

ACCOUNTING

PRACTICE QUESTIONS FOR GCMA



Contents

Chapter 1: The context and purpose of financial reporting 5

1 THE PURPOSE OF FINANCIAL STATEMENTS	6
2 ASSETS AND LIABILITIES	9
3 THE IASB'S FRAMEWORK FOR THE PREPARATION AND PRESENTATION OF FINANCIAL STATEMENTS.....	11
4 ACCOUNTING CONCEPTS: GOING CONCERN AND ACCRUALS	16
5 IMPACT OF GLOBALISATION	18
6 INTERNATIONAL ACCOUNTING STANDARDS BOARD (IASB)	19
7 GENERALLY ACCEPTED ACCOUNTING PRACTICE (GAAP)	25
8 OTHER INTERNATIONAL INFLUENCES	26
9 SCOPE AND APPLICATION OF IFRSS	27
10 PROGRESS TOWARDS GLOBAL HARMONISATION	28
11 BENEFITS OF AND BARRIERS TO GLOBAL HARMONISATION	34
12 IFRS 1: FIRST-TIME ADOPTION OF INTERNATIONAL FINANCIAL REPORTING STANDARDS	36
13 THE NEED FOR A CONCEPTUAL FRAMEWORK	39
14 THE IASB CONCEPTUAL FRAMEWORK	40
15 THE OBJECTIVE OF GENERAL PURPOSE FINANCIAL REPORTING	43
16 UNDERLYING ASSUMPTION	44
17 QUALITATIVE CHARACTERISTICS OF USEFUL FINANCIAL INFORMATION	45
18 THE ELEMENTS OF FINANCIAL STATEMENTS	48
19 RECOGNITION OF THE ELEMENTS OF FINANCIAL STATEMENTS.....	49
20 MEASUREMENT OF THE ELEMENTS OF FINANCIAL	51

Chapter 2: Understanding the use of double entry and accounting systems 53

1 BUSINESS TRANSACTIONS AND DOCUMENTS	54
2 THE ACCOUNTING EQUATION AND BUSINESS TRANSACTIONS.....	59

Chapter 3: Accounting for VAT or Sales tax 71

1. ACCOUNTING FOR VAT OR SALES TAX.....	72
---	----

Chapter 4: Inventory..... 78

1 END-OF-YEAR ADJUSTMENTS FOR INVENTORY	79
2 VALUATION OF INVENTORY	85
3 FIFO AND WEIGHTED AVERAGE COST METHODS.....	92

Chapter 5: Non-current assets..... 101

1 NON-CURRENT ASSETS: BASIC PROVISIONS	102
2 DEPRECIATION	103
3 NON-CURRENT ASSET DISPOSALS.....	111
4 IAS 16: PROPERTY, PLANT AND EQUIPMENT	112
5 IAS 40: INVESTMENT PROPERTY	120
6 INTANGIBLE ASSETS	123
7 GOODWILL	130

8 IAS 36: IMPAIRMENT OF ASSETS.....	133
9 INVESTMENTS	137
Chapter 6: Accruals and prepayments	138
1. ACCRUALS AND PREPAYMENTS.....	139
Chapter 7: Receivables and allowance	147
1. IRRECOVERABLE DEBTS.....	148
2 ALLOWANCES FOR RECEIVABLES.....	150
3 ACCOUNTING FOR IRRECOVERABLE DEBTS AND RECEIVABLES ALLOWANCES	153
Chapter 8: Provision and contingencies	160
1 LIABILITIES AND PROVISIONS.....	161
2. CONTINGENT LIABILITIES AND ASSETS	168
Chapter 9: Capital structure and finance cost	176
1 LIMITED LIABILITY COMPANIES AND SOLE TRADERS COMPARED	177
2 SHARE CAPITAL AND RESERVES.....	180
3 ISSUING SHARES: RIGHTS ISSUES AND BONUS ISSUES.....	184
4 PREFERENCE SHARES.....	190
5 DIVIDENDS	192
6 LOAN CAPITAL	195
7 STATEMENT OF CHANGES IN EQUITY	197
Chapter 10: Preparing trial balance.....	204
1. TRIAL BALANCE.....	205
2 CORRECTING ERRORS.....	210
3 SUSPENSE ACCOUNTS	213
4 IDENTIFYING ERRORS IN DOUBLE ENTRY RECORDS	218
Chapter 11: Control accounts and control account reconciliations	223
1. THE MEANING OF A CONTROL ACCOUNT	224
2. SUPPLIER STATEMENTS: RECONCILIATION WITH LEDGER ACCOUNT	230
3. BANK RECONCILIATIONS	232
Chapter 12: Preparing basic financial statements	243
1 PREPARING A SOLE TRADER'S FINANCIAL STATEMENTS	244
2 PREPARING A COMPANY'S FINANCIAL STATEMENTS	252
3 TAXATION AND DIVIDENDS.....	263
4 EVENTS AFTER THE REPORTING PERIOD	267
Chapter 13: Preparing simple consolidated financial statements	274
1 GROUP ACCOUNTS	275
2 CONSOLIDATED AND SEPARATE FINANCIAL STATEMENTS	278

3	CONTENT OF GROUP ACCOUNTS AND GROUP STRUCTURE.....	280
4	GROUP ACCOUNTS: THE RELATED PARTIES ISSUE.....	284
5	DISCLOSURE.....	286
6	IFRS 10: SUMMARY OF CONSOLIDATION PROCEDURES	287
7	NON-CONTROLLING INTERESTS – IFRS 3	289
8	DIVIDENDS PAID BY A SUBSIDIARY.....	289
9	GOODWILL ARISING ON CONSOLIDATION	290
10	INTRA-GROUP TRADING.....	299
11	INTRA GROUP SALES OF NON-CURRENT ASSETS.....	301
12	ACQUISITION OF A SUBSIDIARY DURING ITS ACCOUNTING PERIOD.....	302
13	FAIR VALUES IN ACQUISITION ACCOUNTING	304
14	THE CONSOLIDATED STATEMENT OF PROFIT OR LOSS	309
15	THE CONSOLIDATED STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME	313
16	THE CONSOLIDATED STATEMENT OF CASH FLOWS	315
19	PRESENTATION OF ASSOCIATES	320
	Chapter 14: Interpretation of financial statements	325

Chapter 1: The context and purpose of financial reporting

1 The purpose of financial statements

Financial statements provide information about the position and performance of a business.

The main purpose of financial statements is to provide information about the financial position of a business entity, and about how it has performed financially over a given period of time. The individual financial statements, which will be explained in some detail later in this text, each provide particular information which could be of value to one or more interest groups.

1.1 What is a business entity?

A reporting entity is a discrete, separately-identified unit or organisation that produces financial reports. A business entity may be a company, a group of companies, a business partnership or the business of a sole trader.

Financial statements are prepared for an 'entity' that makes money transactions. The term 'entity' can refer to non-business organisations and not-for-profit organisations, such as government departments, charities, clubs and societies. A 'business entity' is involved specifically in business, usually for the purpose of making a profit: the term refers to companies, business partnerships and individuals running their own business ('sole traders').

An entity preparing financial statements (the 'reporting entity') must be identifiable as a distinct and discrete unit or organisation; in other words, it should be a cohesive economic unit. To prepare financial statements, an entity must have a system of accounting for its transactions, because it is from the records of money transactions held in this system that financial statements are constructed. Such an accounting system is generally referred to as a 'book-keeping system'.

The entity concept assumes that the business is a separate entity from its owners. If a sole trader sets up a business mowing lawns, then that business is separate from the sole trader. Separate accounting records must be kept for the business.

The capital that the sole trader puts into the business is treated as money owed to the owner in the business accounts, and is sometimes called 'proprietors' funds'.

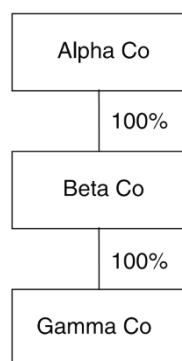
The entity concept applies to sole traders, partnerships and companies. Sole traders and partnerships are not legally separate from their businesses, but are treated as such for accounting purposes. However, a company is legally separate from its owners.

1.2 How does control define the boundary of the reporting entity?

When beginning to study the interpretation of financial statements, it is convenient to think of the reporting entity as a single company. In reality, companies are more commonly linked together as a single group, with a holding or parent company and many subsidiary companies and sub-subsidiaries. A subsidiary is a company that is controlled by another company, for example through a controlling interest in its ordinary share capital.

1.3 Example

Suppose for example that Alpha Co owns 100% of the share capital of Beta Co, which in turn holds 100% of the share capital of Gamma Co.



Alpha Co should provide statements about its financial performance and position (statement of financial position (balance sheet), income statement, statement of cash flows, and so on). But should it report exclusively on the performance of Alpha Co or should it report on the performance of Alpha, Beta and Gamma taken together, since Alpha Co controls the businesses of Beta and Gamma?

The view taken in financial reporting is that the reporting entity is not the individual company. The reporting entity should be defined by the scope of control. A parent company (holding company) of a group of companies should therefore present financial statements to its shareholders about the performance and position of the group as a whole. Published accounts are therefore usually 'group accounts' or 'consolidated accounts', which bring the performance and position of all the group companies together as a single entity.

1.4 Financial performance

Businesses of whatever size or nature exist to make a profit. The financial statement showing the profit or loss earned in a period is the income statement or the statement of comprehensive income.

