



pedite Notes

ACCA Paper F7

Financial Reporting

For exams in December 2009

Contents

	<i>About ExPeditate Notes</i>	3
1.	The Qualitative Characteristics of Financial Statements	4
2.	Recognition, Measurement and Presentation of Financial Statements' Elements. Accounting Policies	6
3.	Non-Current Assets and Impairment	12
4.	Leases	23
5.	Inventories and Construction Contracts	29
6.	Provisions and Contingencies	34
7.	Financial Assets and Financial Liabilities	39
8.	Taxation	45
9.	Revenue Recognition and Performance Reporting	50
10.	The Statement of Cash Flows	59
11.	Consolidated Financial Statements	64
12.	Calculation and Interpretation of Accounting Ratios	65
13.	Limitations of Financial Statements' Interpretation Based on Ratio Analysis	74



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Chapter 1

The Qualitative Characteristics of Financial Statements



START The Big Picture

Qualitative characteristics make the information included in the financial statements useful to others.

There are four primary characteristics that a set of quality financial statements is expected to adhere to, of which two are content related (relevance and reliability) and two are presentation related (comparability and understandability)

There are inherent constraints on the two content related characteristics (relevance and reliability): timeliness (undue delay in reporting may turn reported information irrelevant) and cost (benefits derived from information should exceed the cost of providing it)



KEY DEFINITIONS

Relevant = information helps users making economic decisions on its basis by (a) *being material* and (b) *having predictive or confirmatory* value to the user. Information is *material* if its omission or misstatement distorts financial statements' users' ability to make economic decisions on their basis.

Reliable = information is *free from material error, neutral, complete, prudently* determined, and it reflects *economic substance* and not merely legal form.

Comparable = information is comparable when it enables users to make (a) an entity-to-entity comparison (that is "*company-to-company*" comparability), and (b) a year-to-year comparison (that is "*time-to-time*" comparability) of financial position and performance.

Understandable = information can be understood by users who are reasonably knowledgeable of business & economics and who are willing to study that information with sufficient diligence.



EXAMPLE

Suppose a 1 billion USD annual turnover company which incurred an annual cost of 1.2 million USD with gross salaries due to its seven executive and non-executive directors for the year, plus another approximately 0.5 million USD in benefits in kind and another 0.8 million USD paid as consultancy fees to some of such individuals' own consulting firms. The annual financial statements of the company disclose the following information on the matter: "The Company's total payroll costs for the year include an amount of 1.2 million USD representing gross amounts due to Company's senior management". In prior year's financial statements of the entity, any disclosure on the matter was absent. Is this piece of information, as disclosed in current year's financial statements, fulfilling the four required qualitative characteristics?

Relevance: the information is relevant as it is expected to give users a valuable hint on management's "tone at the top" in respect of valuing the management services they provide. There is a qualitative rather than quantitative materiality attached to this kind of information.

Reliability: the information is not reliable as it is significantly misstated, incomplete, may be deemed biased and fails to put substance over form.

Comparability: time-to-time comparability is impaired (as no comparative period information provided), and so it is entity-to-entity comparability.

Understandability: the information is sufficiently understandable as "senior management" group is not well defined.

Chapter 2

Recognition, Measurement and Presentation of Financial Statements' Elements. Accounting Policies



START The Big Picture

IASB's conceptual framework identifies five elements of financial statements: assets, liabilities, equity interest, income and expenses.

International Financial Reporting Standards (IASs, IFRSs) and Interpretations (SICs, IFRICs) provide specific guidance for recognition, measurement and presentation of financial statements' elements, as well as for disclosure of items which do not meet such definitions.

Recognition happens when (a) the item falls within the definition of a financial statements' element, (b) it triggers an inflow or outflow of economic benefits, and (c) such inflow/outflow can be measured reliably.

Measurement is made under four possible measurement bases (historical cost, current cost, realisable value and present value), with historical cost measurement being the commonest basis.

Presentation is dealt with by the *IAS 1 (R) "Presentation of financial statements"*, which (a) sets down seven required general features of financial statements, (b) requires companies to select and apply appropriate accounting policies for the financial statements to comply with all standards and interpretations, (c) sets out the five components of a complete set of financial statements, and (d) requires companies to present complete financial statements at least annually.

Accounting policies governing recognition, measurement and presentation of financial statements' elements are dealt with by IAS 8 "Accounting policies, changes in accounting

estimates and errors”, which also addresses changes in accounting estimates and correction of prior year errors.



KEY DEFINITIONS

THE FIVE ELEMENTS OF FINANCIAL STATEMENTS

Asset = a resource controlled by the entity as a result of past events and from which future inflows of economic benefits are expected

Liability = a present obligation of the entity arising from past events, the settlement of which is expected to generate future outflows of resources embodying economic benefits

Equity interest = the residual interest in the assets of the entity after deducting all its liabilities (that is, entity’s net assets)

Income = revenue arising in the course of entity’s ordinary activities (such as sales, fees, interest, dividends, royalties and rent) and gains (realised or unrealised) arising or not in the course of ordinary activities (such as increases in economic benefits arising from profitable disposals or upwards revaluations of assets)

Expense = outflow / depletion of assets arising in the course of entity’s ordinary activities (such as cost of sales, payroll, depreciation) and losses (realised or unrealised) arising or not in the course of ordinary activities (such as decreases in economic benefits arising from disposals at a loss or from downwards revaluations and impairments of assets).

THE SEVEN REQUIRED GENERAL FEATURES OF FINANCIAL STATEMENTS

True and fair view = the application of the four qualitative characteristics and the application of all accounting standards and interpretations (IFRS) are normally expected to result in financial statements providing what is generally understood as a true and fair view of reporting entity’s financial position, performance and changes in financial position.

Going concern = financial statements are normally prepared on the assumption that the entity will continue in business for the foreseeable future (at least 12 months from reporting period end).

Accruals basis of accounting = income and expenses are recognised as they are earned or incurred rather than when cash is received or paid.

Consistency of presentation = presentation of items in the financial statements should not change from one year to another unless required by a standard or interpretation or if new presentation is an improvement on the previous presentation.

Materiality and aggregation = material items/classes of similar items should be presented separately in the financial statements, whereas immaterial items/classes of similar items are aggregated together on the face of the primary statements but may need separate presentation in the explanatory notes.

Offsetting = whether between assets and liabilities or income and expenses, offsetting – unless expressly required by an accounting standard – is prohibited in presenting the financial position/performance of the entity because it prevents users to get a full and proper understanding of transactions, events or situations having occurred.

Comparative information = all amounts reported in current period's financial statements (including in the narratives) should show comparative information in respect of the previous period. In case of changes in presentation or classification of items in the current period's financial statements, comparative information should conform to the new presentation.

THE FIVE COMPONENTS OF FINANCIAL STATEMENTS

Statement of financial position = a structured representation (also known as balance-sheet) of entity's financial position as at the reporting date (that is, assets, liabilities and equity as at the reporting date). IAS 1 (R) requires the presentation, as a minimum, of specific line items on the face of the statement, with assets and liabilities analysed between current and non-current, but with no requirement of recommendation on sub-totalling or balance-sheet totals. Many companies show assets equal in total to liabilities plus equity.

Statement of comprehensive income = a structured representation of entity's financial performance for the reporting period, setting out all items of income and expense (that is, all non-owner changes in equity). IAS 1 (revised) gives entities the choice between the single statement presentation of their performance for the period (the "statement of comprehensive income") and a two statement presentation (the "income statement" including all items of income and expenses taken to profit or loss, such as revenues, operating expenses, finance costs or tax expense and the "statement of comprehensive income" showing at the top income statement's bottom line and continuing with the "other comprehensive income" section including items such as revaluation gains or losses on property, plant and equipment or gains and losses on re-measuring available-for-sale financial assets).

Statement of changes in shareholders' equity = a structured representation of capital contributions by and distributions to entity's owners for the reporting period, as well as of total comprehensive income for the period and of effects of any prior-year restatements on the opening equity.

Statement of cash flows = a structured representation of how the entity generated and used cash over the reporting period, in the course of its operating, investing and financing activities.



KEY KNOWLEDGE

Basis of Preparation, Summary of Accounting Policies and Explanatory Notes

- The *basis of preparation* is a brief description of the regulatory framework(s) which bookkeeping is made and financial statements are prepared, and of the measurement base(s) used for measuring the items included in the financial statements.
- The *summary of accounting policies* covers each specific accounting policy that is relevant to understanding the financial statements.
- The *explanatory notes* are a structured presentation of information that is not presented in the primary statements but it is either required by IFRS or otherwise deemed relevant to the understanding of the financial statements.

ACCOUNTING POLICIES, ACCOUNTING ESTIMATES AND PRIOR PERIOD ERRORS

Accounting policies = formalised rules specifying how particular elements of financial statements or other events are accounted for and disclosed (e.g. setting the measurement model for a particular class of property, plant and equipment, setting the valuation model for a particular category of inventories)

Accounting estimates = methods adopted by an entity to arrive at estimated amounts for the financial statements (e.g. depreciation method selected for depreciable non-current assets, useful lives and residual values of non-current assets).

Changes in accounting policies = are applied retrospectively (that is, by restating opening financial position and comparative amounts), unless impracticable. Reasons for change (regulatory requirement and/or improved relevance of affected information) in and numeric impact of the change (if material) should be disclosed.

Changes in accounting estimates = are applied prospectively (that is, by affecting current year's statement of comprehensive income and any subsequent periods impacted by the change). Reasons for change (availability of new information, more experience or subsequent developments) in and numeric impact of the change (if material) should be disclosed.

Corrections of prior period (material) errors = are made by restating opening financial position and comparative amounts as if the error had never occurred, presenting the necessary adjustment to the opening retained earnings in the statement of changes in equity and presenting a (third) statement of financial position, as at the beginning of the comparative period.



EXAMPLE

Let's take the basic event of an entity acquiring a piece of equipment for long-term use and see how the concepts and terms defined above come around.

The acquisition will be **recognised** in entity's financial statements as an acquisition of an **asset**, to be **presented** in the **non-current** section of the asset's list in entity's **statement of financial position**, on the basis that the entity is a **going concern**, thus it will continue to be in the business for longer than one year.

The subsequent **measurement** of this asset at its depreciated cost (on the same going concern basis, otherwise the equipment may have need to be measured at its **realisable value**) means that the entity would have selected **historical cost** as **measurement base** for its non-current tangible assets of an equipment nature.

The depreciation charge reflecting the gradual wear-and-tear of the equipment as the entity uses it will be expensed in entity's **statement of comprehensive income** for the reporting period, after being calculated based on an allowed depreciation method considering equipment's estimated useful life and residual value. These are **accounting estimates** which may be adjusted subsequent to asset's acquisition due to new circumstances, with such **changes in accounting estimates** being applied **prospectively** in terms of equipment's adjusted depreciation charge for the period and resulting net book value as at subsequent reporting dates.

If, for justified reasons (as otherwise the required general feature of **consistency** would have been breached), the entity switches from measuring equipment at historical depreciated cost to measuring it at **fair value** less subsequent accumulated depreciation,

such a decision would amount to a **change in accounting policy** to be applied **retrospectively**, by restating relevant comparative information (carrying amount and depreciation charge of the asset) accordingly.

Any positive difference between equipment's net book value before the first revaluation and the fair value provided by the professional valuer would be reflected as an item of **other comprehensive income** and would also be reflected in entity's **statement of changes in equity** as a non-owner originated event that increased equity but is not part of performance.

If the acquisition of the equipment is financed by a third party lessor under a long-term finance lease agreement with the entity, the item is still recognised as an asset in entity's SoFP (although the legal ownership over the equipment remains with the lessor), as the **economic substance** of the transaction (purchase of a long-term asset for internal use under entity's own control for most of asset's useful life) is preminent **over its legal form**.

The lease obligation towards the lessor will be reported as a **liability**, split per its **current** and its **long-term** components (assuming again that the going concern basis of preparation of financial statements applies, otherwise all liabilities become current). Any associated unpaid interest element related to the current period will need to be **accrued for** as a financial expense of the period under the **accruals basis of accounting**.

Any economic benefits from a temporary sub-rental of the equipment to a third party will be recognised on an accrual basis as **income** in entity's statement of comprehensive income or income statement for the period, with any **offsetting** of such rental income against depreciation charge or lease interest expense being disallowed. Similarly, no offsetting will be possible between the receivable from the operating lessee and the finance lease payable to the lessor.

If the finance lease agreement is erroneously classified as operating lease upon inception, its correction in a subsequent period (if material) would amount to a **correction of a prior period material error**, entailing retrospective recognition of the leased asset and of the lease obligation, retrospective booking of depreciation charge and lease interest expense, and retrospective reversal of operating lease expense. The statement of changes in equity would show the adjustment of the opening retained earnings and a supplementary statement of financial position (as of the beginning of the comparative period) would need to be prepared and presented in the financial statements for the current period.

Chapter 3

Non-Current Assets and Impairment



START The Big Picture

This sub-section addresses accounting for property, plant and equipment ("PPE") and for intangible assets under IFRS.

General accounting for PPE and Intangibles is dealt with by *IAS 16 "Property, plant and equipment"* and *IAS 38 "Intangible assets"*, with the basic concepts and accounting rules covered in your F3 studies. At F7 level, there is a more in-depth coverage of the quite judgemental area of distinguishing between capital expenditure and revenue expenditure (whether PPE related or intangibles related), as well as of accounting for PPE under the revaluation model and of applying the component approach in depreciating complex assets.

