,000)$ | 1,009,424 |
| 2 | 1,009,424 | 59,983 | $(50,000)$ | 1,019,407 |
| 3 | 1,019,407 | 60,577 | $(70,000)$ | 1,009,984 |
| 4 | 1,009,984 | 60,016 | (1,070,000) | nil |
|  |  | 240,000 | 240,000 |  |

The borrower would then show the following amounts in its financial statements at each year end:

| Year-end | P\&L interest <br> expense | Financial liability in statement <br> of financial position |
| :---: | :---: | :---: |
| 1 | 59,424 | $1,009,424$ |
| 2 | 59,983 | $1,019,407$ |
| 3 | 60,577 | $1,009,984$ |
| 4 | 60,016 | nil |

## As a financial asset (from the lender's viewpoint)

The lender would calculate the effective interest rate in exactly the same way and construct the same amortisation table for its financial asset.

However, IFRS 9 defines the balances at this stage as the gross carrying amount of the financial asset rather than amortised cost.

|  | Gross carrying <br> amount brought <br> forward | Interest <br> at $\mathbf{5 . 9 4 2 \%}$ | Cash <br> received | Gross carrying <br> amount carried <br> forward |  |
| :--- | :---: | :---: | ---: | :---: | :---: |
| 1 | $1,000,000$ | 59,424 | $(50,000)$ | $1,009,424$ |  |
| 2 | $1,009,424$ | 59,983 | $(50,000)$ | $1,019,407$ |  |
| 3 | $1,019,407$ | 60,577 | $(70,000)$ | $1,009,984$ |  |
| 4 | $1,009,984$ | $\underline{60,016}$ |  | $(1,070,000)$ | nil |
|  |  | 240,000 |  | 240,000 |  |
|  |  |  |  |  |  |

The only difference so far is the naming of the balances (amortised cost for financial liabilities and gross carrying amount for financial assets).

## The amortised cost of a financial asset is its gross carrying amount less a loss allowance.

The loss allowance is a separate credit balance recognised in respect of expected credit losses in accordance with the IFRS 9 impairment rules. These rules are explained later but for the time being note that the final carrying amount for a financial asset carried at amortised cost is in fact made up of two balances being the gross carrying amount of the financial asset less the loss allowance. (This is similar to the situation for a non-current asset which is carried at cost less accumulated depreciation).

IFRS 9 defines the gross carrying amount of a financial asset as its amortised cost before adjusting for any loss allowance.

The loss allowance has no impact on the calculation of the effective interest rate or on the construction of the amortisation table. It is simply a second balance that is deducted from the gross carrying amount to arrive at amortised cost.

The lender would show the following amounts in its financial statements at each year end (where figures for a loss allowance have been made up):

|  | Statement of <br> profit or loss | Statement of financial position <br> Financial asset |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Year-end | Interest income | Gross | Loss <br> allowance <br> (say) | Net <br> (amortised <br> cost) |
| 1 | 59,424 | $1,009,424$ | $(1,000)$ | $1,008,424$ |
| 2 | 59,983 | $1,019,407$ | $(1,000)$ | $1,018,407$ |
| 3 | 60,577 | $1,009,984$ | $(1,000)$ | $1,008,984$ |
| 4 | 60,016 | nil | nil |  |
|  |  |  |  |  |

This can be summarised as follows:


The recognition of a loss allowance results in a lower value in the books of the lender to that in the books of the borrower for the same instrument.

