

CHAPTER 25

FINANCIAL INSTRUMENTS



25.1 INTRODUCTION

- Arguably one of the most complex subjects in financial accounting and reporting
- Simply – a means of raising finance and includes ‘everyday’ loans
- In practice – wide ranging, extremely complex financial arrangements
- Separate standards dealing with how financial instruments should be presented, recognised, measured and disclosed

25.1 INTRODUCTION

The relevant IASs/IFRSs are:

- IAS 32 *Financial Instruments: Presentation*
- IAS 39 *Financial Instruments: Recognition and Measurement* (gradually being replaced by IFRS 9)
- IFRS 7 *Financial Instruments: Disclosures*
- IFRS 9 *Financial Instruments* (gradually replacing IAS 39)

Table 25.1: Examples of financial instruments

	Cash		Derivatives	
<i>Asset class</i>	<i>Securities</i>	<i>Other Cash</i>	<i>Exchange Traded</i>	<i>OTC</i>
Equity	Stock	N/A	Stock options, equity futures	Stock options
Liability: non-current	Bonds	Loans	Bond futures, options on bond futures	Interest rate caps and floors, Interest rate options
Liability: current	Bills	Deposits	Short-term interest rate futures	Forward rate agreements
Foreign exchange	N/A	Spot foreign exchange	Currency futures	Foreign exchange options, foreign exchange swaps, currency swaps

25.2 FINANCIAL INSTRUMENTS: DEFINITIONS

Financial instrument

This is a contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity.

Financial asset

This is any asset that is:

- cash;
- an equity instrument of another entity;
- a contractual right:
 - to receive cash or another financial asset from another entity; or
 - to exchange financial assets or financial liabilities with another entity under conditions that are potentially favourable to the entity; or
- 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 instruments that are themselves contracts for the future receipt or delivery of the entity's own equity instruments.

25.2 FINANCIAL INSTRUMENTS: DEFINITIONS

Financial liability

This is any liability that is:

- a contractual obligation:
 - to deliver cash or another financial asset to another entity; or
 - to exchange financial assets or financial liabilities with another entity under conditions that are potentially unfavourable to the entity; or
- a contract that will or may be settled in the entity's own equity instruments.

Equity instrument

This is any contract that evidences a residual interest in the assets of an entity after deducting all of its liabilities.

Example 25.1: Definition of a financial instrument

Explain whether each of the following meet the definition of a financial instrument:

- (a) Issue of ordinary share capital
- (b) Issue of debt
- (c) Sale of goods on credit
- (d) Purchase of goods on credit

Example 25.1: Definition of a financial instrument

Solution

- (a)** Issue of ordinary share capital represents an ***equity instrument*** since the shareholders own a financial asset and the company has an equity instrument in the form of new share capital.
- (b)** Issue of debt creates a ***contractual obligation*** between the company and the lender for the debt to be repaid in the future. Therefore the company has a financial liability and the lender has a financial asset.
- (c)** Sale of goods on credit creates a ***contractual obligation*** between the customer and the company. The customer has a financial liability and the company has a financial asset.
- (d)** Purchase of goods on credit creates a ***contractual obligation*** on the part of the company to pay for the goods. Therefore the company has a financial liability and the supplier has a financial asset.

Equity instrument or financial liability

- A financial instrument should be classified as either an ***equity instrument*** or a ***financial liability*** according to the substance of the contract, not its legal form
- An entity must make this decision at the time the instrument is initially recognised and the classification cannot be subsequently revised based on changed circumstances

Equity instrument or financial liability

- A financial instrument is ***an equity instrument only if***:
 - the instrument includes no contractual obligation to deliver cash or another financial asset to another entity; and
 - if the instrument will or may be settled in the issuer's own equity instruments, it is either:
 - ✓ a non-derivative that includes no contractual obligation for the issuer to deliver a variable number of its own equity instruments; or
 - ✓ a derivative that will be settled only by the issuer exchanging a fixed amount of cash or another financial asset for a fixed number of its own equity instruments.