Specific rules in connection with accounting for bank financed self-made PPE & intangibles under construction (basically a capitalisation requirement for the interest cost) are set out in *IAS 23 "Borrowing costs"*. For government subsidised PPE & intangibles, specific cost recognition alternatives are provided by *IAS 20 "Accounting for government grants and disclosure of government assistance"*. Both these standards become examinable at F7 level.

If property (that is, land and buildings) is held for capital appreciation or let to third party tenants, accounting for it is separately dealt with by *IAS 40 "Investment property" ("IP")*, with two of the most significant differences in terms of accounting treatment relating to upwards revaluation differences (taken to profit or loss instead of equity) and to depreciation (not calculated). PPE which is up for disposal rather than intended for long-term use within the entity falls – if some conditions fulfilled – within the scope of *IFRS 5 "Non-current assets held for sale and discontinued operations"*. Again, both these standards were not examinable so far but become relevant to your F7 exam.

Impairment of PPE & Intangibles is addressed by *IAS 36 "Impairment of assets"*. The basic principle is that, when internal or external impairment indicators are identified, an impairment test needs to be run in order to make sure that the carrying amount of your tested assets does not exceed their recoverable amount. If that's not the case, the excess must be taken as an impairment loss.



KEY DEFINITIONS

Cost = purchase cost + costs directly attributable to enabling the asset to operate in its intended location + estimated dismantling and site restoration costs at the end of asset's useful life

Residual value = estimated selling price at the end of item's useful life, net of costs to sell

Depreciable/amortisable amount = Cost less Residual value

Depreciation/Amortisation = systematic allocation of the depreciable/amortisable amount over item's useful life; the depreciation/amortisation charge is captured as operating expense in entity's statement of comprehensive income (income statement), gradually over the useful life of the item.

Fair value = the amount for which the asset could be exchanged between knowledgeable willing parties in an arm's length transaction (most commonly, market value)

Carrying amount = Cost or fair value (depending on the measurement model selected by the entity for the related class of assets) less Accumulated depreciation/amortisation less any Impairment loss.

Investment property = property held to earn rentals or for capital appreciation or both (such as hotels, office, commercial or industrial space let out to third party tenants, land plots in a land-bank)

Intangible asset = identifiable non-monetary asset without physical substance (such as software, copyrights, movies and broadcasting rights, licenses and franchises, customer acquisition costs and customer lists, goodwill arising in a business combination, development costs satisfying some capitalisation criteria)

Borrowing costs = interest expense and/or finance charges incurred in financing the construction of an asset that takes a substantial period of time to get ready for use/sale

Grants related to assets = government grants expressly provided to the entity for the purchase or construction of long-term assets

Cash-generating unit = the smallest group of entity's assets able to generate cash inflows independently of the cash inflows from other assets or groups of assets ("CGU")

Value in use = the present value of net future cash flows expected to be derived from an asset or CGU

Recoverable amount = higher of (a) Fair value less costs to sell and (b) Value in use. It applies to stand-alone assets or CGUs.

Impairment indicator = factor (internal to the entity or external to it) which triggers the need for running an impairment test for an asset or a CGU, with a view of identifying and reflecting any impairment loss on that asset.

Impairment loss = Carrying amount less Recoverable amount (if higher than 0). It is an income statement item, similarly with Depreciation/amortisation charge



KEY WORKINGS

PROPERTY, PLANT AND EQUIPMENT:

Initial expenditure:

*You **DO** add up (capitalise in the cost of the PPE):*

- Purchase cost (net of discounts received, but inclusive of custom duties)
- Staff costs directly attributable to the acquisition/construction of the item (if any)
- Cost of site preparation (if any)
- Initial delivery and handling costs (if any)
- Installation and assembly costs (if any)
- Testing costs, net of proceeds from sale of testing's output (if any)
- Estimated dismantling, removal and site restoration costs (if any)
- Professional fees directly attributable to above activities (if any)
- Interest charged by the bank/leasing company financing asset's construction (only between the date when first construction-related costs are incurred and the date when construction is substantially completed), net of any interest earned from temporarily placing the borrowed funds.

You **DON'T** add up (take to expenses for the period):

- Staff training costs
- New facility/product advertising & promotion costs
- Facility/business relocation costs
- Abnormal wastage of material and labour (for self-constructed assets)
- Internal profits (for self-constructed assets)
- Initial operating losses and idle capacity costs
- General overheads
- Interest charged by the bank/leasing company financing asset's construction during periods of project freezing or after the set-in-use of the asset.

You **CAN CHOOSE** to net-off (against PPE's cost)

- Government grants received expressly for financing asset's acquisition or construction.
- Alternatively, you can book PPE's cost in full (that is, inclusive of the subsidised part), with the capital grant credited as deferred income on the liabilities' side of the SoFP and gradually taken to profit or loss along with asset's depreciation.

Subsequent expenditure:

You **DO** add up (capitalise in the carrying amount of the PPE):

- Cost of new significant parts of the asset replacing old parts at regular (less frequent) intervals
- Cost of regular major inspections for faults, irrespective of whether parts are replaced or not

You **DON'T** add up (take to expenses for the period):

- Repairs and maintenance expenses (day-to-day cost of labour, consumables and small parts incurred with servicing the asset)
- Staff (re)training costs

You **MUST** subtract:

- Carrying amount of old significant parts of the asset replaced at regular (less frequent) intervals

Depreciation:

Calculation

- Under the *straight-line method*, the charge is evenly spread over the useful life of the item, being computed for each year as $[(\text{Cost} - \text{Residual value}) / \text{Useful life}]$
- By summing-up each year's charge up to a particular reporting date over the useful life of the item, you obtain the "Accumulated depreciation" of the item as at that date. The Carrying amount of the item as at that date is computed as $[\text{Cost} - \text{Accumulated depreciation}]$
- Under the *reducing balance method*, the charge gets lower as the useful life of the item elapses. First year's charge is computed as $[(\text{Cost} - \text{Residual value}) / \text{Useful life}]$ (similar to straight-line), then subsequent periods' charges are computed as $[\text{Carrying amount} / \text{Useful life}]$.
- For assets pertaining to classes for which the entity selected the revaluation model for subsequent measurement (most commonly, buildings), "Cost" is replaced by the most recently determined "Fair value" in the calculation formulae above, with "useful life" being as estimated as at the date of the most recent fair valuation.
- For a complex asset which operates as group of separately identifiable technical components assembled together, depreciation charges for each of such components must be computed separately, to recognize the fact that they may follow a different pattern of wear-and-tear. This is the "*component approach*" required by IAS 16 in computing depreciation.

Booking

- It starts when the item is ready for its intended use
- Normally, it goes like DEBIT D/A Charge (income statement item taken to profit or loss for the period) against CREDIT Accumulated Depreciation (balance-sheet item taken against asset's cost or fair value, the resulting net carrying amount being left on the debit side of the SOFP).
- If the item is operated in self-constructing another asset, the charge gets debited into the cost of the new asset (SOFP item) instead of being taken to profit or loss.
- It stops when the item is disposed of (sold or scrapped).

Revaluation at Fair Value:

Calculation

- Under the valuation model of measurement, the fair values of all the assets in a particular class (e.g. buildings) are periodically determined based on professional assessment.

Booking

- If fair value > carrying amount: you credit the increase in asset's value to Equity as "**revaluation** surplus" (with the corresponding debit going to PPE)
- If fair value < carrying amount: you debit the decrease in asset's value to Equity (with the corresponding credit going to PPE) to reduce any previously recognised revaluation surplus for the asset. If there is no such pre-existing revaluation surplus (or if it's not enough to absorb all the decrease) the (remaining) difference is taken to profit or loss

Disposal:

Calculation

- Gain/loss on disposal = [Net sale proceeds - Carrying amount]
- Carrying amount is zero or it equals any pre-set residual value if the asset is disposed of at the end of its useful life; carrying amount is higher than residual value if the asset is disposed of prior to the end of its useful life

Booking

- You debit the net sale proceeds in Cash or Receivables, with the carrying amount of the disposed asset credited to PPE in the same time. Any figure needed to balance off these two first legs of the accounting entry is taken to profit or loss, being either credited as a gain (if net sale proceeds > carrying amount) or debited as a loss (if the other way round)
- Upon disposal of assets measured under the revaluation model, you transfer (debit) any previously accumulated revaluation surplus on the disposed asset out to retained earnings.

INVESTMENT PROPERTY

Initial expenditure/transfer-in:

- You initially measure property meeting the IP definition at cost, working it out following the same capitalisation rules as for PPE. Any transaction costs are included.
- You transfer-in as IP (at their carrying amount upon transfer-in date) assets or parts of assets previously classified as owner-occupied property (part of PPE) or property held for sale in the ordinary course of the business (part of Inventories), when there is a change in use making the item to meet the IP definition.

Subsequent expenditure:

- Qualifies for capitalisation or gets captured as revenue expense of the period following the same rules as PPE

Depreciation:

- Under the fair value model (allowed as first alternative by IAS 40), you don't compute/book any depreciation charge against the IP
- Under the cost model (allowed as second alternative by IAS 40), you compute & book depreciation similarly to PPE

Revaluation:

- Under the fair value model, you restate IP at fair value at each reporting date, with the arising fair value gain/loss (that is, the difference between current reporting date's fair value and prior reporting date's fair value) being taken to profit or loss for the period
- Under the cost model, you don't restate IP at fair value (you keep it at depreciated cost), but fair value as at each reporting date must be disclosed in the financial statements

Disposal/transfer-out:

- Same rules for calculation and booking as applicable to PPE
- You transfer IP out to PPE upon change in use only, with deemed cost (as PPE) equal to property's fair value at the date of change in use.

INTANGIBLES

Initial and subsequent expenditure:

*You **DO** add up (capitalise in the cost of the intangible asset):*

- For intangibles such as software or licenses - same categories of expenditure items eligible for capitalisation as listed above for PPE
- Measurable costs incurred in the development phase of an R&D project, to the extent to which the project is technically feasible and commercially viable, and the entity has the intention and the capability of completing it and of generating economic benefits out of it. Development costs incurred prior to all these conditions being satisfied cannot be retrospectively added-up (capitalised).

You **DON'T** add up (take to expenses for the period):

- For intangibles such as software or licenses - same categories of expenditure items non-eligible for capitalisation as listed above for PPE
- Costs incurred in the research phase of an R&D project
- Costs incurred in the development phase of an R&D, prior to all aforementioned capitalisation conditions being simultaneously satisfied
- Costs associated to internally generated brands, publishing titles, customer lists and similar items

Amortisation:

- Calculation and booking are similar to depreciation for PPE
- Goodwill arising from business combination is the only category of intangible asset which is not subject to amortisation; instead, it needs to be tested for impairment in accordance with IAS 36 at each year-end (see below)

Revaluation:

- Revaluation model is available for the subsequent measurement of classes of intangibles for which an active market exist
- Calculation and booking of revaluation differences are similar to PPE

Disposal:

- Calculation and booking of gain/loss on disposal are similar to PPE

NON-CURRENT ASSETS HELD FOR DISPOSAL

Transfer-in:

- You transfer PPE, IP or Intangibles into this category when asset's carrying amount is expected to be recovered through a sale, provided that (a) the asset is available for immediate sale in its present condition and (b) the sale is highly probable (that is, management is committed to sell and has taken steps to perform the sale on an active market at a reasonable price)
- Upon transfer-in, you compare asset's carrying amount against its fair value less costs to sell, and you take any excess of the former over the latter as an impairment loss for the period, by reducing (crediting) accordingly asset's value

Depreciation/amortisation:

- You don't compute/book depreciation/amortisation subsequent to transfer-in (and consequent re-measurement), as assets in this category are normally expected to be sold within one year from transfer-in date.

Revaluation:

- If following re-measurement upon initial transfer-in there is a fall in asset's fair value less costs to sell, you write-down (credit) asset's value accordingly and debit it as impairment loss for the period
- Any write-up (due to subsequent increases in fair value less costs to sell over the value recognised at asset's re-measurement upon transfer-in as held for disposal) is credited as a gain for the period but it is limited to the cumulative impairment loss that you have previously recognised in connection with the asset.

Disposal/transfer-out:

- Calculation and booking of gain/loss on disposal are similar to PPE
- Transfer-out (back to asset's original category of classification) happens in case the selling decision is reversed. In such a case, you retrospectively re-compute depreciation/amortisation (as if the asset had never been transferred-in) and you compare the resulting new carrying amount as of transfer-out date asset's recoverable amount, with the asset being re-measured at the lower of them (and any difference compared to asset's value before transfer-out taken to profit or loss)

IMPAIRMENT

Impairment testing (applies to a stand-alone asset or a CGU):

- Step 1: Recoverable amount = MAX (Fair value less costs to sell, Value in use); both are usually provided in the question in F7 exams
- Step 2: Recoverable amount > Carrying amount? If so, the test is closed and you conclude that no impairment adjustment is necessary. Otherwise, you go to
- Step 3: Impairment loss = [Carrying amount – Recoverable amount]

Impairment allocation & booking:

- Impairment allocation matter applies to impaired CGUs only: you first allocate the impairment loss worked out under Step 3 above against any goodwill (intangible asset) attributable to the tested CGU. If any impairment loss is left unallocated after reducing

that goodwill down to Nil, you pro-rate it across the other individual assets of the CGU based on their respective carrying amounts.