The purpose of a business is to make money for its owners. A business invests money in resources with the intention of making even more money. Business enterprises vary in character, size and complexity. They range from very small businesses (the local shopkeeper or plumber) to very large ones (e.g. GlaxoSmithkline, Marks and Spencer, Diageo). But the objective of earning profit is common to all of them.

Profit is the excess of income over expenditure. When expenditure exceeds income, the business is running at a loss.

One purpose of financial statements is to show whether a business has made a profit or a loss over a period of time from its operations. A statement showing the performance of a business in a given period of time is called an income statement, or a statement of comprehensive income.

Entities that do not exist to make a profit must nevertheless spend within their means. These organisations produce a performance statement disclosing their income and expenditure for a given period, rather than a statement of profit or loss.

The definition of profit above is slightly simplified. It is more correct to state that a profit or gain arises when the value of the owners' interest in a business rises, without the owners putting in any additional new capital. This definition might become clearer as you work your way through this text, but it is possible for a gain or a loss to arise without any transaction involving income or expenditure.

1.5 Financial position

A statement of the financial position of an entity at a particular point in time is the statement of financial position (previously called the balance sheet). This shows the assets, liabilities and capital of the entity at a specific point in time.

Another purpose of financial statements is to show the financial position of an entity. In reality, the financial position of most businesses is always changing, and is not static. The financial position of a company next week is not going to be the same as its financial position now.

However, a financial statement can only show the position of a business at a given point in time, and this 'snapshot' picture will hopefully give a fairly representative picture.

The main elements affecting the financial position of a business are:

- (a) the economic resources it controls
- (b) its financial structure
- (c) its liquidity and solvency
- (d) its capacity to adapt to changes in its environment

The financial position of a business (or any other entity) is largely concerned with what resources the business has and how much the business owes. This is reported in a statement known as the statement of financial position (previously called the balance sheet) which shows the assets and liabilities of a business, and how much capital it has.

1.6 Financial adaptability

Businesses must generate cash as well as profit. The financial statement showing the generation and uses of cash over a period is the statement of cash flows.

In order to be able to adapt to changing circumstances, markets and commercial environments, companies need to generate cash. The generation of cash is different from the generation of profit due to the concept of accruals. The cash generated by a company in a period is reported in a statement of cash flows.

2 Assets and liabilities

2.1 Assets

An asset is something valuable which a business owns or has the use of.

Examples of assets are factories, office buildings, warehouses, delivery vans, Lorries, plant and machinery, computer equipment, office furniture, cash and also goods held in store awaiting sale to customers, and raw materials and components held in store by a manufacturing business for use in production.

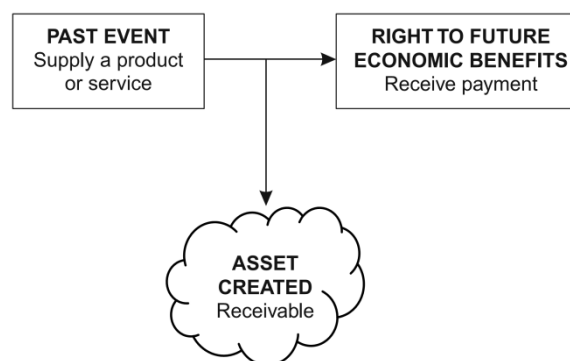
Some assets are held and used in operations for a long time. These are known as non-current assets. An office building might be occupied by administrative staff for years. A machine might have a productive life of many years before it wears out.

Other assets are held for only a short time. These are known as current assets. The owner of a newsagent shop, for example, will have to sell his newspapers on the same day that he gets them, and weekly newspapers and monthly magazines also have a short shelf life. The more quickly a business can sell the goods it has in store, the more profit it is likely to make, provided, of course, that the goods are sold at a higher price than the cost the business incurred to acquire them.

In financial statements, assets are analysed as either current or non-current, depending on the length of time that they are expected to be held. Any assets expected to be held for 12 months or more are generally classified as non-current.

The definition of asset given above is somewhat simplified, although it is useful for introducing the idea of what an asset is. A more formal definition is that an asset is a resource controlled by the business from which future economic benefits are expected to flow, arising out of a past transaction or event.

- (a) An item of office equipment is an asset. A company buying a computer will expect to use it over a number of years, and will derive economic benefits from it. The computer is an asset because it will provide economic benefits to the company in the future that have arisen out of a past event, the purchase of the computer.
- (b) Money owed by a customer to a business is an asset of the business. For example, suppose that a company sells goods on credit to a customer for \$3,000, and the customer is given 30 days to make the payment. Until the debt is paid, the customer is a 'debtor' of the company for \$3,000. The debt is an asset because it gives the company future economic benefit (money income) arising out of a past transaction, the sale of the goods.



The customer who owes money is called a 'debtor'. The balance owed in the business accounts will be referred to as a 'receivable'.

2.2 Liabilities

A liability is something which is owed to somebody else.

'Liabilities' is the accounting term for the debts of a business, amounts that the business owes.

Some examples of liabilities are given below:

- A bank loan or bank overdraft. The liability is the amount which must eventually be repaid to the bank.
- Amounts owed to suppliers for goods purchased but not yet paid for. For example, a boat-builder might buy some sails on credit from a sail-maker, which means that the boat-builder does not have to pay for the sails until sometime after they have been delivered. Until the boat-builder pays what he owes, the sail-maker will be his creditor for the amount owed. Note that the supplier who is owed money is called a 'creditor'. The balance payable by the business will be referred to as a 'payable'.
- Taxation owed to the government. A business pays tax on its profits but there is normally a gap in time between when a company declares its profits and becomes liable to pay tax and the time when the tax bill must eventually be paid.

Again, there is a more 'formal' definition of liability. A liability has been defined in the IASB's Framework as a present obligation of the entity arising from past events, the settlement of which is expected to result in an outflow from the entity of resources embodying economic benefits.

As is the case for assets, liabilities presented in the financial statements are analysed between non-current (long term) and current (short term). Amounts due within 12 months are generally classified as current, and those due in 12 or more months are non-current.

3 The IASB's Framework for the preparation and presentation of financial statements

There are various groups of people who need information about the activities of a business. You should be fully aware of these different user groups and their varying needs.

3.1 Purpose and underlying assumptions of the Framework

The Framework sets out the concepts that underlie the preparation and presentation of financial statements.

The purpose of the Framework is:

- (a) to assist in the development of future International Financial Reporting Standards and in the review of current standards;
- (b) to provide a basis for reducing the number of alternative accounting treatments permitted by IFRS;
- (c) to assist national standard setting bodies in developing national standards;
- (d) to assist preparers of financial statements in applying IFRS and dealing with transactions that are not covered by IFRS;
- (e) to assist auditors in forming an opinion as to whether financial statements comply with IFRS;
- (f) to assist users in interpretation of the information contained in financial statements; and
- (g) to provide information about the approach to the formulation of accounting standards.

The Framework is not an accounting standard, and in cases where an accounting standard is in conflict with the Framework it is the accounting standard that should be followed.

3.2 Role of general purpose financial statements

The IASB's Framework states that 'the objective of financial statements is to provide information about the reporting entity's financial position, performance and changes in financial position of an entity that is useful to a wide range of users for making economic decisions.'

Financial information about a company is of interest to a wide range of users. Some of these users are able to obtain special-purpose reports about a company specific to their information needs. Management can obtain internal management accounting reports, and on occasion, someone else, such as a lending bank or the tax authorities, can obtain specially-prepared reports. Many users of accounts, however, do not have access to special-purpose reports, and must rely for their information on general purpose financial statements, such as the company's published financial statements.

3.3 Users of financial statements

The IASB suggests that general purpose financial statements will meet the needs of most users.

3.4 Financial statements for assessing stewardship

Management is accountable to investors for the stewardship of the company. To understand this, you might find it useful to think of the stewardship of an estate, which involves looking after the assets and condition of the estate, and managing it in the interest of the owner. In much the same way, managers are responsible for the safeguarding of the assets and other resources of the company, and for putting these resources to an efficient and profitable use. Investors will be interested in any information that helps them to judge how well management has carried out their stewardship responsibility.

3.5 Decision usefulness of financial statements

Various groups make use of a company's financial statements to make economic decisions.

- (a) Present and potential investors in the company will consider their investment decision. Should they buy shares in the company? Should they sell their shares? To make an investment decision, the investor needs information about profitability and the ability to generate cash to pay dividends, and also about the risks in the investment. Financial statements should help an investor to assess both the cash-generating capabilities of a company, and also its ability to respond to risks and change (its financial adaptability).
- (b) Lenders to a company will be interested in any information that helps them to assess whether the company will have the ability to meet its obligations: to pay interest and repay the loan principal on time. Potential lenders need similar information to decide whether to lend to the company, and if so, how much and on what terms.
- (c) Suppliers to the company and other trade creditors need to know how reliable the company will be in paying its debts, and how much credit can safely be given.
- (d) Employees want information about the financial stability and profitability of their employer, particularly in the part of the company's business where they work. Their decision to remain with the company will depend to a large extent on the ability of the company to continue to offer them secure and well-paid employment. They will also be interested in how much the company is earning in order to reach a view on what remuneration levels should be.
- (e) Customers are interested in the financial performance and position of a company in order to decide whether to continue buying from it. Where a customer relies on a long-term warranty, or expects to purchase replacement parts from the company over a long

- period, it will want reassurance that the company is financially stable, with good long-term future prospects.
- (f) The government (and its agencies) can often obtain the information it needs from a company from special-purpose reports. Even so, general purpose financial statements can provide additional useful information. For example, the tax authorities are provided with specially-prepared information about the company's trading and profits to determine how much tax is payable. A comparison with general purpose financial statements can then help the tax authorities to assess whether the amounts payable in tax seem consistent with the published information. They would certainly be interested if a company declares profits of several million dollars but pays no company tax.
 - (g) Enterprises affect members of the public in a variety of ways. A major employer in a local community, for example, will help to boost the local economy and stimulate business and employment. Members of the general public might therefore use the financial statements of a company to assess trends and recent developments in its business, and the implications these might have in the future.