Example 25.2: Contractual obligation – liability or equity

If an enterprise issues preference shares that pay a fixed rate of dividend and that have a mandatory redemption feature (for example, must be repaid on a specified date and amount in the future), the substance is that they are a contractual obligation to deliver cash and, therefore, should be recognised as a liability. For example:

- X Limited has 200,000 10% €1 preference shares in issue. The shares are redeemable in five years at a premium of 25 cent;
- Top Limited entered into a zero coupon loan (i.e. interest and principal repayments deferred until maturity) for €400,000. No interest is payable during the term of the loan but the loan is repayable after 5 years at €440,000.

In contrast, if the preference shares do not have a fixed maturity date, and the issuer **does not** have a contractual obligation to make any payment, then the preference shares would be treated as part of equity.

Equity instrument or financial liability

A contractual right or obligation to receive or deliver a number of its own shares or other equity instruments that varies so that the fair value of the entity's own equity instruments to be received or delivered equals the fixed monetary amount of the contractual right or obligation is a **financial liability**.

Example 25.3: Contractual obligation – fixed monetary amount

For example, Company Y plc has a **contractual obligation** to pay Company Z €1,000,000 on 31 December 2013 by issuing its own shares. Therefore the number of shares that Company Y plc has to issue on 31 December 2013 will depend upon its share price on that date.

Compound financial instrument

- This has both a liability and an equity component from the issuer's perspective
- Component parts must be accounted for and presented separately according to their substance
- Split made at issuance and cannot be revised

See Chapter 25, Example 25.4

Example 25.5: Compound financial instrument (2)

Tilt plc issued the following compound financial instrument at par on 31 December 2012: two million 50 cent 3% convertible bonds 2018. The value of two million 50 cent 3% convertible bonds 2018 without the conversion rights was estimated to be €960,000 on 31 December 2012.

Requirement

Show the amounts that should be included in the financial statements of Tilt plc for the year ended 31 December 2012 in respect of the above transactions.

Solution

	€
Total amount raised at issue (2m x 50c)	1,000,000
Allocated to liability (FV of bond without rights)	960,000
Allocated to equity	40,000
Classification is made at issuance.	

25.3 MEASUREMENT OF FINANCIAL ASSETS

In accordance with IFRS 9, *financial assets* may be classified under the following three headings:

1. Financial assets measured at FVTPL
2. Financial assets measured at fair value through other comprehensive income (FVTOCI)
3. Financial assets measured at amortised cost

Classification is made at the time the financial asset is initially recognised, namely when the entity becomes a party to the contractual provisions of the instrument.

1. Financial assets measured at FVTPL

- Default classification
- Initially measured at fair value, with transaction costs being expensed as incurred in arriving at profit or loss in the period
- Financial assets measured at FVTPL include:
 - financial assets **held for trading** purposes;
 - **derivatives**, unless they are part of a properly designated hedging arrangement (see **Derivatives later**); and
 - **debt instruments**, unless they have been correctly designated to be measured at amortised cost (see **Financial Assets Measured at Amortised Cost later**).

Example 25.6: Initial measurement – held for trading

A ***debt security*** that is ***held for trading*** is purchased for €8,000. Transaction costs are €600. The initial carrying amount is €8,000 and the transaction costs of €600 are expensed.

This treatment applies because the debt security is classified as *held for trading* and, therefore, measured at fair value with changes in fair value recognised in profit or loss (i.e. measured at FVTPL).

Financial assets measured at FVTPL

Remeasurement to fair value takes place at each reporting date, with any movement in fair value taken to profit or loss in the year (i.e. measured at FVTPL), which effectively incorporates an annual impairment review.

Example 25.7: Financial asset at FVTPL

An entity acquires for cash 1,000 shares at €10 per share and can designate them as at fair value through profit or loss. At the year end 31 December 2012, the quoted price increases to €16. The entity sells the shares €16,400 on 31 January 2013.