- You take impairment loss to profit or loss unless you can debit it to Equity against any pre-existing revaluation surplus previously booked in connection with that asset/CGU

Impairment reversal:

- You reverse impairment losses when you need to align asset's/CGU's value back to a higher recoverable amount, limited to the accumulated impairment losses previously recognised. The resulting increase in asset's/CGU's value is taken to profit or loss or the period being credited as reversal of impairment loss, unless the asset/CGU is measured under the revaluation model allowed by IAS 16 (in which case such reversals go credited as revaluation surplus in Equity).



EXAMPLE

- From your F3 studies, you should be familiar with practising questions dealing with distinguishing between capital expenditure and revenue expenditure when it comes to PPE and Intangibles, computing and booking depreciation & amortisation, computing and booking revaluation differences for assets measured under the revaluation model, computing and booking gains/losses on disposals of PPE and intangibles
- When it comes to investment property, pay attention to what gets transferred into this category when there is change in use and how you account for subsequent changes in asset's value. For instance, if 1/3 of a previously owner-occupied building is let out to a tenant half way through the financial year, with the carrying amount of the building being 900 upon the change in use date, 300 will be transferred out from PPE to IP with no further depreciation being booked against the transferred amount. When, at year-end, the whole building gets restated at a fair value of, say, 1,200 (suppose the entity selected the revaluation model to measure the entire asset) and supposing that the carrying amount of the owner-occupied part of the building is depreciated down to 550 by year-end (from the 600 left in PPE as at the change in use date), the total revaluation difference of 350 (that is, 1,200 – 850) splits as follows: 100 is taken to profit or loss as fair value gain on re-measurement of IP (thus, the restated value of the IP at year-end is up from 300 to 400, i.e. 1/3 of the fair value of the building at year-end), whereas the rest of 250 is taken to equity as revaluation premium (thus, the restated value of owner-occupied property is up from 550 to 800, i.e. 2/3 of the fair value of the building at year-end).

- When it comes to non-current assets held for disposal, pay attention to the re-measurement that accompanies the reclassification of the asset as soon as the required conditions are fulfilled. For a piece of equipment the carrying value of which amounts to 200 at the date of reclassification but for which achievable selling price is estimated at 175 at cost to advertise, dismantle and deliver, the transfer-in as non-current assets held for disposal will be made at a value of 125 ($175 - 50$), with the write-down of 75 ($200 - 125$) taken as impairment loss to profit or loss for the period.
- When it comes to impairment, don't rush to running the three steps test presented above until you are sure that impairment indicators exist (goodwill impairment testing excepted). Then, make sure you don't mix up the values (carrying, recoverable, in use). Suppose an asset/CGU the carrying value of which is 250. If fair value (market price) less costs to sell is 150 but value in use is 300, there is no impairment loss to book. If value in use (that is, net present cash flows generated from running the asset/CGU) is 220, the impairment loss to book amounts to 30 ($250 - 220$). If value in use is 120, the impairment loss to book amounts to 100 ($250 - 150$).

Chapter 4

Leases

START
The Big Picture

This sub-section addresses lease accounting, from both lessee and lessor perspective. The topic was outside the scope of your earlier ACCA studies, as it involves a significant amount of technical complexity and professional judgement.

The first issue which one must sort out in tackling lease accounting is deciding whether the agreement between the parties, once it has been determined that it is a lease, qualifies for being a *finance lease* or rather an *operating lease*. To do that, a set of criteria for distinguishing out finance leases is provided, which all look at the economic substance of the transaction (as resulting from various terms & conditions of the lease agreement) rather than at its legal form.

If the lease gets classified as a *finance lease*, the application of the "*substance over form*" principle will result in the lessee putting the leased asset in its own SoFP (against a lease payable to the lessor), in the same time with the lessor taking it out from its SoFP (against a lease receivable from the lessee).

The interest element embedded in the total value of the finance lease agreement (thus, in every lease instalment paid) will show up as an expense in lessee's SoCI and as an income in lessor's SoCI for each period over the lease term, spread across the lease period based on one of the widely accepted allocation models.

If the lease gets classified as an *operating lease*, the asset stays in lessor's SoFP, who, at the same time as continuing to charge depreciation on the asset, will take a rental income in its SoCI, at the same time with the lessee booking a corresponding rental expense in its own SoCI.

Lease accounting is dealt with by *IAS 17 "Leases"*. This was the first international accounting standard expressly developed in order to guide financial statements' preparers in applying the "*substance over form*" principle to a particular type of transactions (leases) where the substantial transfer of risks and rewards incidental to leased asset's ownership is often not coincidental with the transfer of legal ownership.



KEY DEFINITIONS

Lease = an agreement whereby the lessor gives to the lessee the right to use an asset for an agreed period of time, against a (series of) payment(s).

Finance lease = a lease where the risks and rewards incidental to leased asset's ownership are substantially transferred from the lessor to the lessee; basically, the lessee is in control of the asset and makes unrestricted use of it for his own benefit for most of asset's useful life; so, in substance, it's close to an outright acquisition of the asset, but financed by the lessor, which is charging interest for the financing service.

Operating lease = a lease which is not a finance lease; basically, this is a rental agreement valid for some unsubstantial part of asset's useful life only, with the lessor substantially preserving the attributes of an owner.

Lease term = primary (non-cancellable) lease period + any secondary (extended upon request) lease period if such extension is probable (that is, available at a rent below the market).

Minimum lease payments ("MLP") = payments made by the lessee to the lessor over the lease term (excluding contingent rent and taxes/services paid by the lessor and reimbursed to him by the lessee). MLP basically include (a) the principal element of the contract value (i.e. the market value of the asset under an outright purchase), (b) the interest element of the contract, and (c) any guaranteed residual value of the asset at the end of the lease term (or, the asset purchase price at the end of the lease term if such a purchase option is available to the lessee and it is probable that the lessee will go for it).

Interest rate implicit in the lease ("IIR") = the rate at which MLP (+any unguaranteed asset residual value) must be discounted to come to a present value equal to asset's fair value (+any initial direct costs to the lessor). IIR is used to break lease instalments down per their principal/capital and interest components, with the principal/capital component taken to SoFP (to reduce the outstanding amount of the lease payable/receivable) and the interest component taken to SoCI (expense for the lessee and income for the lessor). NB that you will be given the IIR figure in the F7 exam.



KEY WORKINGS

WORKING OUT THE LEASE CLASSIFICATION

- At lease term end, is legal ownership transferrable to the lessee (either automatically or via exercising an option to buy the asset at a price below the market)? If **YES**, that's most probably a **finance lease**
- Is the lease term covering most of asset's useful life, with the lessee unlikely to exit the contract prior to its end either due to the specialised nature of the asset or due to the lessee bearing consequent lessor losses? If **YES**, that's most probably a **finance lease**
- Is asset's fair/capital value (market value in an outright purchase) approximately equal to MLP's present value (in other words, is IIR approximately equal to lessee's weighted average cost of capital)? If **YES**, that's most probably a **finance lease**
- If **all** the questions above get a **NO** answer, that's most probably an **operating lease**

WORKING OUT ASSET'S DEPRECIATION IN LESSEE'S BOOKS (IF FINANCE LEASE)

- Asset's capital value (corresponding to the principal/capital element of the MLP) gets depreciated over **MIN (useful life, lease term)**.

BREAKING LEASE INSTALMENTS DOWN PER THEIR PRINCIPAL (CAPITAL) AND INTEREST COMPONENTS OVER THE LEASE TERM AND ACCOUNT FOR THEM ACCORDINGLY (LESSEE BOOKS AND LESSOR BOOKS, IF FINANCE LEASE)

- Keep in mind that at the end of any period-end over the lease term **only the principal (capital) component is due** by the lessee to the lessor
- Make sure you noted carefully how instalments get paid (**in advance** or **in arrears**), at this has an impact on the allocation: the first instalment carries an interest component only if paid in arrears, otherwise it pays back capital only.
- The pro-forma on which you need to work this allocation out is as follows:

For instalments paid in arrears

(1) Period	(2) Due at Period- Start	(3) Interest at IIR%	(4) Installment Paid	(5) Due at Period- End
1	X ⁽¹⁾	X	(X)	X
2	X	X	(X)	X ⁽²⁾
3	X	X	(X)	X ⁽³⁾
...
N	X	X	(X)	Nil

Notes:

- X⁽¹⁾ = fair/capital value of the asset
- (3) = (2) * IIR%
- (5) = (2) + (3) - (4)
- X⁽²⁾ = outstanding lease liability at the end of Period 2 and non-current portion of the lease liability at the end of Period 1.
- X⁽³⁾ = outstanding lease liability at the end of Period 3 and non-current portion of the lease liability at the end of Period 2.

For instalments paid in advance

(1) Period	(2) Due at Period-Start Prior to Instalment Payment	(3) Instalment Paid	(4) Due at Period-Start After Instalment Payment	(5) Interest @IIR%	(6) Due at Period-End
1	X ⁽¹⁾	(X)	X	X	X
2	X	(X)	X	X	X ⁽²⁾
3	X	(X)	X	X	X ⁽³⁾
...
N	X	(X)	Nil	Nil	Nil

Notes:

- X⁽¹⁾ = fair/capital value of the asset
- (4) = (2) - (3)
- (5) = (4) * IIR%
- (6) = (4) + (5)

- $X^{(2)}$ = outstanding lease liability at the end of Period 2 and non-current portion of the lease liability at the end of Period 1.
- $X^{(3)}$ = outstanding lease liability at the end of Period 3 and non-current portion of the lease liability at the end of Period 2.

The figures in the last column of each pro-forma will be reported as lease liability (lessee's SoFP) or lease receivable (lessor's SoFP) at the end of each period. The figures in column "Interest@IIR%" will go as interest expense (lessee's SoCI) or interest income (lessor's SoCI) for each period.

RESTATING A FINANCE LEASE ERRONEOUSLY ACCOUNTED FOR AS OPERATING LEASE (LESSEE'S BOOKS)

- Book the leased asset and the lease obligation in the SoFP as at the end of the period when the lease was inception, at asset's capital value
- Depreciate the asset's capital value over the lower of useful life and lease term, down to the end of current period-end.
- Reduce the lease obligation by the capital component of instalments paid
- Reverse the prior and current operating rental expense
- Book prior and current interest expense (interest component of instalments paid)



EXAMPLE

In practising lease accounting questions, make sure that:

- You understand what perspective you need to take: lessee's or lessor's (more commonly: lessee's)
- Unless expressly stated in the question, you correctly classify the lease as finance or operating: if the leased asset has a fair value of 100 and the net present value of MLP (given in the question) is 90, that's a finance lease. Similarly, if the lease term is, say 4, years, for 5 years' estimated useful life of the asset. Other specific information giving you hints on how customized is the leased asset to serve lessee's needs or on how difficult/costly is for the lessee to drop the deal also points you towards finance lease. Always justify your conclusion making reference to the substance over form principle

- In working out the allocation per years of capital and interest components of the finance lease rentals, you first get it how instalments are paid (in arrears or in advance), then use the right pro-forma. Remember that IIR is always given and that the amount due to the lessor at any reporting period-end includes the principal/capital component only. If the fair/capital value of the leased asset is 50,000 (5 years useful life) and the lessee pays for the use of it 60,000 in 4 equal annual lease instalments paid in arrears, for an IIR of 7.71%, the interest expense to book in year 1 amounts to 3,857 (that is, 7.71% applied to 50,000) and the interest expense to book in year 2 amounts to 2,997 (that is 7.71% applied to $50,000 + 3,857 - 15,000$). The lease payable at the end of year 1 amounts to 38,857 (that is, $50,000 + 3,857 - 15,000$), of which 26,854 long term (that is, $38,857 + 2,997 - 15,000$). If instalments are paid in advance, the IIR becomes 13.70%, the interest expense of year 1 becomes 4,795 (that is, 13.70% applied to $50,000 - 15,000$) and the interest expense in year 2 becomes 3,397 (that is, 13.70% applied to $50,000 - 15,000 \times 2 + 4,795$). The lease payable at the end of year 1 amounts to 39,795 (that is, $50,000 + 4,795 - 15,000$), of which 28,193 long term (that is, $39,795 + 3,397 - 15,000$).

Chapter 5

Inventories and Construction Contracts



START The Big Picture

This sub-section starts by a quick look into the topic of inventories, with an aim of refreshing and enhancing the knowledge acquired on the matter during your F3 studies.

As you may remember from F3, the key issues to tackle when accounting for inventories are all valuation related, that is (a) correctly identifying the expenditure eligible for being included in the cost of inventories, (b) selecting and correctly applying one of the widely accepted inventory valuation models, and (c) identifying and accounting for inventories the net realisable value of which has fallen below cost at period-end.

We will list down what is generally eligible for being debited to current assets as inventory cost component and what is to be taken to profit or loss as incurred. We will briefly recap the mechanics of FIFO and AVCO, as well as of performing an NRV test.