Any analysis of financial statements should be set in the context of the particular user and their requirements. For example, as mentioned above, lenders are interested in the ability of a company to repay them; they have little interest in operational details, such as the time taken for a debtor to pay the company, or the profitability of a certain product line. This information is, however, of interest to management.

Financial information does have limitations. It is backward looking, reporting events that have already happened and does not assess what might happen in the future.

It is usually based on historic costs which report items such as non-current assets at their original cost which may be very different from their current market value.

3.6 Types of financial information available to users

The information needs of different users are not the same. General purpose financial statements do not provide all the information that individuals need, or would like, to make their decisions, and the limitations of a company's report and accounts should be understood. Financial statements are backward-looking, reporting what has happened in the past, when users are more often concerned with the future. They also report on the company in purely financial terms, and do not properly address non-financial matters.

Managers responsible for the running of a business are likely to find detailed management accounts showing actual performance against budget, usually on a monthly basis, to be more useful than statutory financial statements. Moreover, these are likely to be used alongside business plans projected into the future usually over a period of three to five years.

3.7 Investor focus

The Framework states that 'As investors are providers of risk capital to the entity, the provision of financial statements that meet their needs will also meet most of the needs of other users that financial statements can satisfy'. For example, investors need information about the ability of a company to generate profits and cash flows from its operations and on the company's financial adaptability (i.e. its ability to respond to unexpected events and new opportunities). Essentially, other user groups are interested in the same information, although with different emphasis, as discussed above.

3.8 The information required by investors

Investors need information about a company's financial performance and financial position.

- (a) Financial performance relates to the return that the company has made on the resources at its disposal. Information about performance provides an account of the stewardship by management, and can also be used to assess the ability of the company to generate cash from its existing resources. Information about historical performance can help investors to make judgments about future prospects.
- (b) The financial position of a company relates to the assets that it owns (including its cash position), the liabilities it owes and the amount of capital invested. This information helps investors to assess the stewardship of management. It also helps them to understand how the future cash flows generated by the business will be distributed among those with an interest in or a claim on the company (e.g. lenders, trade creditors, employees and shareholders). Information about the cash position and liquidity helps investors to assess the ability of the company to meet its financial obligations as they fall due. Information about the risk profile of a company will help them to judge the financial adaptability of the company, and its ability to deal with unexpected future setbacks and opportunities.
- (c) Information about changes in the financial position of an entity is useful in order to assess its investing, financing and operating activities during the reporting period. This information is useful in providing the user with a basis to assess the ability of the

- enterprise to generate cash and cash equivalents and the needs of the business to utilise those cash flows.
- (d) The main general purpose financial statements are the statement of financial position of a company, an income statement or statement of comprehensive income for the period under review and a statement of cash flows for the same period. In broad terms, profits and cash flow information can be used to assess the ability of the company to generate cash. A statement of financial position provides information about the financial position. Taken together, they provide information on performance and the stewardship of management.

4 Accounting concepts: going concern and accruals

In order to meet their objectives, financial statements are prepared on the going concern and accruals basis.

4.1 Going concern

The going concern concept requires assets to be valued on the assumption that the business will continue and will not be broken up or dissolved.

The entity is normally viewed as a going concern, that is, as continuing in operation for the foreseeable future. It is assumed that the entity has neither the intention nor the necessity of liquidation or of curtailing materially the scale of its operations. (*IASB Glossary*)

This assumption is based on the notion that, when preparing a normal set of accounts, it is always expected that the business will continue to operate in approximately the same manner for the foreseeable future (at least the next 12 months should be considered). In particular, the entity will not go into liquidation or scale down its operations in a material way.

The main significance of the going concern assumption is that the assets of the business should not be valued at their 'break-up' value, which is the amount that they would sell for if they were sold off piecemeal and the business were thus broken up.

4.1.1 Example: going concern

Suppose, for example, that Emma acquires a T-shirt printing machine at a cost of \$60,000. The asset has an estimated life of six years, and it is normal to write off the cost of the asset to the

income statement over this time. In this case a depreciation cost of \$10,000 per year will be charged.

Using the going concern assumption, it would be presumed that the business will continue its operations and so the asset will live out its full six years in use. A depreciation charge of \$10,000 will be made each year, and the value of the asset in the statement of financial position will be its cost less the accumulated amount of depreciation charged to date. After one year, the carrying value of the asset would therefore be $$(60,000 - 10,000) = \$50,000$, after two years it would be \$40,000, after three years \$30,000 etc., until it has been written down to a value of 0 after 6 years.

Now suppose that this asset has no other operational use outside the business, and in a forced sale it would only sell for scrap. After one year of operation, its scrap value might be, say, \$8,000.

The carrying value of the asset, applying the going concern assumption, would be \$50,000 after one year, but its immediate sell-off value is only \$8,000. It might be argued that the asset is over-valued at \$50,000 and that it should be written down to its break-up value (i.e. in the statement of financial position should be shown at \$8,000 and the balance of its cost should be treated as an expense). However, provided that the going concern assumption is valid, so that the asset will continue to be used and will not be sold, it is appropriate accounting practice to value the asset at its carrying value.

4.2 Accruals basis of accounting

The non-cash effect of transactions should be reflected in the accounting period in which they occur and not in the period any cash involved is received or paid.

Accrual basis of accounting. The effects of transactions and other events are recognised when they occur (and not as cash or its equivalent is received or paid) and they are recorded in the accounting records and reported in the financial statements of the periods to which they relate.

Entities should prepare their financial statements on the basis that transactions are recorded in them, not as the cash is paid or received, but as the revenues or expenses are earned or incurred in the accounting period to which they relate.

According to the accrual assumption, then, in computing profit revenue earned must be matched against the expenditure incurred in earning it.

4.2.1 Example: accrual

Suppose that Emma (from Paragraph 4.1.1 above), prints 20 T-shirts in her first month of trading (May) at a cost of \$5 each. She then sells all of them for \$10 each. Emma has therefore made a profit of \$100 by matching the revenue (\$200) earned from the sale of 20 T-shirts against the cost (\$100) of acquiring them.

If, however, Emma had only sold 18 T-shirts, it would have been incorrect to charge her income statement with the cost of 20 T-shirts, as she still has two T-shirts in inventory. If she intends to sell them in June she is likely to make a profit on the sale. Therefore, only the purchase cost of 18 T-shirts (\$90) should be matched with her sales revenue, leaving her with a profit of \$90. (\$180 – \$90).

The two remaining T-shirts would be carried forward in the statement of financial position as assets (inventory) held at a cost of \$10. ($2 \times \5).

If, however, Emma had decided to give up selling T-shirts, then the going concern assumption would no longer apply and the value of the two T-shirts in the statement of financial position would be a break-up valuation rather than cost. Similarly, if the two unsold T-shirts were now unlikely to be sold at more than their cost of \$5 each (say, because of damage or a fall in demand) then they should be recorded on the statement of financial position at their net realisable value (i.e. the likely eventual sales price less any expenses incurred to make them saleable, e.g. paint) rather than cost.

In this example, the concepts of going concern and accrual are linked. Because the business is assumed to be a going concern it is possible to carry forward the cost of the unsold T-shirts as a charge against profits of the next period.

5 Impact of globalisation

The current reality is that the world's capital markets operate more and more freely across borders. The impacts of rapid globalisation are epitomised by the words of Paul Volker, Chairman of the IASC Foundation Trustees in November 2002, in a speech to the World Congress of Accountants.

'Developments over the past year and more have strongly reinforced the logic of achieving and implementing high-quality international accounting standards. In an age when capital flows freely across borders, it simply makes sense to account for economic transactions, whether they occur

in the Americas, Asia, or Europe, in the same manner. Providing improved transparency and comparability will certainly help ensure that capital is allocated efficiently. Not so incidentally, generally accepted international standards will reduce the cost of compliance with multiple national standards.'

As the modern business imperative moves towards the globalisation of operations and activities, there is an underlying commercial logic that also requires a truly global capital market. Harmonised financial reporting standards are intended to provide:

- A platform for wider investment choice
- A more efficient capital market
- Lower cost of capital
- Enhanced business development

Globally, users of financial statements need transparent and comparative information to help them make economic decisions.

From 2005 EU listed companies have been required to use IFRS in preparing their consolidated financial statements. This is an important step towards eventual harmonisation with the US.

6 International Accounting Standards Board (IASB)

The International Accounting Standards Board is an independent, privately-funded accounting standard setter based in London. Contributors include major accounting firms, private financial institutions, industrial companies throughout the world, central and development banks, and other international and professional organisations.

In March 2001 the IASC Foundation was formed as a not-for-profit corporation incorporated in the USA. The IASC Foundation is the parent entity of the IASB. In July 2010 it changed its name to the IFRS Foundation.