Initial recognition:

DR Financial assets at FVTPL	€10,000	
CR Cash		€10,000

31 December 2012:

DR Financial assets at FVTPL	€6,000	
CR SPLOCI – P/L		€6,000

31 January 2013:

DR Cash	€16,400	
CR Financial assets at FVTPL		€16,000
CR SPLOCI – P/L		€400

2. Financial assets measured at FVTOCI

- Default = SFP @ FV and value changes recognised in SPLOCI – P/L (i.e. FVTPL).
- However, at initial recognition, an entity may make an **irrevocable** election to report **value changes** in OCI; only dividend income is recognised in arriving at profit or loss in the period.
- This applies to **equity instruments only**. It will typically be applicable for equity interests that an entity intends to retain ownership of (i.e. those that are **not** held for trading). Initial recognition at fair value normally includes the associated transaction costs of purchase.

3. Financial assets measured at amortised cost

- Amortised cost is the cost of an asset or liability adjusted to achieve a constant effective interest rate over the life of the asset or liability (**see Examples 25.8 and 25.9**)
- Amortised cost is calculated using the effective interest method
- Financial assets that are *not* carried at FVTPL (e.g. those carried at amortised cost) are subject to an annual impairment test. Any impairment identified must be charged in full in SPLOCI – P/L
- The ‘financial assets measured at amortised cost’ classification applies **only to debt instruments** and must be designated upon initial recognition. In this instance, the financial assets are initially measured at *fair value plus transaction costs*
- A debt instrument that meets the following two tests *may be* measured at amortised cost (net of any write-down for impairment):
 - The business model test
 - The cash flow characteristics

Example 25.10: Measurement of financial asset at FVTPL and amortised cost

Aquaria Limited purchased a five-year bond on 1 January 2012 at a cost of €5m with annual interest of 5%, which is also the effective rate, payable on 31 December annually. At the reporting date of 31 December 2012 interest has been received as expected and the market rate of interest is now 6%.

Requirement

Account for the financial asset on the basis that it is classified:

- (a) as FVTPL; and
- (b) to be measured at amortised cost, on the assumption it passes the necessary tests and has been properly designated at initial recognition.

Example 25.10: Measurement of financial asset at FVTPL and amortised cost

Solution

(a) If classified as FVTPL

The FV of the bond is measured based upon expected future cash flows discounted at the current market rate of interest of 6% as follows:

Year	Expected cash flows	6% discount factor	PV €m
31 December 2013	€5m x 5% = €0.25m	0.9434	0.2358
31 December 2014	€0.25m	0.8900	0.2225
31 December 2015	€0.25m	0.8396	0.2099
31 December 2016	€0.25m + €5m	0.7921	<u>4.1585</u>
			<u>4.8267</u>

Therefore, at the reporting date of 31 December 2012, the financial asset will be stated at a fair value of €4.8267m, with the fall in fair value amounting to €0.1733m taken to profit or loss in the year. Interest received will be taken to profit or loss for the year amounting to €0.25m.

Example 25.10: Measurement of financial asset at FVTPL and amortised cost

(b) If classified to be measured at amortised cost

This requires that the fair value of the bond is measured based upon expected future cash flows discounted at the original effective rate of 5%. This will continue to be at €5m as illustrated below:

Year	Expected cash flows	5% discount factor	PV €m
31 December 2013	€5m x 5% = €0.25m	0.9524	0.2381
31 December 2014	€0.25m	0.9070	0.2267
31 December 2015	€0.25m	0.8638	0.2160
31 December 2016	€0.25m + €5m	0.8227	<u>4.3192</u>
			<u>5.000</u>

In addition, interest received during the year of €0.25m will be taken to profit or loss for the year.

Reclassification of financial assets

- For financial assets, reclassification is required between **FVTPL and amortised cost**, or vice versa, ***if and only if*** the entity's business model objective for its financial assets changes so that its previous model assessment no longer applies.
- If reclassification is appropriate, it must be done ***prospectively*** from the reclassification date. An entity does not restate any previously recognised gains, losses or interest.
- IFRS 9 does ***not*** allow reclassification where the:
 - OCI option has been exercised for a financial asset; or
 - fair value option has been exercised in any circumstance for a financial asset or financial liability.