Then, the sub-section goes on to the topic of construction contracts (new at F7 level), introducing you to the key definitions, concepts and methods to determine completion stage and revenues/costs to be taken to profit or loss as a construction contract unfolds, on the basic principle that profits start to be recognised only if contract's overall profitability is reliably measurable and only proportionately to contract's percentage of completion. On the contrary, as soon as the contract is reliably measurable as loss-making, the whole loss to completion must be booked immediately. While contract's outcome is uncertain, revenues booked will equal recoverable costs incurred, with no profit recognised.

There are three possible methods to work out contract's percentage of completion: based on cost (costs to date over total estimated costs), based on surveys (work certified over contract price) and physical completion stage (given as a percentage).

Inventories are dealt with by *IAS 2 "Inventories"*, whereas construction contracts fall under the specific scope of *IAS 11 "Construction contracts"*.



KEY DEFINITIONS

Cost of inventories = costs of purchase, costs of conversion and other costs incurred in bringing the inventories to their present location and condition

Net realisable value = inventory's estimated selling price less estimated completion and directly attributable selling costs

Construction contract = contract for construction of a stand-alone asset or a combination of technologically and functionally interrelated assets



KEY WORKINGS

WORKING OUT INVENTORIES' COST

You **DO** add up (*capitalise in the cost of inventories*):

Costs of purchase

- Purchase price (net of trade discounts and similar rebates)
- Import duties
- Acquisition related transport and handling costs

Costs of conversion

- Direct material costs (e.g. raw materials consumed in the production process)
- Direct labour costs (e.g. wages and salaries of directly productive workers)
- Variable production overheads (e.g. indirect materials and indirect labour)
- Fixed production overheads (e.g. plant utility costs, plant depreciation), allocated based on normal production capacity

Other costs incurred in bringing inventories in their present location and condition

- E.g. attributable non-production overheads, product customisation costs, unavoidable storage costs of raw materials and work-in-progress

You **DON'T** add up (take to expenses for the period):

- Abnormal losses incurred in the production process
- Idle production capacity costs
- Administrative overheads
- Selling costs

WORKING OUT INVENTORIES' BALANCE & COST OF SALES UNDER VARIOUS VALUATION MODELS

FIFO

- Earliest purchased units go out first, most recently purchased units stay in the closing balance
- Consequently, in times of rising prices, FIFO gives lower Cost of Sales (thus higher profits) and higher Inventories balance (thus higher assets). The other way round in times of falling prices

AVCO

- Re-compute average unit cost after each purchase by dividing total inventory cost to total units in stock
- Value movements-out at the most recently calculated average unit cost
- In times of rising prices, AVCO gives higher Cost of Sales (thus lower profits) and lower Inventories balance (thus lower assets). The other way round in times of rising prices

PERFORMING THE NRV TEST AND ALLOWING FOR OBSOLETE INVENTORIES

- Deduct estimated costs to completion and directly attributable selling costs from selling price (net of trade discounts) in order to determine the NRV to compare against unit cost
- Perform the Cost vs. NRV comparison on a line-by-line basis, otherwise the allowance for obsolete inventories may turn understated, as – at overall level - adverse differences (NRV < Cost) may be compensated by favourable differences (Cost < NRV). The sum of all the adverse differences (identified on a line-by-line basis) will amount to the allowance for obsolete inventories (SoFP item) to be credited against the gross balance (the cost) of the inventories at year-end.
- The period-on-period variance in the allowance for obsolete inventories gets captured in period's SoCI.

DETERMINING COMPLETION PERCENTAGE ON THE CONSTRUCTION CONTRACT

- Cost based method (most common): $\text{completion\%} = [\text{costs to date} / \text{total costs}]$
- Certified work based method: $\text{completion\%} = [\text{work certified} / \text{contract price}]$

RECOGNISING CONSTRUCTION CONTRACT'S REVENUES AND COSTS (SOCIAL ITEMS)

Contract's outcome is reliably measurable

- Profit-making contract:
 - $\text{Recognised costs to date} = (\text{Costs incurred to date} + \text{Estimated costs to completion}) * \text{completion\%}$
 - $\text{Recognised revenue to date} = \text{Estimated contract revenue} * \text{completion\%}$
- Loss-making contract:
 - Recognise total loss to completion immediately by providing for it as for an onerous contract (see sub-section d)

Contract's outcome is not reliably measurable

- $\text{Recognised revenues to date} = \text{Recoverable costs incurred to date}$

WORKING OUT ACCOUNT THE BALANCE OF THE CURRENT ACCOUNT WITH THE CUSTOMER (SOFP ITEMS)

- The current account with the customer can either have a debit balance (thus, a receivable from the customer, which is the more common case) or a credit balance (thus, a liability to the customer)
- $\text{Amounts due from/to construction contract customers} = \text{Costs incurred to date} + \text{Recognised profit} - \text{Recognised losses} - \text{Progress billings cashed in.}$



EXAMPLE

- You should be familiar with working out most of the likely inventories related questions from your earlier ACCA studies
- To illustrate construction contracts accounting, suppose a contract on which costs to date are 3,000, estimated costs to completion are 2,500, contract value is 7,500,

certified work is 3,250 and progress bills cashed in are 2,000. Under such a scenario, completion percentage would amount 55% under the cost approach (that is, $3,000/5,500$) and to 43% under the certified work approach (that is, $3,250/7,500$). Assuming that the cost approach is adopted and given that contract's outcome can be reliably measured as being a profit of 2,000 (that is $7,500 - 3,000 - 2,500$), the recognised profit to date would amount to 1,100 (that is, $55\% \times 2,000$), deriving from recognised revenues to date in amount of 4,125 (that is, $55\% \times 7,500$) and recognised costs to date in amount of 3,025 (that is, $55\% \times 5,500$). In SoFP caption terms, the contract would show a current customer account balance of 2,100 (that is, $3,000 + 1,100 - 2,000$).

Chapter 6

Provisions and Contingencies



START The Big Picture

This sub-section primarily addresses – at a level superior to what was expected from you as an F3 student – the accounting and financial reporting for provisions and contingent liabilities.

Provisions, such as provided for business restructuring costs, asset dismantling costs, product extended warranty costs, ongoing litigation costs or losses from onerous contracts are a quite special (and complex to deal with) type of liability, as they embed uncertainty in terms of either amount to be given up or timing of settlement, or both.

A fine borderline (inherently subject to professional judgement) distinguishes between provisions and contingent liabilities for which accounting recognition is not required (as the definition of the liability is not met) but particular disclosures are still necessary in the narrative explanatory notes to the IFRS financial statements.

Contingent assets, which generally do not meet the definition of the asset (thus, they are not recognised in entity's statement of financial position), but particular disclosures may still be required.

Lastly, the sub-section covers the reporting requirements in connection with events occurring between the reporting date and the date when the financial statements are issued.

Accounting for provisions and contingencies is dealt with by IAS 37 "Provisions, contingent liabilities and contingent assets". Accounting for subsequent events is covered by IAS 10 "Events after the reporting period".



KEY DEFINITIONS

Provision = liability of uncertain timing or amount (see examples above)

Legal obligation = derives from contract or law. E.g. contractual obligation of a dealer to provide a two-year extended product warranty period beyond what the manufacturer offers.

Constructive obligation = derives from entity's actions, which created valid expectations from third parties, that the entity will discharge some responsibilities it accepted in the past. E.g. constructive obligation to sponsor one collective educative holiday trip per year for employees' children aged between 7 and 14.

Onerous contract = the costs incurred from complying with it or exiting from it exceed the benefits from it. E.g. a lessee bound by an operating lease agreement for a commercial space, where future rental payments until lease end (or unilateral exit penalty cost) exceed forecasted sales of the store for the remaining lease period.

Restructuring plan = management programme aimed at significantly changing either entity's business or entity's manner of running its business. Restructuring plans eligible for being provided for must be detailed, formal, approved and announced to those affected, with provided costs limited to measurable expenditure directly attributable to the restructuring process

Contingent liability = possible obligation which may turn certain depending on the outcome of future uncertain events beyond entity's control, OR present obligation the settlement of which is either unlikely or not reliably measurable (in terms of outflow of economic resources). E.g. possible environment protection related fines arising from draft environmental legislation under development.

Contingent asset = possible right which may turn certain depending on the outcome of future uncertain events beyond entity's control. E.g. possible right to claim back paid taxes subject to possible cancellation by local authorities.

Adjusting events after the reporting period = events between year-end and financial statements' issuance date, which are indicative of conditions that existed at year-end. E.g. court case settlement, customer bankruptcy, post year-end sales below cost, discovery of fraud or errors. Such events trigger adjustments of relevant figures in the financial

statements (such as provisions for litigations, allowances for underperforming receivables or inventories)

Non-adjusting events after the reporting period = events between year-end and financial statements' issuance date, which are indicative of conditions that arose after the year-end. E.g. post year-end decline in market value of investments, inventories destroyed by post year-end accidental fire, dividends declared after year-end. Such events don't trigger adjustments of figures in the financial statements, but their effect, if material, needs to be disclosed in the narrative explanatory notes to the financial statements.



KEY WORKINGS

PROVISIONS AND PROBABLE CONTINGENCIES

Calculation

- You need to work out (or select directly from the given information) the "best estimate" of the amount to provide for as at the reporting date.
- In the case of probable contingent liabilities (that means 50% or more estimated likelihood of outflow of resources), the "best estimate" to provide for may derive from applying the estimated likelihood percentage to the estimated amount of the potential outflow. Alternatively (in a more conservative and more common approach), the provision may be set at the level of the full estimated amount of as the outflow
- In the case of a provision for an ongoing litigation, this comes to adjusting the estimated amount needed to settle the claim in case of adverse court decision by the estimated likelihood (if > 50%) for such a decision. More commonly, the provision will be equal to the estimated settlement amount.
- In the case of a warranty provision, this may come to multiplying the average estimated unit cost incurred in repairing/replacing defective products in the warranty period by the estimated number of units of product in the warranty period, then adjusting the result by the estimated likelihood (if > 50%) for sold products to fall defective in the warranty period.
- In the case of a restructuring provision, it is not about adjusting the estimated restructuring cost by any likelihood percentage as, as soon as the above mentioned criteria for restructuring provision recognition are met, the restructuring is virtually

certain. Instead, it is about correctly working out the estimated restructuring costs, which excludes costs associated with ongoing activities and future operating losses. Actually, future operating losses can never be provided for.

- In the case of a provision for onerous contract, it is equally not about applying any likelihood percentage, but about correctly working out the amount to be provided for as difference between estimated costs directly attributable to running the contract to its end and estimated revenues to be flow to the entity as a result of staying in the onerous contract to its end.
- In the case of a provision for asset dismantling/site restoration costs, again no adjustment by some likelihood percentage is needed, but a proper identification and quantification of such costs.
- No provision discounting/unwinding is expected at F7 level. You will be provided with the present value of any estimated future outflows or inflows.

Booking

- Provisions (and probable contingent liabilities provided for) get credited to the SoFP (as liabilities) against a corresponding debit taken to profit or loss (usually, an operating expense).
- Subsequent to initial recognition, provisions are regularly re-assessed based on most recent developments, with any changes (up or down) taken to profit or loss
- Upon incurring the provided for cost, the provision gets used (i.e. it is debited) against a credit of the resource (asset) used to discharge the obligation (commonly cash).
- The only category of provision not to be booked against an expense on the debit side is the provision for non-current tangible asset dismantling/site restoration, which goes debited into the cost of the asset.

IMPROBABLE CONTINGENCIES

- Improbable contingencies (whether assets or liabilities) don't get booked (accounted for) as provisions in the SoFP; instead improbable contingent liabilities (unless if remotely likely) need to be disclosed in the narrative explanatory notes to the financial statements
- Improbable contingent assets don't need to be disclosed



EXAMPLE

- Provision for ongoing litigation: if the compensation requested by the claimant amounts to 10,000 and the likelihood of the Courts deciding in favour of the claimant is estimated by the management (normally, based on legal advice) at 75%, most commonly a provision will be set for 10,000, against a corresponding debit expensed to profit or loss. In a more aggressive approach, the provision will be set at 7,500 ($10,000 \times 75\%$), with constant monitoring of the estimated likelihood of adverse court decision. If such likelihood drops below 50%, the provision is reversed (i.e. debited) against the credit taken to profit or loss. Otherwise, upon settlement of the liability (say, for 9,000), the provision is used (i.e. debited) against a credit in Cash, with the difference between the amount provided for and the amount actually paid out being taken to profit or loss (that is 1,000 credited to profit or loss under the first more common approach, or 1,500 debited to profit or loss under the second more aggressive approach).
- Provision for extended product warranty: for a car dealer offering extended warranty period to its customers, the provision to be booked if there are 100,000 sold cars within the extended warranty period as at the reporting date, if the average repairs cost per car within that period amounts to 60 and if the likelihood of car coming for repairs in within the extended warranty period is 20% would amount to 1.2 million ($100,000 \times 60 \times 20\%$).
- Restructuring provision: if estimated restructuring costs approved by the management amount to 1 million, of which 100,000 budgeted for retraining and relocating continuing staff and 200,000 expected future operating losses which will be incurred until full implementation of a new distribution network, the restructuring provision would amount to 700,000 and it is eligible for booking at year-end only if the restructuring plan was communicated to all those affected.

Chapter 7

Financial Assets and Financial Liabilities



START The Big Picture

Financial assets and financial liabilities are two of the four defined types of financial instruments. When two entities are parties in a contract, if that contract generates recognition of a financial asset by one of them and of a financial liability (or equity instrument) by the other, then that contract is a financial instrument.