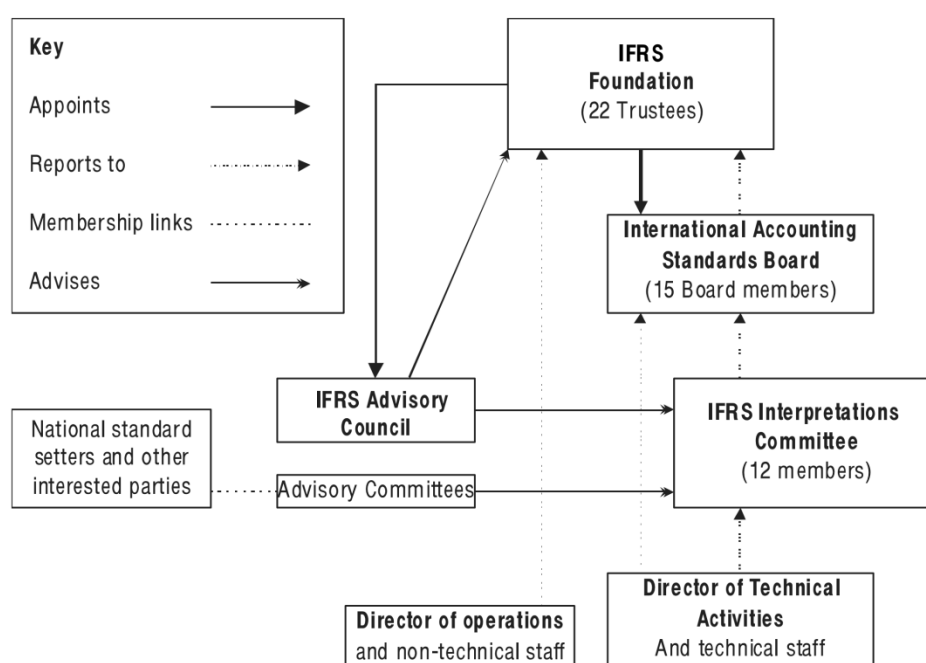
From April 2001 the IASB assumed accounting standard setting responsibilities from its predecessor body, the International Accounting Standards Committee (IASC). The 15 members of the IASB come from nine countries and have a variety of backgrounds with a mix of auditors, preparers of financial statements, users of financial statements and an academic.

The formal objectives of the IASB are to:

- (a) Develop, in the public interest, a single set of high quality, understandable and enforceable global accounting standards that require high quality, transparent and comparable information in financial statements and other financial reporting to help participants in the various capital markets of the world and other users of the information to make economic decisions
- (b) Promote the use and rigorous application of those standards
- (c) Work actively with national standard-setters to bring about convergence of national accounting standards and IFRSs to high quality solutions

Structure of the IASB

The structure of the IASB can be illustrated by the following diagram:



IFRS Foundation

The IFRS Foundation is made up of 22 Trustees, who essentially monitor and fund the IASB, the IFRS Advisory Council and the IFRS Interpretations Committee. The Trustees are appointed from a variety of geographic and functional backgrounds according to the following procedure:

- (a) The International Federation of Accountants (IFAC) suggested candidates to fill five of the Trustee seats and international organisations of preparers, users and academics each suggested one candidate.
- (b) The remaining Trustees are 'at-large' in that they were not selected through the constituency nomination process.

IFRS Advisory Council

The IFRS Advisory Council provides a formal vehicle for further groups and individuals with diverse geographic and functional backgrounds to give advice to the Board and, at times, to advise the Trustees. It comprises about fifty members and meets at least three times a year. It is consulted by the IASB on all major projects and its meetings are open to the public. It advises the IASB on prioritisation of its work and on the implications of proposed standards for users and preparers of financial statements.

IFRS Interpretations Committee

The Interpretations Committee provides timely guidance on the application and interpretation of International Financial Reporting Standards. It deals with newly identified financial reporting issues not specifically addressed in IFRSs, or issues where unsatisfactory or conflicting interpretations have developed, or seem likely to develop.

Scope and authority of IFRSs

The IASB achieves its objectives primarily by developing and publishing IFRSs and promoting the use of those standards in general purpose financial statements and other financial reporting.

IFRSs set out recognition, measurement, presentation and disclosure requirements dealing with transactions and events that are important in general purpose financial statements. IFRSs are based on the IASB *Conceptual Framework*, which:

- Addresses the concepts underlying the information presented in general purpose financial statements
- Facilitates the consistent and logical formulation of IFRSs
- Provides a basis for the use of judgment in resolving accounting issues.

IFRSs are designed to apply to the general purpose financial statements and other financial reporting of all profit-oriented entities.

General purpose financial statements are directed towards the common information needs of a wide range of users, for example, shareholders, suppliers, employees and the public at large. The objective of financial statements is to provide information about the financial position, performance and cash flows of an entity that is useful to those users in making economic decisions.

A complete set of financial statements includes:

- A statement of financial position
- A statement of profit or loss and other comprehensive income
- A statement of all changes in equity, showing only owner changes in equity (Non-owner changes are in the statement of comprehensive income)
- A statement of cash flows
- Accounting policies and explanatory notes

The term 'financial statements' includes a complete set of financial statements prepared for an interim or annual period, and condensed financial statements for an interim period. In the interest of timeliness and cost, and to avoid repeating information previously reported, an entity may provide less information in its interim financial statements than in its annual financial statements. IAS 34 Interim financial reporting prescribes the minimum content of complete or condensed financial statements for an interim period.

Many of the IASs produced by the old IASC allowed entities to make a choice between 'benchmark treatments' and 'allowed alternatives'. By contrast, the IASB has shifted the emphasis away from allowing entities a choice between accounting treatments, and is reconsidering all those IASs where choices are permitted. Its objective is either to reduce the number of options available to choose from, or to eliminate the element of choice altogether. This is in line with the IASB's emphasis on reporting like transactions and events in a like way, and reporting different transactions and events differently.

Any limitation of scope of an IFRS will be made clear in the standard.

IFRS due process

IFRSs are developed through an international due process that involves accountants, financial analysts and other users of financial statements, the business community, stock exchanges,

regulatory and legal authorities, academics and other interested individuals and organisations from around the world. The IASB consults the IFRS Advisory Council in public meetings on major projects, agenda decisions and work priorities, and discusses technical matters in meetings that are open to public observation.

The overall agenda of the IASB will initially be set by discussion with the Advisory Council. The process for developing an individual standard would involve the following steps.

- Step 1** During the early stages of a project, IASB may establish an Advisory Committee to give advice on issues arising in the project. Consultation with the Advisory Committee and the Standards Advisory Council occurs throughout the project.
- Step 2** IASB may develop and publish Discussion Papers for public comment.
- Step 3** Following the receipt and review of comments, IASB would develop and publish an Exposure Draft for public comment.
- Step 4** Following the receipt and review of comments, the IASB would issue a final International Financial Reporting Standard.

The period of exposure for public comment is normally 90 days. However, in exceptional circumstances, proposals may be issued with a comment period of 60 days.

Interpretation of IFRSs

The IFRS Interpretations Committee assists the IASB by improving existing Standards. The Interpretations Committee has two main responsibilities:

- Review, on a timely basis, newly identified financial reporting issues not specifically addressed in IFRSs
- Clarify issues where unsatisfactory or conflicting interpretations have developed, or seem likely to develop in the absence of authoritative guidance, with a view to reaching a consensus on the appropriate treatment.

The Interpretations Committee also helps the IASB move towards international harmonisation by working with its equivalent national-level bodies (such as the UITF in the UK).

The Interpretations Committee, like the IASB itself, adopts a principle-based approach. Its intention is to provide guidance that is in line with the rest of the IFRSs. It therefore bases itself,

like each of the individual Standards, first and foremost on the IASB *Conceptual Framework*. It will then look at any relevant IFRSs for principles applying the *Conceptual Framework* to that particular area.

The Interpretations Committee develops its interpretations through a due process of consultation and debate which includes making Draft Interpretations available for public comment.

Comment periods

The IASB issues each Exposure Draft of a Standard and discussion documents for public comment, with a normal comment period of 120 days. In certain circumstances, the Board may expose proposals for a much shorter period. However, such limited periods would be used only in extreme circumstances. Draft IFRIC Interpretations are exposed for a 60-day comment period.

Co-ordination with national standard setters

Close co-ordination between IASB due process and due process of national standard setters is important to the success of the IASB's mandate.

The IASB is exploring ways in which to integrate its due process more closely with national due process. Such integration may grow as the relationship between IASB and national standard setters evolves. In particular, the IASB is exploring the following procedure for projects that have international implications.

- (a) IASB and national standard setters would co-ordinate their work plans so that when the IASB starts a project, national standard setters would also add it to their own work plans so that they can play a full part in developing international consensus. Similarly, where national standard setters start projects, the IASB would consider whether it needs to develop a new Standard or review its existing Standards. Over a reasonable period, the IASB and national standard setters should aim to review all standards where significant differences currently exist, giving priority to the areas where the differences are greatest.
- (b) National standards setters would not be required to vote for IASB's preferred solution in their national standards, since each country remains free to adopt IASB standards with amendments or to adopt other standards. However, the existence of an international consensus is clearly one factor that members of national standard setters would consider when they decide how to vote on national standards.