Impairment

- IFRS 9 effectively incorporates an impairment review for financial assets that are measured at fair value, as any fall in fair value is taken to profit or loss or OCI in the period (depending upon the classification of the financial asset)
- For financial assets designated to be **measured at amortised cost**, an entity must make an assessment at each reporting date whether there is evidence of possible impairment
- If impairment is identified, it is charged in arriving at profit or loss immediately
- The recoverable amount would normally be based upon the present value of the expected future cash flows estimated at the date of the impairment review and discounted to their present value based on the original effective rate of return at the date the financial asset was issued.

Example 25.11: Impairment of financial assets measured at amortised cost

Using the information contained in **Example 25.10**, where the carrying value of the financial asset at 31 December 2012 was €5m. If, in early 2013, it was identified that the bond issuer was beginning to experience financial difficulties and that there was doubt regarding full recovery of the amounts due to Aquaria Limited, an impairment review would be required. The expected future cash flows now expected by Aquaria Limited from the bond issuer are as follows:

31 December 2013	€0.20m
31 December 2014	€0.20m
31 December 2015	€0.20m
31 December 2016	€0.20m + €4.4m

Requirement

Calculate the extent of impairment of the financial asset to be included in the financial statements of Aquaria Limited for the year ending 31 December 2013.

Example 25.11: Impairment of financial assets measured at amortised cost

Solution

The future expected cash flows are discounted to present value based on the original effective rate associated with the financial asset of 5% as follows:

Year	Expected cash flows	5% discount factor	PV €m
31 December 2013	€0.20m	0.9524	0.1905
31 December 2014	€0.20m	0.9070	0.1814
31 December 2015	€0.20m	0.8638	0.1727
31 December 2016	€0.205m + €4.4m	0.8227	<u>3.7844</u>
			<u>4.3290</u>

Therefore, impairment amounting to the change in carrying value of (€5.0m – €4.329m) €0.671m will be recognised as an impairment charge in the year to 31 December 2013. Additionally, there will also be recognition of interest receivable in the SPLOCI – P/L for the year amounting to (4.329m x 5%) €0.2165m.

Derecognition of a financial asset

- Once an entity has determined that the asset has been transferred, it then determines whether or not it has transferred ***substantially all of the risks and rewards of ownership*** of the asset
- If substantially all the risks and rewards have been ***transferred***, the asset is derecognised
- If substantially all the risks and rewards have been ***retained***, derecognition of the asset is precluded
- If the entity has ***neither retained nor transferred*** substantially all of the risks and rewards of the asset, then the entity must assess whether it has relinquished control of the asset or not
- If the entity does not control the asset then derecognition is appropriate; however if the entity has retained control of the asset, then the entity continues to recognise the asset to the extent to which it has a continuing involvement in the asset.

See Chapter 25, Figure 25.1

Example 25.12: Derecognition of a financial asset

- If a company sells an investment in shares, but retains the right to repurchase the shares at any time at a price equal to their current fair value then it should derecognise the asset.
- If a company sells an investment in shares and enters into an agreement whereby the buyer will return any increases in value to the company and the company will pay the buyer interest plus compensation for any decrease in the value of the investment, then the company should not derecognise the investment as it has retained substantially all the risks and rewards.

25.4 MEASUREMENT OF FINANCIAL LIABILITIES

IFRS 9 requires that financial liabilities should be accounted for as follows:

1. Financial liabilities measured at FVTPL; and
2. Financial liabilities at amortised cost.

1. Financial liabilities measured at FVTPL

- Includes financial liabilities *held for trading* and derivatives that are *not* part of a hedging arrangement
- All other financial liabilities are measured at amortised cost unless the fair value option is applied
- Classification is made at the time the financial liability is initially recognised
- IFRS 9 requires gains and losses on financial liabilities designated as FVTPL to be split into:
 - the amount of change in the fair value that is attributable to changes in the credit risk of the liability, which is presented in OCI; and
 - the remaining amount of change in the fair value of the liability which is presented in arriving at profit or loss in the period
- If the accounting treatment for the credit risk (i.e. taken through OCI) creates or enlarges an accounting mismatch in profit or loss then the gain or loss relating to credit risk should also be taken to profit or loss. This determination is made at initial recognition and is not reassessed
- Amounts presented in OCI should not be subsequently transferred to profit or loss; the entity may only transfer the cumulative gain or loss within equity