Most commonly, entity's assets falling under the definition of financial assets are cash and cash equivalents, investments in shares of other entities, trade receivables and loans granted to other entities (such as investments in bonds). Similarly, most common financial liabilities are trade payables and borrowings. It is important to keep in mind that all such items must have a contractual basis to which the reporting entity is a contracting party. For instance, tax payables are not financial liabilities as they don't have a contractual basis.

There are four categories of financial assets and two categories of financial liabilities, all of them being initially recognised at the fair value of the related consideration given or received. Subsequent measurement must be made at either fair value or amortised cost, depending on the specific category of classification. Financial assets measured at amortised cost are subject to regular impairment testing.

For an entity financing its activities by issuing bonds convertible into shares, accounting for such bonds gets slightly more complicated, as they embed an equity element in addition of giving rise to a financial liability in entity's books. In such cases, we talk about compound financial instruments. The basic accounting principle in such scenarios is that the two components of the instruments (the liability component and the equity component) must be quantified separately and accounted for accordingly, with the equity component always being the difference between the consideration received upon convertible bond's issuance and the net present value of the financial liability.

At F7 level, accounting for financial instruments is addressed at a fairly basic level, with the more sophisticated areas like accounting for derivatives and hedge accounting left for your further (P2) studies.

The topic of financial assets and financial liabilities is covered by IAS 32 "Financial instruments: presentation", IAS 39 "Financial instruments: recognition and measurement" and IFRS 7 "Financial instruments: disclosures".



KEY DEFINITIONS

Financial assets = cash, shares of other entities, contractual rights to receive cash or to exchange financial assets/liabilities under potentially favourable conditions (such as trade receivables and investments in bonds), contracts which may be settled by giving up own shares under potentially favourable terms

Financial liabilities = contractual obligations to deliver cash or to exchange financial assets/liabilities under potentially unfavourable conditions (such as trade payables, bank borrowings or bond debt issued), contracts which may be settled by giving up own shares under potentially unfavourable terms.

Compound financial instrument = has both a liability and an equity component, which need to be separated-out and accounted for accordingly (e.g. bond convertible to shares). The equity component is always residual. NB that preference shares are never compound financial instruments: they are either fully equity (if irredeemable, with any declared dividends debited to Equity) or fully liability (if redeemable, with any declared dividends debited to expenses).

Fair value of financial assets/liabilities = quoted price in an active market, or – for financial assets/liabilities for which there is no active market – price established by use of valuation techniques (such as: reference to recent similar transactions or current value of similar instruments, or discounted cash flow analysis based)

Amortised cost of financial assets/liabilities = fair value upon initial recognition – repayments of principal +/- cumulative amortisation of difference between initial fair value and maturity amount, calculated based on the effective interest method – any impairment allowance.

Effective interest rate ("EIR") = the rate that discounts estimated future cash payments or receipts (through financial asset's/liability's maturity) down to its present carrying amount. It is always given in the question.

Effective interest method ("EIM") = method of calculating amortised cost and allocating interest income/expense over the life of the financial asset/liability, based on effective interest rate.



KEY WORKINGS

WORKING OUT FINANCIAL ASSET'S/LIABILITY'S FAIR VALUE ON INITIAL RECOGNITION

- That's the cash consideration received/paid, net any issue/transaction costs and discounts offered on instrument's issuance. For instance, for a bond issue with a nominal value of 500,000 issued at a discount of 5% and incurring issue costs of 15,000 will be initially recognised at 460,000 (that is, $500,000 - 25,000 - 15,000$)

SELECTING THE RIGHT SUBSEQUENT MEASUREMENT RULE, ACCORDING TO ITEM'S CLASSIFICATION

- Make sure you get familiar with the following summary

Financial assets

Class	Subsequent measurement rule
At fair value through P/L (e.g. shares of quoted entities held for trading, other short-term placements in quoted securities)	Fair value (through profit/loss)
Held to maturity (e.g. long-term investments in quoted bonds or in mandatorily redeemable preference shares)	Amortised cost
Loans & receivables (e.g. trade receivables, unquoted loans granted to third parties)	Amortised cost
Available for sale (e.g. shares of quoted/unquoted entities, not held for trading)	Fair value (through Equity)

Financial liabilities

Class	Subsequent measurement rule
At fair value through P/L (e.g. bonds issued with a view of repurchase in the near term)	Fair value (through profit/loss)
Other (e.g. own mandatorily redeemable preference shares, long-term bonds issued)	Amortised cost

CALCULATING BONDS' AMORTISED COST & ALLOCATING INTEREST BASED ON EIM. CAPTURING CALCULATION'S RESULTS IN THE FINANCIAL STATEMENTS

- For a bond issue, work this out based on the following pro-forma (issuer's perspective):

(1)	(2)	(3)	(4)	(5)	(6)
Period	Opening Balance	Interest charge @EIR	Interest paid @Coupon rate	Principal paid	Closing Balance
1	X ⁽¹⁾	X	(X) ⁽²⁾	Nil	X
2	X	X	(X) ⁽²⁾	Nil	X
3	X	X	(X) ⁽²⁾	Nil	X
...
N	X	X	(X) ⁽²⁾	(X) ⁽³⁾	Nil

Notes:

- X⁽¹⁾ = Bonds' nominal value (NV) – discounts at issue – issue costs
- = (2) * EIR%; it goes as interest expense in related period's SoCI
- X⁽²⁾ = NV * Coupon rate% (equal amounts every period)
- X⁽³⁾ = NV + NV * Premium rate% (if any); commonly, there are no partial principal repayments over bonds' life
- (6) = (2) + (3) + (4) + (5)

BREAKING CONVERTIBLE BOND PER LIABILITY AND EQUITY COMPONENTS, AND ACCOUNT FOR EACH COMPONENT ACCORDINGLY

- Liability component = Present value of future cash outflows if the bond is not converted
- Present value of future cash outflows = recurring interest paid @ coupon rate + capital repayment on bond's maturity, discounted at EIR (often given as "market rate for similar non-convertible bonds")
- Equity component = Net cash received upon bond issuance – Liability component
- Accounting initial recognition: Net cash received upon bond issuance (that is, bonds' nominal value less any discounts at issue and issue costs) is debited to Cash, against a credit in Liabilities (for the Liability component) and in Equity (for the Equity component)
- Accounting subsequent measurement:
 - Liability component is re-measured every period-end at amortised cost (with associated interest charge @ EIR expensed every period) until eventual redemption or conversion
 - Equity component stays unchanged.



EXAMPLE

- Suppose a 4% bond issued at nominal value of 800,000, at 2% discount. Issue costs amount to 14,000. The bonds are set to be redeemed at a premium of 5% in four years time. EIR is 6.23%. What's the outstanding balance of the bond liability at the end of Year 2? What's the interest that the issuer will expense in Year 3? Both required figures come out of the calculation template below (which replicates the above pro-forma):

Period	Opening Balance (2)	Interest charge @6.23% (3)=(2)*6.23%	Interest paid @4% (4)=800k*4%	Principal& premium paid (5)	Closing Balance (6)=sum(2:5)
1	770,000*	47,948	- 32,000	-	785,948
2	785,948	48,941	- 32,000	-	802,888
3	802,888	49,995	- 32,000	-	820,884
4	820,884	51,116	- 32,000	-840,000**	- 0

*) $770,000 = 800,000 - 2\% \times 800,000 - 14,000$

**) $840,000 = 800,000 + 5\% \times 800,000$

- Suppose now that the bond holders can choose to convert it into shares at any time up to maturity and that market rate carried by similar non-convertible bonds is 7.5%. How much is the equity option of this compound instrument and how it is accounted for by its issuer on inception?

Step 1: Work out discounted future cash-outflows (if debt not converted) based on market rate (7.5%). That's

Period Nominal cash outflow Discounted@7.5%

1	32,000	29,767
2	32,000	27,691
3	32,000	25,759
4	872,000	<u>652,954</u>
		736,171

Step 2: Equity option = $770,000 - 736,171 = 33,829$

Step 3: Accounting entry on inception goes like

DR Cash	770,000
CR Bond liability	(736,171)
CR Equity	(33,829)

Chapter 8

Taxation



START The Big Picture

This sub-section starts by briefly refreshing your knowledge of sales tax (F3 topic), and then it moves on to tackle the most key aspects of current and deferred income tax.

Sales tax is an indirect type of tax, i.e. it's not borne by the entity, but by the final users/consumers of the sold goods or services. The entity acts like an agent of the government, collecting it from its customers along with collecting its sales and paying it to its suppliers along with settling its purchases. The net of what's collected from customers and what's paid to suppliers during any given period represents the net sales tax payable/receivable which the entity owes/is due from the government. Sales tax charged to customers/by suppliers is not a revenue/expense to be taken to entity's SoCI, but reflects in credit/debit movements in the sales tax current account (SoFP item). Sales tax is computed as % (sales tax rate) of sales/purchases net value.

Current income tax is a direct type of tax, i.e. it is a current expense incurred for the period by any profit-making entity. Current income tax is calculated as a percentage (income tax rate) of entity's profit before tax, adjusted for any non-allowable expenses and non-taxable income. Current income tax expense (together with any deferred tax expense or income for the period) gets subtracted from entity's profit before tax in determining net financial performance for the period.

Deferred income tax (whether an asset or, more commonly, a liability) reflects expected future tax consequences of current and past transactions and events recognised in the financial statements. Due to accounting rules being different from tax rules in recognising and/or measuring various assets and liabilities, the carrying amounts of such assets and liabilities in entity's SoFP (i.e. their "accounting base") may differ from their respective tax values. If such differences are temporary, a deferred tax effect appears and needs to be accounted for at each-period end, under the "balance-sheet" approach of determining entity's deferred tax position as at period-end. Taxable temporary differences between accounting and tax bases of assets and liabilities generate deferred tax liability elements, whereas deductible temporary differences generate deferred tax asset elements, with the net of them giving entity's deferred tax position (liability or asset) as at period-end. The

period-on-period variance in the deferred tax position gets captured in entity's SoCI for the period, as deferred tax expense or income.

Current and deferred income tax are addressed by IAS 12 "Income taxes".



KEY DEFINITIONS

Taxable profit (tax loss) = accounting profit (loss) before tax, adjusted for tax filing purposes in accordance with tax rules

Current tax = income tax payable/recoverable in respect of taxable profit (tax loss) for the period

Accounting base (of an asset or liability) = carrying amount (of that asset or liability) as per the accounting records

Tax base (of an asset or liability) = amount attributed (to that asset or liability) for tax purposes

Taxable temporary difference = temporary difference between the accounting base and the tax base (of an asset or liability) that will result in taxable amounts in determining future taxable profits (tax losses)

Deductible temporary difference = temporary difference between the accounting base and the tax base (of an asset or liability) that will result in deductible amounts in determining future taxable profits (tax losses)

Deferred tax liabilities = future income tax payables in respect of current taxable temporary differences

Deferred tax assets = future income tax recoverable in respect of current deductible temporary differences and of carried-forward unused tax losses/credits.



KEY WORKINGS

WORKING OUT THE CURRENT INCOME TAX EXPENSE FOR THE YEAR

- **Step 1:** Taxable profit = Accounting profit + Non-allowable expenses for the period – Non-taxable income for the period – Any unused tax losses/credits;
- **Step 2:** Current income tax due for the period = Taxable profit * Income tax rate;
- **Step 3:** Current income tax expense for the period = Current income tax due for the period – Any over-provided prior year's current tax liability reversed in current period + Any under-provided prior year's current tax liability charged to current period.

WORKING OUT THE DEFERRED TAX NET POSITION AT PERIOD-END (UNDER THE BALANCE-SHEET APPROACH) AND THE DEFERRED TAX EXPENSE/INCOME FOR THE PERIOD

- **Step 1:** Take each category of assets and liabilities in balance at period-end and compare accounting base against tax base. E.g. if an equipment was acquired for 10,000 being depreciated 10% straight-line for accounting purposes, but for which 50% accelerated depreciation charge is allowed for tax purposes in Year 1, then equipment's accounting base at the end of Year 1 is 9,000, whereas its tax base is 5,000. Or, if a rental expense in amount of 500 has been accrued for at the end of Year 1 because related to last month of the year, but it will become tax-allowable only in Year 2 when it will be actually paid, then rental payable's accounting base at the end of Year 1 is 500, whereas its tax base is Nil.
- **Step 2:** Take differences identified in Step 1 and determine if temporary or permanent. For instance, both differences exemplified above are of temporary nature. The second difference (the rental expense related) would have been permanent if, for instance, the expense had been stayed non-allowable even upon actual payment because, say, deemed not business related by tax authorities.
- **Step 3:** Take temporary differences identified in Step 2 and determine if taxable or deductible. Use the following rule:

Assets

Accounting Base > Tax Base => Taxable (generates deferred tax liability);

Accounting Base < Tax Base => Deductible (generates deferred tax asset).

Liabilities

Accounting Base > Tax Base => Deductible (generates deferred tax asset);

Accounting Base < Tax Base => Taxable (generates deferred tax liability).

Continuing on the two examples in Step 1, first temporary difference is taxable (DTL generating, as accounting base of an asset exceeds its tax base) and second temporary difference is deductible (DTA generating, as accounting base of a liability exceeds its tax base).