- (c) The IASB would continue to publish its own Exposure Drafts and other documents for public comment.
- (d) National standard setters would publish their own exposure document at approximately the same time as IASB Exposure Drafts and would seek specific comments on any significant divergences between the two exposure documents. In some instances, national standard setters may include in their exposure documents specific comments on issues of particular relevance to their country or include more detailed guidance than is included in the corresponding IASB document.
- (e) National standard setters would follow their own full due process, which they would ideally choose to integrate with the IASB's due process. This integration would avoid unnecessary delays in completing standards and would also minimise the likelihood of unnecessary differences between the standards that result.

7 Generally Accepted Accounting Practice (GAAP)

The expression GAAP may or may not have statutory or legal authority or definition, depending on the country involved, e.g. it does not have statutory authority in the UK, but does so in the USA.

GAAP is in fact a dynamic concept and changes constantly as circumstances alter through new legislation, standards and practice.

The problem of what is 'generally accepted' is not easy to settle, because new practices will obviously not be generally adopted yet. The criteria for a practice being 'generally accepted' will depend on factors such as whether the practice is addressed by financial reporting standards or legislation, and whether other companies have adopted the practice. Most importantly perhaps, the question should be whether the practice is consistent with the needs of the users and the objective of financial reporting and whether it is consistent with the 'true and fair' concept.

True and fair view (or presented fairly)

It is a requirement of both national legislation (in some countries) and International Standards on Auditing that the financial statements should give a true and fair view of (or 'present fairly, in all material respects') the financial position of the entity as at the end of the financial year.

The terms 'true and fair view' and 'present fairly, in all material aspects' are not defined in accounting or auditing standards. Despite this, a company's managers may depart from any of the provisions of accounting standards if these are inconsistent with the requirement to give a true and fair view. This is commonly referred to as the 'true and fair override'. It has been treated as an important loophole in the law in different countries and has been the cause of much argument and dissatisfaction within the accounting profession.

8 Other international influences

European Commission (EC)

The EC regulations form one part of a broader programme for the harmonisation of company law in member states. The commission is uniquely the only organisation to produce international standards of accounting practice which are legally enforceable, in the form of directives which must be included in the national legislation of member states.

However, the EC has also acknowledged the role of the IASB in harmonising worldwide accounting rules.

United Nations (UN)

The UN has a Commission and Centre on Transnational Reporting Corporations through which it gathers information concerning the activities and reporting of multinational companies. The UN processes are highly political and probably reflect the attitudes of the governments of developing countries to multinationals.

International Federation of Accountants (IFAC)

The IFAC is a private sector body established in 1977 and which now consists of over 100 professional accounting bodies from around 80 different countries. The IFAC's main objective is to co-ordinate the accounting profession on a global scale by issuing and establishing international standards on auditing, management accounting, ethics, education and training.

Organisation for Economic Co-operation and Development (OECD)

The OECD supports the work of the IASB but also undertakes its own research into accounting standards via ad hoc working groups. For example, in 1976 the OECD issued guidelines for

multinational companies on financial reporting and nonfinancial disclosures. The OECD appears to work on behalf of developed countries to protect them from the extreme proposals of the UN. The OECD has also entered the debate on corporate governance.

International Organisation of Securities Commissions (IOSCO)

IOSCO is the representative of the world's securities markets regulators. High quality information is vital for the operation of an efficient capital market, and differences in the quality of the accounting policies and their enforcement between countries leads to inefficiencies between markets. IOSCO has been active in encouraging and promoting the improvement and quality of IFRSs over the last ten years. IOSCO issued a report in May 2000 which recommended to all its members that they allow multinational issuers to use IFRSs, as supplemented by reconciliation, disclosure and interpretation where necessary to address outstanding substantive issues at a national or regional level.

IASB staff and IOSCO continue to work together to resolve outstanding issues and to identify areas where new IASB standards are needed.

Financial Accounting Standards Board (FASB)

The US standard setter, the FASB and the IASB have been undertaking a project of harmonisation between US GAAP and IFRS.

In September 2002, both parties acknowledged their commitment to the process of developing accounting standards that can be used for domestic and international purposes. Both the FASB and the IASB have worked together to make amendments to current accounting standards in the short term, and to work together on a long term basis to ensure new standards issued are compatible.

The FASB has an important influence on the current and future work of the IASB.

9 Scope and application of IFRSs

Any limitation of the applicability of a specific IAS/IFRS is made clear within that standard. IASs/IFRSs are not intended to be applied to immaterial items, nor are they retrospective. Each individual IAS/IFRS lays out its scope at the beginning of the standard.

Within each individual country local regulations govern, to a greater or lesser degree, the issue of financial statements. These local regulations include accounting standards issued by the national regulatory bodies and/or professional accountancy bodies in the country concerned.

IFRSs concentrate on essentials and are designed not to be too complex, otherwise they would be impossible to apply on a worldwide basis.

IFRSs do not override local regulations on financial statements. Members of the IASB should simply disclose the fact where IFRSs are complied with in all material respects. Members of the IASB in individual countries will attempt to persuade local authorities, where current regulations deviate from IASs/IFRSs, that the benefits of harmonisation make local change worthwhile.

10 Progress towards global harmonisation

Close co-ordination between IASB due process and due process of national standard setters is important to the success of the IASB's mandate.

The IASB is exploring ways of further integrating its due process with that of national standard setters. This integration may grow as the relationship between IASB and national standard setters evolves. In particular, the IASB is exploring the following procedure for projects that have international implications.

- (a) IASB and national standard setters would co-ordinate their work plans so that when the IASB starts a project, national standard setters would also add it to their own work plans so that they can play a full part in developing international consensus. Similarly, where national standard setters start projects, the IASB would consider whether it needs to develop a new Standard or review its existing Standards. Over a reasonable period, the IASB and national standard setters should aim to review all standards where significant differences currently exist, giving priority to the areas where the differences are greatest.
- (b) National standards setters would not be required to vote for IASB's preferred solution in their national standards, since each country remains free to adopt IASB standards with amendments or to adopt other standards. However, the existence of an international consensus is clearly one factor that members of national standard setters would consider when they decide how to vote on national standards.
- (c) The IASB would continue to publish its own Exposure Drafts and other documents for public comment.

- (d) National standard setters would publish their own exposure document at approximately the same time as IASB Exposure Drafts and would seek specific comments on any significant divergences between the two exposure documents. In some instances, national standard setters may include in their exposure documents specific comments on issues of particular relevance to their country or include more detailed guidance than is included in the corresponding IASB document.
- (e) National standard setters would follow their own full due process, which they would ideally choose to integrate with the IASB's due process. This integration would avoid unnecessary delays in completing standards and would also minimise the likelihood of unnecessary differences between the standards that result.

IASB liaison members

Seven of the full-time members of the IASB have formal liaison responsibilities with national standard setters in order to promote the convergence of national accounting standards and International Accounting Standards. The IASB envisages a partnership between the IASB and these national standard setters as they work together to achieve convergence of accounting standards worldwide.

The countries with these liaison members are Australia and New Zealand, Canada, France, Germany, Japan, UK and USA.

In addition all IASB members have contact responsibility with national standards setters not having liaison members and many countries are also represented on the Standards Advisory Council.

World-wide effect of IFRS and the IASB

The IASB, and before it the IASC, has now been in existence for around 25 years, and it is worth looking at the effect it has had in that time.

As far as Europe is concerned, the consolidated financial statements of many of Europe's top multinationals are already prepared in conformity with national requirements, EC directives and IFRS. These developments have been given added impetus by the internationalisation of capital markets. As discussed, IFRS has been implemented in the EU since 2005.

In Japan, the influence of the IASB had, until recently, been negligible. This was mainly because of links in Japan between tax rules and financial reporting. The Japanese Ministry of Finance set up a working committee to consider whether to bring national requirements into line with IFRS. The Tokyo Stock Exchange has announced that it will accept financial statements from foreign issuers that conform to home country standards, which would include IFRS.

The Japanese standpoint was widely seen as an attempt to attract foreign issuers, in particular companies from Hong Kong and Singapore. As these countries base their accounting on international standards, this action is therefore implicit acknowledgement by the Japanese Ministry of Finance of IAS/IFRS requirements.

In America, the Securities and Exchange Commission (SEC) agreed in 1993 to allow foreign issuers (of shares, etc.) to follow IAS/IFRS treatments on certain issues, including cash flow statements under IAS 7. The overall effect is that, where an IAS/IFRS treatment differs from US GAAP, these treatments will now be acceptable. The SEC is now supporting the IASB because it wants to attract foreign listings.

In certain countries, the application of IFRS is mandatory for all domestic listed companies. The following provides an example of some of the countries, but the schedule is not exhaustive: Barbados, Cyprus, Georgia, Jamaica, Jordan, Kenya, Kuwait, Malawi, Mauritius, Nepal, Peru, Serbia and Trinidad and Tobago.

Countries that implemented IFRS for the 2005 European ruling in respect of the consolidated financial statements of public listed companies include Austria, Belgium, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Liechtenstein, Lithuania, Luxembourg, Netherlands, Norway, Poland, Portugal, Slovenia, Slovak Republic, Spain, Sweden and the United Kingdom.

Many non-European countries also require their listed companies to adopt IFRS. These include Australia, Bahamas, Bahrain, Chile, Costa Rica, Egypt, Hong Kong, Kenya, Kuwait, Mauritius, New Zealand, and South Africa.