2. Financial liabilities measured at amortised cost

Example 25.13: Financial liabilities measured at amortised cost (deep discount bonds)

Coffee Limited issued debt with a nominal value of €400,000 on 1 January 2012, receiving proceeds of €315,526. The debt will be redeemed on 31 December 2016. The interest rate on the debt is 4% and the internal rate of return is 9.5%.

Requirement

Based upon the information provided, show how the debt should be accounted.

Example 25.13: Financial liabilities measured at amortised cost (deep discount bonds)

At Inception:

DR	Cash	€315,526	
CR	Liability		€315,526

Annual interest payments:	€
4% x €400,000 x 5 years	80,000
Deep discount (€400,000 - €315,526)	<u>84,474</u>
	<u>164,474</u>

Year	SPLOCI - P/L Charge €*	Interest Paid €	Winding up interest charged to SPLOCI - P/L €	SFP - Liability €
2012	29,975	16,000	13,975	329,501
2013	31,303	16,000	15,303	344,804
2014	32,756	16,000	16,756	361,560
2015	34,348	16,000	18,348	379,908
2016	36,092	<u>16,000</u>	<u>20,092</u>	400,000
		<u>80,000</u>	<u>84,474</u>	

*Opening SFP liability x 9.5% [for example, 2012: €315,526 x 9.5%]

Offsetting

- IAS 1 *Presentation of Financial Statements* states that assets and liabilities, and income and expenses, should not be offset (i.e. netted against each other) unless required or permitted by a standard (*See Chapter 2*)
- IAS 32 specifies that a financial asset and a financial liability should be offset and the net amount reported when an enterprise:
 - currently has a legally enforceable right of set-off; and
 - intends either to settle on a net basis, or to realise the asset and settle the liability simultaneously.

Derecognition of a financial liability

- A financial liability should be removed from the statement of financial position when, and only when, it is extinguished, that is, when the obligation specified in the contract is either discharged, cancelled, or expired.
- Where there has been an exchange between an existing borrower and lender of debt instruments with substantially different terms, or there has been a substantial modification of the terms of an existing financial liability, this transaction is accounted for as an extinguishment of the original financial liability and the recognition of a new financial liability.
- A gain or loss from extinguishment of the original financial liability is recognised in SPLOCI – P/L.

25.5 HEDGE ACCOUNTING

Hedging Instruments

- All **derivative contracts** with an external counterpart may be designated as hedging instruments except for some written options
- An **external non-derivative** financial asset or liability may not be designated as a hedging instrument except as a hedge of foreign currency risk
- A **proportion** of the derivative may be designated as the hedging instrument

Hedged Items

A hedged item can be a:

- single recognised asset or liability, firm commitment, highly probable transaction, or a net investment in a foreign operation
- group of assets, liabilities, firm commitments, highly probable forecast transactions, or net investments in foreign operations with similar risk characteristics
- held-to-maturity investment for foreign currency or credit risk (but not for interest risk or prepayment risk)
- portion of the cash flows or fair value of a financial asset or financial liability or
- non-financial item for foreign currency risk only or the risk of changes in fair value of the entire item

Main categories of hedges

1. Fair value hedge

- A hedge of the exposure to changes in fair value of a recognised asset or liability or a previously unrecognised firm commitment to buy or sell an asset at a fixed price or an identified portion of such an asset, liability or firm commitment, that is attributable to a particular risk and could affect profit or loss.
- The gain or loss from the change in fair value of the hedging instrument is recognised immediately in arriving at profit or loss in SPLOCI – P/L.
- At the same time the carrying amount of the hedged item is adjusted for the corresponding gain or loss with respect to the hedged risk, which is also recognised immediately in net profit or loss in SPLOCI – P/L