- **Step 4:** Calculate deferred tax position at period-end, by netting-off total taxable temporary differences against total deductible temporary differences and multiplying the result by the applicable tax rate. Continuing on the example above, if we consider a tax rate of 30% and assuming there are no other temporary differences at the end of Year 1, the deferred tax position as at the end of Year 1 amounts to $30\% \times [(9,000 - 5,000) - (500 - 0)] = 1,050$ (net liability)
- **Step 5:** Compare period-end's deferred tax position calculated in Step 4 against the deferred tax position as at the end of prior period (calculated following the same 4 steps approach). Take the difference to profit or loss as deferred tax income/expense. Continuing with the same example, if deferred tax position at the end of Year 0 was 450 (net asset), the deferred tax expense for Year 1 would be 1,500 (1,050 year-end liability plus 450 prior year-end asset which gets reversed in Year 1).



EXAMPLE

Continuing on the example above, suppose that the entity books an allowance for doubtful debts in amount of 2,500 against its gross receivables balance at the end of Year 1. The opening balance of the allowance amounts to 500. Doubtful debts allowance expense is recognised under the tax rules only as related customers formally file for bankruptcy. None of the related customers formally filed for bankruptcy at neither of the two year-ends. How these extra-information impacts deferred tax position at the end of Year 1 and deferred tax expense for the year?

Allowing for the doubtful customers creates a deductible temporary difference at both year-ends (the accounting base of the receivables is reduced below its tax base). The arising deferred tax asset amounts to 750 at the end of Year 1 ($2,500 \times 30\%$) and to 150 at the end of Year 0 ($500 \times 30\%$). Hence, deferred tax position at the end of Year 1 lowers to 300

net liability (1,050-750), whilst at the end of Year 0 deferred tax position increases to 600 net asset (450+150). Consequently, the deferred tax expense to be taken to profit or loss in Year 1 lowers to 900 (300+600).

Chapter 9

Revenue Recognition and Performance Reporting



START The Big Picture

Revenue recognition may arguably be named as “*the*” key issue of financial reporting, as, on the one hand, reported turnover and profits have such a great impact on users’ perception of reporting entity’s business performance and financial strength and, on the other hand, selected accounting policies and management’s estimates, assumptions, conservative or aggressive approach in applying the “*substance over form*” principle”, and business ethics can heavily influence the way revenue is accounted for and financial performance is reported.

The revenue recognition issue was already touched within sub-section (c) of this section of your F7 Express Notes, when addressing accounting for construction contracts. Within this particular sub-section we will expand to addressing particular of revenue recognition from sale of goods are services, emphasising on the application of the “*substantial transfer of risks and rewards*”. Application of the “substance over form” principle will be again visited, in the context of more complex arrangements like consignments, sale & repurchase, sale & leasebacks and factorings.

Then, we move on to performance reporting related aspects, which, to a certain extent, have been already addressed within sub-section (b) of section A of these Notes. At this stage, we will go into greater detail into applying the new key requirements of IAS 1 revised in respect of presenting financial performance under a single Statement of Comprehensive Income or, alternatively, under an Income Statement followed by a Statement of Comprehensive Income. This second part of the sub-section also addresses performance reporting for discontinuing operations and refreshes you on the format and preparation guidance of the Statement of Changes in Equity.

Revenue recognition is specifically addressed by IAS 18 “Revenue”, financial performance reporting is covered, as mentioned, by IAS 1 (R) “Presentation of financial statements” and discontinued operations’ performance reporting is dealt with by IFRS 5 “Non-current assets held for sale and Discontinued operations”.



KEY DEFINITIONS

Risks of ownership = risks generally borne an asset's owner, such as risk of theft or destruction, risk of damage or (temporary) loss of (full) operating capacity. Bearing such risks means incurring the costs of eliminating or keeping under control such risk factors.

Rewards of ownership = benefits generally enjoyed by an asset's owner, such as deciding on asset's purpose, location and manner of usage, and benefiting from asset's usage over (most of) its useful life.

Revenue from sale of goods = to be recognised at fair value of consideration received/receivable if this is measurable, likely to be collected, can be matched against measurable costs incurred in earning it, and when control and significant risks and rewards of ownership are transferred from seller to buyer

Revenue from rendering of services = to be recognised at fair value of consideration received/receivable if this is measurable, likely to be collected, can be matched against measurable costs incurred in earning it, and when stage of service completion can be reliably measured.

Consignment = delivery of inventories, with consignor preserving legal ownership until eventual sale by consignee to final customers, and with consignee having the right to return the goods if sale to final customer is not achieved.

Commonly, the consignor withholds the substantial risks & rewards of ownership, in which case he must recognise revenue from consignment deliveries (and associated cost of sales) only upon occurrence of sale (by consignee) or expiration of consignee's right of return. From a SoFP perspective, consignment inventories stay in consignor's books until the aforementioned cut-off point for revenue/cost of sales recognition.

Sale & repurchase = sale of an asset, with seller able to repurchase at a certain point in the future under certain conditions.

If seller continues to use the asset and has an option to repurchase symmetrically with buyer's option to sell back if there is a fall in value of the asset, then it is more probable that the substance of the arrangement is a loan granted by the buyer to the seller and secured on the asset sold. If the case, the asset stays in seller's SoFP, who will debit sale proceeds

against a loan liability against the buyer, with any difference up to the repurchase price spread over the life of the arrangement as interest expense.

Sale & leaseback = transaction involving the sale of an asset and the leasing back of the same asset.

Depending on whether the leasing back is finance or operating, accounting treatment is different in both lessor's and lessee's books (see Key Workings section below)

Factoring = transfer of receivables to a factor, with factor managing collection and entitled to keep cash-ins as receivables get collected. Instead, transferor receives an advance payment on the value of factored receivables.

Similarly, depending on whether the credit (non-collection) risk is substantially transferred to the factor or not, the receivables are taken-out of entity's SoFP (they are sold) or they stay in entity's SoFP with the cash received from the factor credited to loans (as the arrangement is in substance a loan from the factor, secured on the factored receivables).

Statement of Comprehensive Income = under the single statement option available for financial performance presentation, a structured representation of entity's financial performance for the reporting period setting out all non-owner changes in equity.

Income Statement = under the two statements option available for financial performance presentation, a structured representation of entity's income and expenses taken to profit or loss for the reporting period, presented immediately before the Statement of Comprehensive Income. Income Statement's bottom line ("profit/loss for the period") comes as top line of the Statement of Comprehensive Income under the two statements presentation option.

Other Comprehensive Income = section of the Statement of Comprehensive Income (under both financial performance presentation options) including non-owner changes in equity not taken to profit or loss due to requirements of specific standards, such as revaluation gains or losses on property, plant and equipment or gains and losses on re-measuring available-for-sale financial assets.

Statement of changes in shareholders' equity = a structured representation of capital contributions by/distributions to entity's owners for the reporting period, as well as of total comprehensive income for the period and of effects of any prior-year restatements on the opening equity.

Discontinued operations = line of business, geographical area of operations or subsidiary, that has been disposed of in the period or it is classified as held for sale.



KEY WORKINGS

WORKING OUT ACCOUNTING ENTRIES FOR SALE & LEASEBACK AGREEMENTS

Finance leaseback

- Seller-lessee:
 - Step 1: Sold asset is credited out of the PPE at its carrying amount, against debiting Cash for the sale proceeds. The difference is credited / debited to the SoFP as deferred income/cost, and then released to P/L over asset's remaining useful life along with depreciation.
 - Step 2: Sold asset is debited back (reinstated) into PPE at its cash value (sale proceeds), against crediting Finance lease liability.
 - No Sale revenue recorded in income for the period.
 - Lease instalments paid-out over the lease term are split per capital and interest elements based on the actuarial method (see sub-section (b)), then accounted for accordingly (capital element debited against Finance lease liability in SoFP and interest element debited to Profit or Loss as Interest charge)
- Buyer-lessor
 - Purchase price paid to seller-lessee is credited out the Cash against debiting Finance lease receivables
 - No PPE acquisition recorded in SoFP
 - Lease instalments received-in over the lease term are split per capital and interest elements based on the actuarial method (see sub-section (b)), then accounted for accordingly (capital element credited against Finance lease liability in SoFP and interest element credited to Profit or Loss as Interest income)

Operating leaseback

- Seller-lessee
 - Normally recorded sale revenue, gain/loss on disposal of PPE and operating rental expenses
- Buyer-lessor
 - Normally recorded PPE acquisition and operating rental income

DRAFTING AND FILLING-IN THE SOCI/INCOME STATEMENT & SOCI PRO-FORMAS

- Remember from your F3 studies that there are two options available for presenting operating expenses: by function and by nature
- Under the single statement approach, a typical SoCI pro-forma for an individual entity, with operating expenses presented "by function", may look as follows:
 - SoCI for the year ended 31 Dec 200X

Revenue	X
Cost of sales	(X)
Gross profit	X
Other income	X
Distribution costs	(X)
Administrative expenses	(X)
Other expenses	(X)
Interest revenue	X
Interest expense	(X)
Profit before tax	X
Income tax expense	(X)
Profit for the year from continuing operations	X
Loss for the year from discontinued operations	(X)
Profit for the year (1)	X
Other comprehensive income	
Fair value re-measurement of available-for-sale financial assets	X/(X)
Revaluation surplus on property	X
Income tax relating to other comprehensive income	(X)
Other comprehensive income for the year, net of tax (2)	X
Total comprehensive income for the year (3) = (1) + (2)	X

- If presented "by nature" the part from top line "Revenues" down to line "Profit before tax" may look as follows:

Revenue	X
Changes in inventories	X/(X)
Other operating income	X
Costs of materials and services	(X)
Staff costs	(X)
Depreciation, amortisation and impairment	(X)
Other operating expense	<u>(X)</u>
Profit from operating activities (1)	X
Interest income	X
Interest expense	<u>(X)</u>
Financial result (2)	X
Profit before tax (3) = (1) + (2)	X

- Remember from your F3 studies that line "Changes in inventories" (part of the "Cost of Sales" line under the "by function" presentation) comes with a "-" (adverse impact on operating profit) if Opening inventories > Closing inventories and with a "+" (favourable impact on operating profit) if Opening Inventories < Closing inventories.
- Under the two statements approach, the part from the top line "Revenues" down to line "Profit for the year" is separated out under the heading "Income statement for the year ended 31 Dec 200X", with the remaining part left under the heading "Statement of comprehensive income for the year ended 31 Dec 200X" and showing the bottom line of the Income Statement as its own top line (above the "Other comprehensive income" heading).

DRAFTING AND FILLING-IN THE SOCIE PRO-FORMA

- A typical SoCiE pro-forma for an individual entity may look like as follows:

	Share Capital (1)	Retained Earnings (2)	Revaluation Reserve (3)	Total (4)
As at year-start	X	X	X	X
New shares issued in the year	X	-	-	X
Dividends distributed in the year	-	(X)	-	(X)
Profit for the year	-	X ⁽¹⁾	-	X ⁽¹⁾
Other comprehensive income for the year	-	X	X	X ⁽²⁾
As at year-end	X	X	X	X

Notes:

- (4) = (1) + (2) + (3);
- The figures in the top line "As at year-start" should coincide with the respective Equity balances shown in entity's SoFP (comparative period's column);
- The figures in the bottom line "As at year-end" should coincide with the respective Equity balances shown in entity's SoFP (current period's column);
- (1): the figure should coincide with the one shown in line "Profit for the year" shown in entity's SoCI (current period's column);
- (2): the figure should coincide with the one shown in line "Other comprehensive income for the year, net of tax" shown in entity's SoCI (current period's column).

PRESENTING DISCONTINUED OPERATIONS IN THE SOCI/INCOME STATEMENT

- As visible in the SoCI pro-forma set out above, the post-tax profit/loss from discontinued operations is presented separately on the face of the SoCI, just above the "Profit/loss for the year" line.



EXAMPLES

CONSIGNMENT INVENTORY

Question: Danny, motor vehicle dealer, gets invoiced by his wholesaler Willy at the time of each delivery to Danny's showroom, with Danny not required to pay until he sells to a final customer. There is no interest element in the price charged to Danny. The dealership agreement says that the legal ownership passes from Willy to Danny only when Danny pays Willy. If the final sale doesn't happen within 3 months, Danny is entitled to return the car to Willy. However, in the ten years period for which the dealership agreement has been in place, no return happened as Danny always managed to eventually sell all the cars in stock and was keen to avoid Willy withdrawing his dealer license for not reaching minimal purchase volumes set by the dealership agreement. What is the cut-off point for car sale revenue recognition in Willy's books?

Answer: that's rather borderline, but cut-off point should nevertheless be billing date. Three months post-billing date for cars still with Danny wouldn't be OK because the right of return is unlikely to be exercised given contractual clauses and actual history. Payment date (legal ownership transfer date) wouldn't be OK as well, according to IAS 18.

SALE & LEASEBACK

Question: bearing in mind the relevant workings set-out above, suppose that Sam sells its office to Bob for 9,000 cash and leases it back. The office was purchased 5 years before for 10,000 and has been depreciated 4% per annum straight line. The lease term is 18 years and provides for an annual rental of 850 payable in arrears. Internal rate implicit to the lease is 6.3%. How is the arrangement accounted for in Sam's books? What's arrangement's income statement capture in Sam's books in the third year of the lease?