There are some countries where the implementation of IFRS is not mandatory but discretionary. These include Aruba, Bermuda, Bolivia, Botswana, Cayman Islands, Dominica, El Salvador, Gibraltar, Laos, Lesotho, Swaziland, Switzerland, Turkey, Uganda, Zambia and Zimbabwe. In

December 2009 the Japanese FSA announced that Japanese listed companies would be allowed to use IFRS from 31 March 2010.

However, there are several countries where the use of IFRS is not currently permitted. The following are some of the countries, but the list is not exhaustive: Bangladesh, Cuba, Indonesia, Iran, Saudi Arabia, Senegal, Taiwan, Thailand, Tunisia and Vietnam.

Harmonisation in Europe

The objective of the European Commission (EC) is to build a fully integrated, globally competitive market. A key element of this is the harmonisation of company law across the member states. In line with this the EC aims to establish a level playing field for financial reporting, supported by an effective enforcement regime. The commission is uniquely the only organisation whose accounting standards are legally enforceable, in the form of directives which must be included in the national legislation of member states. However, the directives have been criticised as they might become constraints on the application of world-wide standards, and might bring accounting standardisation and harmonisation into the political arena.

The EC adopted a regulation under which from 2005 consolidated financial statements of listed companies were required to comply with IFRS. The implications of this measure are far reaching. However, member states currently have the discretion to extend the implementation of IFRS to include non-listed companies. In the UK, for example, small companies report under UK GAAP, with many taking advantage of the reduced disclosure requirements of the FRSSE (Financial Reporting Standard for Smaller Entities). In 2009 the IASB issued the IFRS for SMEs (Small and Medium-sized entities) and this is an important step toward the introduction of IFRS for all companies.

Many commentators believe that in the light of the EC's commitment to IFRS it is only a matter of time before national standard setting bodies like the ASB in the UK are, in effect, replaced by the IASB, with national standards falling into disuse. However, the IASB will continue to need input and expertise from valued national standard setters like the ASB.

IFRS in the USA

Convergence between IFRS and US GAAP is one of the bigger issues in the global implementation of IFRS. At present, all US entities must file accounts prepared under US GAAP. However, in 2002

the IASB and its US equivalent, the FASB (Financial Accounting Standards Board) did agree to harmonise their work plans, and to work towards reducing the differences between IFRS and US GAAP.

In 2008 the Securities and Exchange Commission (SEC) issued a 'roadmap' for the use of IFRS, proposing the eventual mandatory use of IFRS for all US public companies by 2014. At present, only overseas issuers of securities are allowed to file accounts under IFRS (without having to provide a reconciliation to US GAAP).

The SEC's 'roadmap' allowed some companies the option of using IFRS from 2010. It envisages phasing in IFRS by requiring companies to file accounts under both IFRS and US GAAP for the two years 2012-2014, after which accounts would be prepared under IFRS alone.

Rules-based versus principles-based financial reporting Standards

US GAAP is an example of a rules-based approach. It consists of a large number of specific accounting standards, and each standard contains a large number of rules (as well as exceptions to the rules), attempting to prescribe treatments for every possible situation that might arise. However, in 2002 the incoming chairman of the FASB signalled his support for a shift to a principles-based approach:

'I understand the US environment where there has been such a proliferation of rules. I like the principles-based approach but some people have exaggerated the differences. You are always going to have rules but the question is: 'Where do I start?' You can never have a rule for everything and at that point you have to go back to principles.' (*Bob Hertz, FASB Chairman, Financial Times, 27 May 2002*)

The US has accordingly begun to develop a principles-based approach, which coincides with its move toward adoption of IFRS, which are themselves principles-based.

A principles-based approach then, is one where the individual standards can be clearly seen to be applications of the approach to accounting adopted by the standards as a whole. Thus each individual IAS/IFRS applies the IASB *Conceptual Framework*, and each standard is an individual reflection of the whole. Specificity at the level of detail is sacrificed for clarity in terms of the overall approach.

Accountants working under IFRS are required to use more professional judgement than under a rules-based approach. There may not be a specific rule that applies to the event that they need to report, so they need to use judgement in applying the principles contained in the relevant IFRS. It is the view of the IASB that this will result in better quality financial reporting. Accounts will have to be true to the overall principles of IFRS, rather than to an individual rule that may not be appropriate for the event being reported, and which may therefore end up with an accounting treatment that is not true to the intentions of IFRS as a whole.

Brief comparison of IFRS v UK GAAP v US GAAP

To provide you with some practical perspective, here is a very brief comparison between IAS, UK GAAP and US GAAP requirements regarding two financial reporting areas.

Subject	UK GAAP	US GAAP	IFRS
Inventory valuation	The LIFO method is not permitted under UK GAAP, so inventory must be valued using a method such as FIFO (first in first out).	In the USA inventory may be valued using the LIFO (last in first out) method. Under this method, assuming prices are rising, closing inventory has a lower value than using FIFO.	IAS 2 (revised) requires use of FIFO or the weighted average method for ordinarily interchangeable items.
Development expenditure	Development expenditure should be written off in year of expenditure, except in certain circumstances where it may be deferred.	Development expenditure must be written off to profit or loss under all circumstances.	Under IAS 38 (revised) development costs are capitalised if certain criteria are met.

UK Accounting Standards Board Convergence Approach

In the UK a detailed comparison has been carried out between international and UK accounting standards which has been documented in what is called The Convergence Handbook.

The following statement is taken from The Convergence Handbook.

'The ASB is working with the IASB and other national standard setters in order to seek improvements in IFRS and convergence of national and international standards. The ASB is one of several national standard setters that have a formal liaison relationship with the IASB. This relationship involves regular meetings and other consultations as well as several joint standard setting projects, including the ASB's joint project with the IASB on reporting financial performance.

The ASB intends to align UK accounting standards with IFRS whenever practicable. It proposes to do this, in the main, by a phased replacement of existing UK standards with new UK standards based on the equivalent IFRS.'

11 Benefits of and barriers to global harmonisation

Benefits of global harmonisation

The benefits of harmonisation will be based on the benefits to users and preparers of accounts, as follows:

- (a) Investors, both individual and corporate, would like to be able to compare the financial results of different companies internationally as well as nationally in making investment decisions.
- (b) Multinational companies would benefit from harmonisation for many reasons including the following:
 - Better access would be gained to foreign investor funds.
 - Management control would be improved, because harmonisation
 - Would aid internal communication of financial information.
 - Appraisal of foreign entities for take-overs and mergers would be more straightforward.
 - It would be easier to comply with the reporting requirements of overseas stock exchanges.
 - Preparation of group accounts would be easier.

- A reduction in audit costs might be achieved.
 - Transfer of accounting staff across national borders would be easier.
- (c) Governments of developing countries would save time and money if they could adopt international standards and, if these were used internally, governments of developing countries could attempt to control the activities of foreign multinational companies in their own country. These companies could not 'hide' behind foreign accounting practices which are difficult to understand.
- (d) Tax authorities. It will be easier to calculate the tax liability of investors, including multinationals who receive income from overseas sources.
- (e) Regional economic groups usually promote trade within a specific geographical region. This would be aided by common accounting practices within the region.
- (f) Large international accounting firms would benefit as accounting and auditing would be much easier if similar accounting practices existed throughout the world.

Barriers to harmonisation

- (a) Different purposes of financial reporting. In some countries the purpose is solely for tax assessment, while in others it is for investor decision-making.
- (b) Different legal systems. These prevent the development of certain accounting practices and restrict the options available.
- (c) Different user groups. Countries have different ideas about who the relevant user groups are and their respective importance. In the USA investor and creditor groups are given prominence, while in Europe employees enjoy a higher profile.
- (d) Needs of developing countries. Developing countries are obviously behind in the standard setting process and they need to develop the basic standards and principles already in place in most developed countries.
- (e) Nationalism is demonstrated in an unwillingness to accept another country's standard.
- (f) Cultural differences result in objectives for accounting systems differing from country to country.
- (g) Unique circumstances. Some countries may be experiencing unusual circumstances which affect all aspects of everyday life and impinge on the ability of companies to produce proper reports, for example hyperinflation, civil war, currency restriction and so on.

- (h) The lack of strong accountancy bodies. Many countries do not have strong independent accountancy or business bodies which would press for better standards and greater harmonisation.

12 IFRS 1: First-time adoption of International Financial Reporting Standards

IFRS 1 sets out the precise way in which companies should implement a change from local accounting standards (their previous GAAP) to IFRS. One of the main reasons for issuing a new standard was that listed companies in the EU were required to prepare their consolidated financial statements in accordance with IFRS from 2005 onwards.

The standard is intended to ensure that an entity's first IFRS financial statements contain high quality information that: is transparent for users and comparable over all periods presented; provides a suitable starting point for accounting under IFRS; and can be generated at a cost that does not exceed the benefits to users.

Date of transition to IFRSs: The beginning of the earliest period for which an entity presents full comparative information under IFRSs in its first IFRS financial statements.

Deemed cost: An amount used as a surrogate for cost or depreciated cost at a given date.

Fair value: The amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arm's length transaction.

First IFRS financial statements: The first annual financial statements in which an entity adopts International Financial Reporting Standards (IFRSs), by an explicit and unreserved statement of compliance with IFRSs.

Opening IFRS statement of financial position: An entity's statement of financial position (published or unpublished) at the date of transition to IFRSs.

Previous GAAP: The basis of accounting that a first time adopter used immediately before adopting IFRSs.

Reporting date: The end of the latest period covered by financial statements or by an interim financial report.