Example 25.14: Fair value hedge

Duvet Limited is an Irish company that prepares its financial statements to 31 December each year. On 1 January 2011 Duvet Limited purchased an investment in a fixed interest debt security for €100. The company has decided to account for the investment as available for sale financial asset, with equity accounting being adopted on remeasurement. The fair value of the security on 31 December 2011 and 2012 was €110 and €105 respectively. On 31 December 2011 Duvet Limited purchased a derivative asset, and its fair value had increased by €4 on 31 December 2012.

Requirement

Assuming that the derivative asset is designated as a hedge from 1 January 2012, explain the accounting treatment in 2011 and 2012.

Example 25.14: Fair value hedge

Solution

Year ended 31 December 2011:

The increase in fair value of the investment will be taken to equity and the security will be recorded at its fair value of €110 in the statement of financial position at 31 December 2011.

Year ended 31 December 2012:

The decline in value of €5 on the security will be taken to the SPLOCI and hedged by the increase in the derivative of €4. At 31 December 2012, the statement of financial position will show a security at €105, a derivative at €4, with the net effect on the SPLOCI being €1.

Main categories of hedges

2. Cash flow hedge

- A hedge of the exposure to variability in cash flows that:
 - a) is attributable to a particular risk associated with a recognised asset or liability (such as all or some future interest payments on variable rate debt) or a highly probable forecast transaction and
 - b) could affect profit or loss.

Example 25.15: Cash flow hedge

A company expects to purchase a piece of machinery for \$10 million in a year's time (31 July 2014). In order to offset the risk of increases in the euro rate, the company enters into a forward contract to purchase \$10 million in 1 year for a fixed amount (€6,500,000). The forward contract is designated as a cash flow hedge and has an initial fair value of zero.

At the year end, (31 October 2013) the dollar (\$) has appreciated and the value of \$10 million is €6,660,000. The machine will still cost \$10 million so the company concludes that the hedge is 100% effective. Thus the entire change in the fair value of the hedging instrument is recognised directly in reserves.

DR	Forward contract	€160,000
CR	Other component of equity – cash flow hedge reserve	€160,000

The effect of the cash flow hedge is to lock in the price of \$10 million for the machine. The gain in equity at the time of the purchase of the machine will either be released from equity as the machine is depreciated or be deducted from the initial carrying amount of the machine.

Discontinuance of hedge accounting

- Hedge accounting must be discontinued prospectively (i.e. going forward and not as a prior period adjustment in accordance with IAS 8 *Accounting Policies, Changes in Accounting Estimates and Errors* – see **Chapter 21**) if:
 - the hedging instrument expires or is sold, terminated, or exercised;
 - the hedge no longer meets the hedge accounting criteria (e.g. it is no longer effective);
 - for cash flow hedges the forecast transaction is no longer expected to occur; or
 - the entity revokes the hedge designation.

25.6 DISCLOSURE REQUIREMENTS

- An entity must group its financial instruments into *classes* of similar instruments
- The two main categories of disclosures required are information about the:
 1. *significance of financial instruments*
 2. *nature and extent of exposure to risks arising from financial instruments*

1. Significance of financial instruments

Statement of Financial Position

- Details of financial instruments measured at fair value through profit/loss, reclassified, derecognised, pledged as collateral and terms breached

SPLOCI and Equity

Items of income, expense, gains, and losses

Other Disclosures

- Accounting policies for financial instruments
- Information about hedge accounting
- Information about the fair values of each class of financial asset and financial liability

2. Nature and extent of exposure to risks arising from financial instruments

Qualitative Disclosures

- Risk exposures for each type of financial instrument
- Management's objectives, policies, and processes for managing those risks
- Changes from the prior period

Quantitative Disclosures

- Credit Risk
- Liquidity Risk
- Market Risk

See Chapter 25, Example 25.16