ANSWER

- The leaseback qualifies for a finance leaseback, as it covers most of asset's remaining useful life and the cash value of the asset is similar to net present value of minimum lease payments (see sub-section (b) of these Notes). Upon arrangement's inception, Sam will book the following entries:

DR Cash	9,000
DR Buildings – Accumulated depreciation	2,000 (10,000 * 4% * 5)
CR Buildings-cost	(10,000)
CR Deferred income	(1,000) (balancing figure)

And

DR Buildings – cost	9,000
CR Finance lease liability	(9,000)

- Arrangement's income statement capture in Year 3 has three components:
 - Asset's depreciation charge: $9,000 / 18 = 500$ (the asset is depreciated over the lower of lease term and remaining useful life, that is lower of 18 and 20, i.e. 18)
 - Deferred profit on sale released in the year: $1,000 / 18 = 56$
 - Lease interest charge for Year 3 amounts to 530:

Period	Due at Period-start	Interest @6.3%	Instalment Paid	Due at Period-end
1	9,000	567	(850)	8,717
2	8,717	549	(850)	8,416
3	8,416	530	(850)	8,096

- To sum-up, arrangement's net capture in Sam's financial performance for Year 3 amounts to: $500 - 56 + 530 = 973$ (net expense). If the arrangement didn't exist, the income statement capture would have been limited to 400 (annual depreciation). The difference up to 973 is the extra-cost that Sam accepted to incur in order to get the 9,000 cash at the end of year 5 of asset's life and continue to use it.

Chapter 10

The Statement of Cash Flows



START The Big Picture

The statement of cash flow shows entity's ability to generate net cash from its operating activities and how such net cash is used in investing and/or financing activities. Some say that, for this reason and also because it is more objectively determined and free from professional judgements and from the impact of various accounting policies, statements of cash flow are more relevant than statements of comprehensive income (income statements) in terms of providing a real view of company's financial strength. Moreover, statements of cash flow help users in developing models to assess and compare the present value of future cash flows of different entities, and give indications on the amount, timing and certainty of such future cash flows. Still, statements of cash flow statements remain limited in reflecting the longer-term viability of the business are themselves prone to manipulation, particularly by "playing around" with working non-cash capital (inventories, receivables, payables) towards reporting period-ends.

The statement of cash flow pro-forma has three sections, corresponding to the three types of activities that any entity undertakes: (a) operating (basically, cash-in from sales and cash-out from paying current expenses including interest and tax), (b) investing (basically, cash-out to buy fixed assets and shares and cash-in from assets' disposals and from dividends and interest received), and (c) financing (basically, cash-in from capital paid-in by entity's shareholders and from bank loans drawings, and cash-out from repaying bank loans and from paying-out dividends to the shareholders). The basic maths is that, by adding-up the net cash movement related to each of the three types of activities, you should end up with the year-on-year variance in the cash & cash equivalents balance, as reflected in entity's SoFP: $\text{net operating cash flows} + \text{net investing cash flows} + \text{net financing cash flows} = \text{closing balance} - \text{opening balance of cash \& cash equivalents}$.

There are two accepted methods to determine and present the operating section of the statement of cash flows: the direct method and the indirect method. Under the indirect method (the most frequent method of preparing and presenting the cash flows from operating activities, and the examinable one), you calculate the net cash flows from operating activities by adjusting the profit before tax for the non-cash operating items (typically, the depreciation and amortisation charges, the expenses with bad and doubtful debts and with obsolete inventories, any fair value gains or losses) and for the items dealt

with further down the statement of cash flows (like interest expense or gains/losses from selling fixed assets). Then, the figure so obtained is further adjusted for the year-on-year variances in the non-cash working capital. Finally, interest paid and tax paid are subtracted, to obtain the net cash flows from operating activities.

The statement of cash flows is one of the five mandatory components of a full set of financial statements. Preparation and presentation guidance related to cash flows are covered by *IAS 7 "Statement of Cash Flows"*.



KEY DEFINITIONS

Cash = Cash on hand and bank deposits cashable on demand

Cash equivalents = Short-term, highly liquid investments readily convertible (in practice, within 3 months) to known amounts of cash insignificantly exposed to the risk of change in value

Operating activities = principal revenue-producing activities of the entity and other sundry activities which are not investing or financing

Investing activities = acquisition and disposal of non-current assets and non-cash investments

Financing activities = activities resulting in the change of size and composition of owner-contributed and of borrowed capital.

Cash flows = inflows and outflows of cash and cash equivalents arising from entity's operating, investing and financing activities.



KEY WORKINGS

DRAWING UP A PROPER PRO-FORMA AND PLUGGING IN THE EASY FIGURES

Make the effort to memorize the pro-forma statement of cash flows, with the operating section drawn up under the indirect method.

Operating cash flows

Profit/ (loss) before tax	(PBT)	X/(X)
Adjustments for:		
Depreciation, amortisation & impairment	X	
Allowances for obsolete inventories	X	
Allowances for doubtful & irrecoverable receivables	X	
Gain/ (loss) on disposal of non-current assets	(X)/X	
Gain/(loss) on revaluation of investment property	(X)/X	
Income from government grants	(X)	
Interest income	(X)	
Dividend income	<u>(X)</u>	
Operating profit/ (loss) before working capital changes		X/(X)
(Increase)/decrease in inventories (gross)	(X)/X	
(Increase)/decrease in receivables (gross)	(X)/X	
Increase/ (decrease) in payables	<u>X/(X)</u>	
Cash generated from operations		X/(X)
Interest paid	(X)	
Tax paid	<u>(X)</u>	
Net operating cash flows (1)		X/(X)
<i>Investing cash flows</i>		
Payments to acquire non-current assets		(X)
Proceeds from sale of non-current assets	X	
Interest received	X	
Dividends received	<u>X</u>	
Net investing cash flows (2)		X/(X)
<i>Financing cash flows</i>		
Capital payments-in by shareholders	X	
Dividends payments-out to shareholders	(X)	
Drawings from borrowings	X	
Repayments of borrowings	(X)	
Government grants received	<u>X</u>	
Net financing cash flows (3)		X/(X)
Net variance in cash & cash equivalents (4) = (1) + (2) + (3)		X/(X)
Cash & cash equivalents at beginning of the period (5)		X/(X)
Cash & cash equivalents at end of the period (6) = (4) + (5)		X/(X)

Notes:

- PBT and all the adjustments to it down to operating profit before WoC changes come straight from entity's SoCI/Income statement
- You work out WoC changes simply by netting-off closing balances against opening balances as per entity's SoFPs as at beginning and end of the period, after grossing receivables up for any allowances
- Capital payments-in by shareholders include proceeds from ordinary share issue (including any share premium paid-in) and from any rights issue
- Dividends paid to holders of redeemable preference shares go under the operating section as "interest paid", rather than being assimilated to dividends paid to ordinary shareholders under the financing section
- (5) and (6) must coincide with the respective figures reported in entity's SoFP for beginning and end of period (Cash & Cash equivalents line of the Current assets section of the SoFP).

NOT MESSING UP SIGNS IN PLUGGING-IN WOC CHANGES

- An increase in receivables has an adverse effect on the operating cash flows, as less cash has come in from entity's customers (so, it's captured with a minus in the cash flow statement);
- An increase in payables has a favourable effect on the cash flows, as the entity withheld the cash instead of paying it out to its suppliers (so, it's captured with a plus in the cash flow statement);
- An increase in inventories has an adverse effect on the cash flows, as cash was frozen in unsold stocks instead of staying liquid (so, it's again captured with a minus in the cash flow statement).
- And vice-versa for the three of them, if they vary in the opposite way.

WORKING-OUT THE PAYMENTS AND RECEIPTS TO BE PLUGGED-IN

You need to be comfortable with accounting equations and T accounts in deriving the cash movements in and out that need to be captured in the proper place in the statements of cash flows pro-forma statement. For instance, based on the figures available in entity's SoFP and/or SoCI, you should get used to quickly derive items such as:

- interest paid (goes with a minus in the operating section) = interest expense - closing accrued interest payable + opening accrued interest payable

- tax paid (goes with a minus in the operating section) = current tax expense - closing current tax payable + opening current tax payable
- payments to acquire non-current assets (go with a minus in the investing section) = closing NCA balance - opening NCA balance + net book value of disposed assets + depreciation & amortisation expense + impairment loss - revaluation gain from revaluing fixed assets + opening payables to fixed asset suppliers - closing payables to fixed asset suppliers – capital grants received (if subsidised assets accounted for at full cost).
- proceeds from disposals of fixed assets (go with a plus in the investing section) = gain/loss from disposal of fixed assets + net book value of disposed assets
- dividends received (go with a plus in the investing section) = dividend income + opening dividend receivable - opening dividend receivable
- dividends paid (go with a minus in the financing section) = dividend declared + opening dividend payable - closing dividend payable

Chapter 11

Consolidated Financial Statements

Please note that this chapter will follow in the next version of these notes. Please contact info@theexpgroup.com for details of when the next version will be released.

Chapter 12

Calculation and Interpretations of Accounting Ratios



START The Big Picture

Various categories of financial statements' external users are interested in different things when they look at a set of financial statements: existing shareholders are interested if they invested well their capital compared to other alternatives and if any further capital payments-in are likely to provide rates of return superior to other placements. This is also the main interest of the potential investors in entity's shares. Suppliers are interested if they incur any significant credit risk by continuing to supply the entity with goods or services, and customers want to learn if the entity is a reliable supplier charging appropriate prices. Banks and creditors want to know if they will get their loans back and if the entity is solvent enough and it has enough non-restricted assets to sign-up for even more loans. Competitors are interested in measuring their own performance and financial health against the one reported by the entity and in spotting out what are entity's strategic moves in the future. Staff and trade unions wants to know if their jobs are stable and if company's profitability would allow any pay rises. Academics, students, business press or various institutes may be interested in extracting data and information for various research projects, surveys or statistics. Central and local government agencies are interested if the entity is a correct and reliable healthy profit-making tax payer and if voting citizens are happy with entity's impact on the local economy and community.

Ratio analysis addresses these various interpretation needs, through calculating a series of accounting ratios based on the figures reported in the financial statements, and enabling subsequent entity-to-entity or time-to-time comparison and/or corroboration of these ratios. Overtrading or bad working capital management are examples of problems which ratio analysis is likely to spot out.

Accounting ratios can be grouped in four main categories: (1) profitability ratios, (2) liquidity/working capital ratios, (3) solvency ratios and (4) investor ratios.

One of the most highly regarded investor ratios, particularly applicable to quoted entities, is "Earnings per Share" ("EPS"), which is a measure of earnings available to ordinary

shareholders for each share they own; one specific accounting standard (*IAS 33 "Earnings per share"*) has been issued to provide guidance for EPS calculation and interpretation. EPS are often used by finance analysts to share price evolution by multiplying most recently published EPS by the Price per Earnings (P/E) ratio of the entity, which is deemed fairly constant over time, if economic circumstances don't change significantly.



KEY DEFINITIONS

Profitability = entity's ability to earn more than what it costs to generate the earnings

Liquidity = entity's ability to generate enough cash to meet its business needs

Working capital = cash, cash equivalents and non-cash assets and liabilities expected to turn into cash inflows/outflows within one year (that is, inventories, current receivables and current payables)

Solvency = entity's ability to settle its liabilities as they fall due

Financial structure = the balance between equity capital and long-term borrowed capital

Rights issue = issue of ordinary shares to existing shareholders, at a price below market; a 1:x \$1 rights issue means that 1 new share is offered at a price of \$1 for each x shares held

Cum-rights share price ("CRP") = market price of the share before the rights issue (given in the question)

Theoretical ex-rights share price ("TERP") = market price of the share after the rights issue (needs to be calculated; always lower than CRP)

Bonus issue = issue of free shares to existing shareholders; a 1:x bonus issue means that 1 new share is offered free for each x shares held

Share options & warrants = financial instruments giving the holder the right to buy shares during a pre-determined exercise period at a pre-determined exercise price.