(IFRS 1)

Note that the definition of fair value has now been amended by IFRS 13 to:

The price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

IFRS 1 only applies where an entity prepares IFRS financial statements for the first time. Changes in accounting policies made by an entity that already applies IFRSs should be dealt with by applying either *IAS 8: Accounting policies, changes in accounting estimates and errors* or specific transitional requirements in other standards.

Making the transition to IFRS

An entity should:

- (a) Select accounting policies that comply with IFRSs at the reporting date for the entity's first IFRS financial statements.
- (b) Prepare an opening IFRS statement of financial position at the date of transition to IFRSs. This is the starting point for subsequent accounting under IFRSs. The date of transition to IFRSs is the beginning of the earliest comparative period presented in an entity's first IFRS financial statements.
- (c) Disclose the effect of the change in the financial statements.

Example: reporting date and opening IFRS statement of financial position

A listed company has a 31 December year-end and will be required to comply with IFRSs from 1 January 2012.

What is the date of transition to IFRSs?

The company's first IFRS financial statements will be for the year ended 31 December 2012.

IFRS 1 requires that at least one year's comparative figures are presented in the first IFRS financial statements. The comparative figures will be for the year ended 31 December 2011.

Therefore the date of transition to IFRSs is 1 January 2011 and the company prepares an opening IFRS statement of financial position at this date.

Preparing the opening IFRS statement of financial Position

IFRS 1 states that in its opening IFRS statement of financial position an entity shall:

- (a) Recognise all assets and liabilities whose recognition is required by IFRSs
- (b) Not recognise items as assets or liabilities if IFRSs do not permit such recognition
- (c) Reclassify items that it recognised under previous GAAP as one type of asset, liability or component of equity, but are a different type of asset liability or component of equity under IFRSs
- (d) Apply IFRS in measuring all recognised assets and liabilities

This involves restating the statement of financial position prepared at the same date under the entity's previous GAAP so that it complies with IASs and IFRSs in force at the first reporting date. In our example above, the company prepares its opening IFRS statement of financial position at 1 January 2008, following accounting policies that comply with IFRSs in force at 31 December 2009.

The accounting policies that an entity uses in its opening IFRS statement of financial position may differ from those it used for the same date using its previous GAAP. The resulting adjustments are recognised directly in retained earnings (in equity) at the date of transition. (This is because the adjustments arise from events and transactions before the date of transition to IFRS.)

Exemptions from other IFRSs

A business may elect to use any or all of a range of exemptions. These enable an entity not to apply certain requirements of specific accounting standards retrospectively in drawing up its opening IFRS statement of financial position. Their purpose is to ensure that the cost of producing IFRS financial statements does not exceed the benefits to users.

Business combinations

IFRS 3 need not be applied retrospectively to business combinations that occurred before the date of the opening IFRS statement of financial position. This has the following consequences.

- (a) Combinations keep the same classification (e.g. acquisition, uniting of interests) as in the previous GAAP financial statements.
- (b) All acquired assets and liabilities are recognised other than:
 - Some financial assets and financial liabilities derecognised under the previous GAAP (derivatives and special purpose entities must be recognised);

- Assets (including goodwill) and liabilities those were not recognised under previous GAAP and would not qualify for recognition under IFRSs.

Any resulting change is recognised by adjusting retained earnings (i.e. equity) unless the change results from the recognition of an intangible asset that was previously subsumed within goodwill. Items which do not qualify for recognition as an asset or liability under IFRSs must be excluded from the opening IFRS statement of financial position. For example, intangible assets that do not qualify for separate recognition under IAS 38 must be reclassified as part of goodwill. The carrying amount of goodwill in the opening IFRS statement of financial position is the same as its carrying amount under previous GAAP. However, goodwill must be tested for impairment at the transition date.

13 The need for a conceptual framework

A conceptual framework, in the field we are concerned with, is a statement of generally accepted theoretical principles which form the frame of reference for financial reporting. These theoretical principles provide the basis for the development of new accounting standards and the evaluation of those already in existence.

Although it is theoretical in nature, a conceptual framework for financial reporting has highly practical final aims.

The danger of not having a conceptual framework is demonstrated in the way some countries' standards have developed over recent years; standards tend to be produced in a haphazard and fire-fighting way. Where an agreed framework exists, the standard-setting body acts as an architect or designer, rather than a fire-fighter, building accounting rules on the foundation of sound, agreed basic principles.

The lack of a conceptual framework also means that fundamental principles are tackled more than once in different standards, thereby producing contradictions and inconsistencies in basic concepts. This leads to ambiguity and it affects the true and fair concept of financial reporting.

Another problem with the lack of a conceptual framework has become apparent in the USA. The large number of highly detailed standards produced by the Financial Accounting Standards Board (FASB) has created a financial reporting environment governed by specific rules rather than general principles. This would be avoided if a cohesive set of principles were in place.

A conceptual framework can also bolster standard setters against political pressure from various 'lobby groups' and interested parties. Such pressure would only prevail if it was acceptable under the conceptual framework.

Advantages and disadvantages of a conceptual framework

Advantages

- (a) The situation is avoided whereby standards are being developed on a patchwork basis, where a particular accounting problem is recognised as having emerged, and resources were then channelled into standardising accounting practice in that area, without regard to whether that particular issue was necessarily the most important issue remaining at that time without standardisation.
- (b) As stated above, the development of certain standards (particularly national standards) have been subject to considerable political interference from interested parties. Where there is a conflict of interest between user groups on which policies to choose, policies deriving from a conceptual framework will be less open to criticism that the standard-setter buckled to external pressure.
- (c) Some standards may concentrate on the statement of profit or loss whereas some may concentrate on the valuation of net assets (statement of financial position).

Disadvantages

- (a) Financial statements are intended for a variety of users, and it is not certain that a single conceptual framework can be devised which will suit all users.
- (b) Given the diversity of user requirements, there may be a need for a variety of accounting standards, each produced for a different purpose (and with different concepts as a basis).
- (c) It is not clear that a conceptual framework makes the task of preparing and then implementing standards any easier than without a framework.

14 The IASB Conceptual Framework

The IASB *Framework for the Preparation and Presentation of Financial Statements* was produced in 1989 and is gradually being replaced by the new *Conceptual Framework for Financial Reporting*. This is the result of an IASB/FASB joint project and is being carried out in phases.

The Introduction to the *Conceptual Framework* points out the fundamental reason why financial statements are produced worldwide, i.e. to satisfy the requirements of external users, but that practice varies due to the individual pressures in each country. These pressures may be social, political, economic or legal, but they result in variations in practice from country to country, including the form of statements, the definition of their component parts (assets, liabilities etc.), the criteria for recognition of items and both the scope and disclosure of financial statements.

It is these differences which the IASB wishes to narrow by harmonising all aspects of financial statements, including the regulations governing their accounting standards and their preparation and presentation.

The preface emphasizes the way financial statements are used to make economic decisions and thus financial statements should be prepared to this end. The types of economic decisions for which financial statements are likely to be used include the following:

- Decisions to buy, hold or sell equity investments
- Assessment of management stewardship and accountability
- Assessment of the entity's ability to pay employees
- Assessment of the security of amounts lent to the entity
- Determination of taxation policies
- Determination of distributable profits and dividends
- Inclusion in national income statistics
- Regulations of the activities of entities

Any additional requirements imposed by national governments for their own purposes should not affect financial statements produced for the benefit of other users.

The *Conceptual Framework* recognises that financial statements can be prepared using a variety of models. Although the most common is based on historical cost and a nominal unit of currency (i.e. pound sterling, US dollar etc.), the *Conceptual Framework* can be applied to financial statements prepared under a range of models.

Purpose and status

The introduction gives a list of the purposes of the *Conceptual Framework*.

- (a) To assist the Board in the development of future IFRSs and in its review of existing IFRSs.

- (b) To assist the Board in promoting harmonisation of regulations, accounting standards and procedures relating to the presentation of financial statements by providing a basis for reducing the number of alternative accounting treatments permitted by IFRSs.
- (c) To assist national standard-setting bodies in developing national standards.
- (d) To assist preparers of financial statements in applying IFRSs and in dealing with topics that have yet to form the subject of an IFRS.
- (e) To assist auditors in forming an opinion as to whether financial statements comply with IFRSs.
- (f) To assist users of financial statements in interpreting the information contained in financial statements prepared in compliance with IFRSs.
- (g) To provide those who are interested in the work of the IASB with information about its approach to the formulation of IFRSs.

The *Conceptual Framework* is not an IFRS and so does not overrule any individual IFRS. In the (rare) case of conflict between an IFRS and the *Conceptual Framework*, the IFRS will prevail.

Scope

The *Conceptual Framework* deals with:

- (a) The objective of financial statements
- (b) The qualitative characteristics that determine the usefulness of information in financial statements
- (c) The definition, recognition and measurement of the elements from which financial statements are constructed
- (d) Concepts of capital and capital maintenance

Users and their information needs

Users of accounting information consist of investors, employees, lenders, suppliers and other trade creditors, customers, government and their agencies and the public. Their needs are as follows.