Potential ordinary shares = bond debt/preference shares convertible into ordinary shares, and share options & warrants

Basic earnings per share ("EPS") = financial performance ratio obtained by dividing:

- The numerator: net profit for the period from continuing operations attributable to ordinary shareholders, to
- The denominator: weighted average number of ordinary shares in issue for the period

Diluted earnings per share ("DEPS") = financial performance ratio required to entities having potential ordinary shares in issue, obtained by dividing:

- The numerator: EPS numerator + dividend/interest incurred in respect of preference shares/convertible bonds
- The denominator: EPS denominator + weighted average number of new ordinary shares if all potential ordinary shares are converted



KEY WORKINGS

PROFITABILITY RATIOS

- **Gross Margin ("GM")** = [Gross profit / Sales revenue] (%);
 - Interpretation: margin made on sales, before consideration of distribution, administrative and finance costs
 - Sensitive to selling prices, sales mix, purchase/production costs, inventory valuation model
- **Operating (Trading) Margin ("TM")** = [PBIT / Sales revenue] (%)
 - PBIT = profit before interest and tax (operating profit)
 - If it doesn't vary in line with GM, it may mean that fixed operating costs are too high compared to variable operating costs
- **Return On Capital Employed ("ROCE")** = [PBIT / Capital Employed] (%);
 - Capital Employed = [Equity + Non-current borrowings] OR [Total assets – Current liabilities] OR [Non-current assets + Working capital].
 - It measures the revenue generating efficiency of entity's assets
- **Net asset turnover ("NAT")** = [Sales revenue / Capital employed] (times)
 - NAT = Non-current assets' turnover + Working capital turnover
 - Volume-based or labour intensive businesses achieve low GM/TM and high NAT
- $ROCE = NAT * TM$

LIQUIDITY / WORKING CAPITAL RATIOS

- **Current ratio** = $[\text{Current assets} / \text{Current liabilities}] : 1$
 - If too much over 1:1, it may mean too large inventories or underinvestment in capital assets)
- **Quick ratio** = $[(\text{Current assets} - \text{Inventories}) / \text{Current liabilities}]$
 - A below 1:1 quick ratio may be normal for FMCG businesses (like retailers)
- **Inventory turnover** = $[\text{Gross Inventories} / \text{Cost of Sales}] * 365 \text{ (days)}$
 - Influenced by complexity of production process and by ordering/delivery management, given the nature of traded inventories and market circumstances
- **Receivables collection period** = $[\text{Gross Trade receivables} / \text{Credit sales}] * 365 \text{ (days)}$
 - Influenced by entity's credit policy/early settlement incentives given, considering the type of business and market circumstances
- **Payables payment period** = $[\text{Trade payables} / \text{Credit purchases}] * 365 \text{ (days)}$
 - Influenced by entity's bargaining power/early settlement incentives received, given market circumstances
 - Should not fall below receivables collection period, but should not go up to impairing entity's reputation

SOLVENCY RATIOS

- **Debt to Equity ratio** = $[\text{Long-term Debt} / \text{Equity}] (\%)$, or $[\text{Long-term Debt} / (\text{Equity} + \text{Long-term Debt})]$
 - Long-term Debt includes Preferred Share Capital
 - Higher the ratio, higher the gearing, that is both higher insolvency risk and higher potential rewards (relative to capital invested) available to shareholders if profits are growing;
 - Lower the ratio, lower the gearing, which means that the entity may use too much equity capital relative to available (cheaper) loan capital.
- **Interest cover** = $[\text{PBIT} / \text{Interest payable}]$
 - It's a measure of ability to pay current interest due to creditors out of current operating profits
 - Generally, if it falls below 2 it indicates possible solvency problems

INVESTOR RATIOS

- **EPS/DEPS** -> see relevant key-definitions above and relevant key-workings below
- **P/E ratio** = [Current share price / Latest EPS]
 - It reflects market perception of entity's business prospects
- **Dividend yield** = [Dividend per share / Current share price]
 - Lower the yield, higher the dividend growth that investors may expect
- **Dividend cover** = [Profit after tax / Dividends]
 - Lower the cover, more the entity is consuming from past earnings to pay-out current dividends, therefore more likely that dividend level will fall in the nearer future

BASIC EPS CALCULATION

Step 1: Derive ratio's numerator ("after-tax profit for the year from continuing operations, attributable to ordinary shareholders") based on information provided in the question;

Step 2: Work out ratio's denominator ("weighted average number of ordinary shares in issue for the year"). If there are no capital changes (shares issue, bonus issue, rights issue) in the period, ratio's denominator is strictly equal to the number of shares in issue at year-start and year-end. Otherwise, you work out ratio's denominator depending on the type of capital change(s) during the year, taking the following steps:

- **Step 2.1:** If there is a 1:x bonus issue in the year, compute the "bonus fraction": $BF = (1+x)/x$. BF is always > 1 .
- **Step 2.2:** If there is a 1:x rights issue in the year, with MP current market price of ordinary shares and EP exercise price for the right ($EP < MP$)
 - Compute "theoretical ex-rights price": $TERP = (1*EP + x*MP)/(1+x)$
 - Compute the "rights fraction": $RF = CRP/TERP$. RF is always > 1
- **Step 2.3:** Compute the weighted average number of ordinary shares in issue for the year using the following pro-forma:

Period Start	Period End	Capital change at Period-End	Number of months in the Period	Shares in issue at Period-Start	Number attributable to the Period
(1)	(2)	(3)	(4)	(5)	(6)
Jan-0X	M1-0X	Share issue (say)	N1	X0	$X0 * (N1/12) * BF * RF$
M1-0X	M2-0X	Rights issue (say)	N2	X1	$X1 * (N2/12) * BF$
M2-0X	M3-0X	Bonus issue (say)	N3	X2	$X2 * (N3/12)$
M3-0X	Dec-0X	-	<u>N4</u>	X3	<u>$X3 * (N4/12)$</u>
			12		X5

Notes:

- The number of lines in the pro-forma is always equal to the number of capital changes in the year + 1;
- The total to column (4) is always 12;
- X0 (first figure in column (5)) is always the total number of shares at year-start, whereas X3 (last figure in column (5)) is always the total number of shares in issue at year-end; $X3 > X2 > X1 > X0$;
- When there's a bonus issue (a rights issue) during the year, "the number of shares attributable to the Period" in column (6) must be multiplied by the BF (the RF) for all prior periods (that is, prior lines in the pro-forma)
- **X5** (the total to column (6)) is the weighted average number of ordinary shares in issue for the year, that is the denominator of the EPS ratio;

Step 3: Work out the Basic EPS ratio by dividing ratio's numerator (calculated in Step 1) to ratio's denominator (calculated in Step 2)

DILUTED EPS CALCULATION

It applies only to entities having in issue one or more of the following types of financial instruments: convertible bonds, convertible preferred shares, share options or warrants.

Step 1: If there are convertible bonds or convertible preferred shares in issue:

- **Step 1.1:** Compute ratio's numerator by adding back to the basic EPS numerator the after-tax profit savings from interest/preferred dividend savings if the bonds / preferred shares were converted

$$\text{DEPS numerator} = \text{Basic EPS numerator} + \text{Post-tax interest/preferred dividend saved}$$

- **Step 1.2:** Compute ratio's denominator by adding to the basic EPS denominator the number of new ordinary shares if all bonds/preferred shares are converted under the most dilutive available terms (e.g. at the available best ratio of new ordinary shares received for a given converted amount)

DEPS denominator = Basic EPS denominator + Number of new shares if full conversion at best possible conversion ratio

Step 2: If there are share options or warrants in issue:

- **Step 2.1:** Ratio's numerator is the same with the one computed for basic EPS calculation, as conversion does not affect earnings

DEPS numerator = Basic EPS numerator

- **Step 1.2:** Compute ratio's denominator by adding to the basic EPS denominator the number of new ordinary shares, which the option/warrant holders would get for free in case they would exercise in full their conversion option at the stated exercise price (EP), instead of paying-out the same amount of money to buy shares from the capital market at their average market price (MP):

DEPS denominator = Basic EPS nominator + $NS \cdot (MP - EP) / MP$

Notes:

- NS = total number of ordinary shares issued to option/warrant holders if they convert in full
- $MP > EP$ (otherwise, the options are not in the money, therefore the conversion wouldn't rationally take place)

Step 3: Work out the Diluted EPS ratio by dividing ratio's numerator (adjusted as per Step 1.1) to ratio's denominator (adjusted as per Steps 1.2 and 2.2)



EXAMPLE

ACCOUNTING RATIOS

A full ratio analysis example would not fit here, so make sure that you get familiar with the calculation formula above, with the purpose and meanings of each particular ratio, and that, consequently, you are able to produce reasonable comments on the specific results, corroborating as necessary various financial performance indicators among them and deriving broader comments on the overall financial performance of the entity and on any possible problems (such as overtrading, poor working capital management, or inadequate financial structure)

EPS CALCULATION

If an entity reporting net profits of \$4 million at year-end had 1.5 million \$2 ordinary shares in issue at year-start, followed by a 2:5 bonus issue on 30 April, a full price share issue of 1 million shares on 31 August, and a 1:10 \$1.5 rights issue on 30 November (market price of shares on rights issue date: \$2.5), EPS for the year will be calculated as follows:

Step 1: EPS numerator = \$4 million

Step 2:

- **Step 2.1:** $BF = (2+5)/5 = 1.40$
- **Step 2.2:**
 - $TERP = (1*1.5 + 6*2.5)/(1+6) = 2.36$
 - $RF = 2.5/2.36 = 1.06$
- **Step 2.3:**

Period Start	Period End	Capital change at Period-End	Number of months in the Period	Shares in issue at Period-Start	Number attributable to the Period
(1)	(2)	(3)	(4)	(5)	(6)
Jan	Apr	Bonus issue	4	1.50m	$1.50*(4/12)*1.40*1.06$

May	Aug	Share issue	4	2.10m	$2.10 \times (4/12) \times 1.06$
Sep	Nov	Rights issue	3	3.10m	$3.10 \times (3/12)$
Dec	Dec		<u>1</u>	<u>3.41m</u>	<u>$3.41 \times (1/12)$</u>
			12		2.5432

Step 3: $\text{EPS} = \$4\text{m} / 2.54\text{m} = \1.5728

DEPS CALCULATION

Continuing on the example above, suppose that the entity has 5% 1.25m bond debt in issue, convertible at \$95 nominal share capital for \$100 bond par value if converted within 1 year from reporting date, and at \$80 nominal share capital for \$100 bond par value if converted between 1 and 2 years from reporting date. The entity also has 0.75m share options in issue, at an exercise price of \$2.2 per share issued for each converted option. Shares' market value as at 30 November reflects average market price for the whole year. Income tax rate is 30%. DEPS for the year will be calculated as follows:

Step 1:

- **Step 1.1:**
DEPS numerator goes up by 0.4375\$m ($5\% \times 1.25$, net of 30% tax)
- **Step 1.2:**
DEPS denominator goes up by 1.1875m ($95/100 \times 1.25$)

Step 2:

- **Step 2.1:** No effect on DEPS numerator
- **Step 1.2:**
DEPS denominator goes up by 0.09m ($0.75 \times (2.5 - 2.2) / 2.5$)

Step 3: $\text{DEPS} = (4\$m + 0.4375\$m) / (2.5432m + 1.1875m + 0.09m) = \1.0584

Chapter 13

Limitations of Financial Statements' Interpretation Based on Ratio Analysis



START The Big Picture

Firstly, ratio analysis has very limited predictive value, as based on historical information and ignorant of management's intentions and future actions. Moreover, in inflationary economies, confirmatory value of ratio analysis (largely historical cost based) and of time-to-time comparative analysis of historical financial information is limited accordingly.

The relevance of entity-to-entity comparative analysis based on ratios is also limited as financial information included in the financial statements (and used for ratio analysis) is heavily influenced by the accounting policies adopted by reporting entities and by management's professional judgement, which may differ significantly according to entity-specific business circumstances and market conditions.

Secondly, the figures used in ratio analysis may be distorted by significant volumes of related party transactions having occurred artificially and/or at non-market prices.

Thirdly, accounting ratios (underlying figures used by ratio analysis) are prone to manipulation through intentional misstatement techniques, generally referred to as "creative accounting". Management is particularly incentivised to go for such techniques when subject to excessive market pressure, when management's compensation is inadequately linked to reported business performance, or when the importance of achieving short-term performance targets is exaggerated on the expense of longer-terms strategic business objectives.

Last (but far from least), ratio analysis cannot measure all aspects of performance, such as business sustainability, environmental impact of operations, or management's business ethics or social responsibility in a world where the non-financial/alternative measures of performance are becoming increasingly relevant.



KEY DEFINITIONS

Non-financial performance indicators = KPIs included in Operating, Environmental or Social Reports which management may issue along with financial statements, as part of the Annual Report document. E.g. market share, sales volume per customer, wastage per unit of output, CO2 emission reduction ratio, employee turnover, or training time per employee

Alternative performance indicators = financial performance measures (particularly investor interest focused) developed to overcome limitations of some traditional ratios. E.g. Earnings Before Interest, Tax, Depreciation and Amortisation ("EBITDA") (as an approximation to operating cash flows), Free Cash Flows, or Economic Value Added ("EVA").

Related party to an entity = it is controlled by the entity OR it controls the entity OR the entity has significant influence over it OR it has significant influence over the entity OR they are both under common control. Required related party disclosures are covered by IAS 24 "Related party disclosures"

Creative accounting = Regulatory requirements are complied with, but the economic substance of transactions is not adequately accounted for in the financial statements, with the specific purpose of presenting to financial statements' users an "embellished" view of entity financial performance/position.



KEY DEFINITIONS

- Be prepared to discuss limitations of ratio analysis and of historical financial information, possibly in some specific context provided by a scenario based question;
- Make sure you're able to recognise and comment on the creative accounting techniques that may have been used to distort financial statements' interpretation based on ratio analysis. The most common creative accounting techniques include:
 - Capitalising costs instead of expensing them as incurred (e.g. staff training or marketing costs included in some non-current asset's value instead of being taken to profit or loss);

- Smoothing profits by:
 - recognising revenues or expenses too early or too late (e.g. by misstating completion stage in construction contracts, setting an inadequate revenue recognition cut-off date in consignment or sale & repurchase arrangements, or overstating the capital element on the expense of the interest element in finance lease agreements),
 - booking artificial/overstated provisions (e.g. for restructuring or for ongoing litigation) and releasing them to income in later periods
 - unjustifiably changing accounting policies (e.g. switch from FIFO to AVCO in price falling times) or accounting estimates (e.g. setting too high residual values for non-current depreciable assets).

(end of notes)