- (a) Investors are the providers of risk capital
 - Information is required to help make a decision about buying or selling shares, taking up a rights issue and voting

- Investors must have information about the level of dividend, past, present and future and any changes in share price.
 - Investors will also need to know whether the management has been running the company efficiently.
 - As well as the position indicated by the financial statements and earnings per share (EPS), investors will want to know about the liquidity position of the company, the company's future prospects, and how the company's shares compare with those of its competitors.
- (b) Employees need information about the security of employment and future prospects for jobs in the company, and to help with collective pay bargaining.
- (c) Lenders need information to help them decide whether to lend to a company. They will also need to check that the value of any security remains adequate, that the interest repayments are secure, that the cash is available for redemption at the appropriate time and that any financial restrictions (such as maximum debt/equity ratios) have not been breached.
- (d) Suppliers need to know whether the company will be a good customer and pay its debts.
- (e) Customers need to know whether the company will be able to continue producing and supplying goods.
- (f) Government's interest in a company may be one of creditor or customer, as well as being specifically concerned with compliance with tax and company law, ability to pay tax and the general contribution of the company to the economy.
- (g) The public at large would wish to have information for all the reasons mentioned above, but it could be suggested that it would be impossible to provide general purpose accounting information which was specifically designed for the needs of the public.

Financial statements cannot meet all these users' needs, but financial statements which meet the needs of investors (providers of risk capital) will meet most of the needs of other users.

The *Conceptual Framework* emphasises that the preparation and presentation of financial statements is primarily the responsibility of an entity's management. Management also has an interest in the information appearing in financial statements.

15 The objective of general purpose financial Reporting

The Conceptual Framework states that:

'The objective of general purpose financial reporting is to provide information about the reporting entity that is useful to existing and potential investors, lenders and other creditors in making decisions about providing resources to the entity.'

These users need information about:

- the economic resources of the entity;
- the claims against the entity; and
- changes in the entity's economic resources and claims

Information about the entity's economic resources and the claims against it helps users to assess the entity's liquidity and solvency and its likely needs for additional financing. Information about a reporting entity's financial performance (the changes in its economic resources and claims) helps users to understand the return that the entity has produced on its economic resources. This is an indicator of how efficiently and effectively management has used the resources of the entity and is helpful in predicting future returns.

The *Conceptual Framework* makes it clear that this information should be prepared on an accruals basis.

Accruals basis. The effects of transactions and other events are recognised when they occur (and not as cash or its equivalent is received or paid) and they are recorded in the accounting records and reported in the financial statements of the periods to which they relate. (*Conceptual Framework*)

Financial statements prepared under the accruals basis show users past transactions involving cash and also obligations to pay cash in the future and resources which represent cash to be received in the future.

Information about a reporting entity's cash flows during a period also helps users assess the entity's ability to generate future net cash inflows and gives users a better understanding of its operations.

16 Underlying assumption

Going concern is the underlying assumption in preparing financial statements.

Going concern: The entity is normally viewed as a going concern, that is, as continuing in operation for the foreseeable future. It is assumed that the entity has neither the intention nor the necessity of liquidation or of curtailing materially the scale of its operations. (*Conceptual Framework*)

It is assumed that the entity has no intention to liquidate or curtail major operations. If it did, then the financial statements would be prepared on a different (disclosed) basis.

17 Qualitative characteristics of useful financial Information

The *Conceptual Framework* states that qualitative characteristics are the attributes that make financial information useful to users.

The *Conceptual Framework* distinguishes between fundamental and enhancing qualitative characteristics, for analysis purposes. Fundamental qualitative characteristics distinguish useful financial reporting information from information that is not useful or misleading. Enhancing qualitative characteristics distinguish more useful information from less useful information.

The two fundamental qualitative characteristics are relevance and faithful representation.

Relevance: Relevant information is capable of making a difference in the decisions made by users. It is capable of making a difference in decisions if it has predictive value, confirmatory value or both. (*Conceptual Framework*)

The relevance of information is affected by its nature and its materiality.

Materiality: Information is material if omitting it or misstating it could influence decisions that users make on the basis of financial information about a specific reporting entity. (*Conceptual Framework*)

Faithful representation: Financial reports represent economic phenomena in words and numbers. To be useful, financial information must not only represent relevant phenomena but must faithfully represent the phenomena that it purports to represent. (*Conceptual Framework*)

To be faithful representation information must be complete, neutral and free from error.

A complete depiction includes all information necessary for a user to understand the phenomenon being depicted, including all necessary descriptions and explanations.

A neutral depiction is without bias in the selection or presentation of financial information. This means that information must not be manipulated in any way in order to influence the decisions of users.

Free from error means there are no errors or omissions in the description of the phenomenon and no errors made in the process by which the financial information was produced. It does not mean that no inaccuracies can arise, particularly where estimates have to be made.

Substance over form

This is not a separate qualitative characteristic under the *Conceptual Framework*. The IASB says that to do so would be redundant because it is implied in faithful representation. Faithful representation of a transaction is only possible if it is accounted for according to its substance and economic reality.

Enhancing qualitative characteristics

Comparability: Comparability is the qualitative characteristic that enables users to identify and understand similarities in, and differences among, items. Information about a reporting entity is more useful if it can be compared with similar information about other entities and with similar information about the same entity for another period or date. (*Conceptual Framework*)

Consistency, although related to comparability, is not the same. It refers to the use of the same methods for the same items (i.e. consistency of treatment) either from period to period within a reporting entity or in a single period across entities.

The disclosure of accounting policies is particularly important here. Users must be able to distinguish between different accounting policies in order to be able to make a valid comparison of similar items in the accounts of different entities.

Comparability is not the same as uniformity. Entities should change accounting policies if those policies become inappropriate.

Corresponding information for preceding periods should be shown to enable comparison over time.

Verifiability: Verifiability helps assure users that information faithfully represents the economic phenomena it purports to represent. It means that different knowledgeable and independent observers could reach consensus that a particular depiction is a faithful representation. *(Conceptual Framework)*

Timeliness: Timeliness means having information available to decision-makers in time to be capable of influencing their decisions. Generally, the older information is the less useful it is. *(Conceptual Framework)*

Information may become less useful if there is a delay in reporting it. There is a balance between timeliness and the provision of reliable information.

If information is reported on a timely basis when not all aspects of the transaction are known, it may not be complete or free from error.

Conversely, if every detail of a transaction is known, it may be too late to publish the information because it has become irrelevant. The overriding consideration is how best to satisfy the economic decision-making needs of the users.

Understandability: Classifying, characterising and presenting information clearly and concisely makes it understandable.

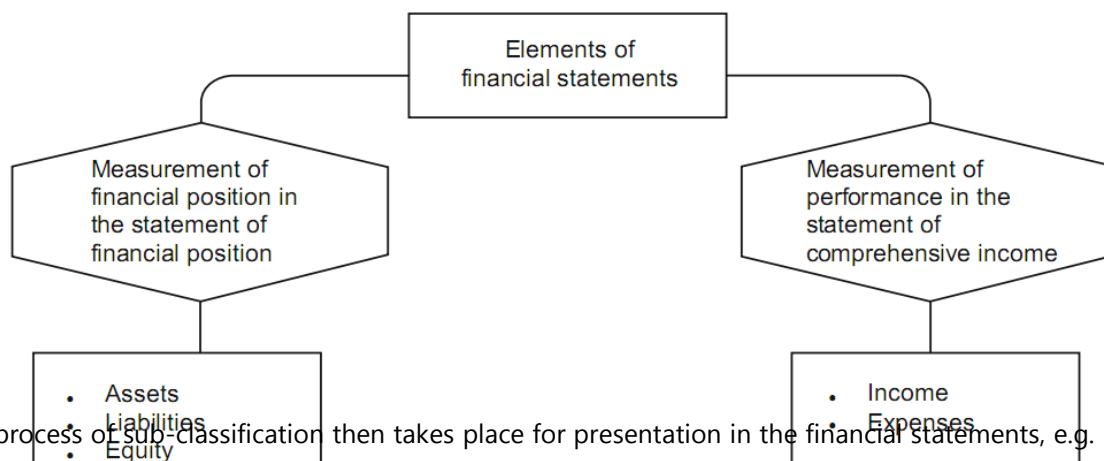
Financial reports are prepared for users who have a reasonable knowledge of business and economic activities and who review and analyse the information diligently. Some phenomena are inherently complex and cannot be made easy to understand. Excluding information on those phenomena might make the information easier to understand, but without it those reports would be incomplete and therefore misleading. Therefore matters should not be left out of financial statements simply due to their difficulty as even well informed and diligent users may sometimes need the aid of an advisor to understand information about complex economic phenomena.

The cost constraint on useful financial reporting

This is a pervasive constraint, not a qualitative characteristic. When information is provided, its benefits must exceed the costs of obtaining and presenting it. This is a subjective area and there are other difficulties: others, not the intended users, may gain a benefit; also the cost may be paid by someone other than the users. It is therefore difficult to apply a cost-benefit analysis, but preparers and users should be aware of the constraint.

18 The elements of financial statements

Transactions and other events are grouped together in broad classes and in this way their financial effects are shown in the financial statements. These broad classes are the elements of financial statements. The *Conceptual Framework* lays out these elements as follows:



A process of sub-classification then takes place for presentation in the financial statements, e.g. assets are classified by their nature or function in the business to show information in the best way for users to take economic decisions.

Financial position

We need to define the three terms listed under this heading above.

Asset: A resource controlled by an entity as a result of past events and from which future economic benefits are expected to flow to the entity.

Liability: A present obligation of the entity arising from past events, the settlement of which is expected to result in an outflow from the entity of resources embodying economic benefits.

Equity: The residual interest in the assets of the entity after deducting all its liabilities.

(Conceptual Framework)

These definitions are important, but they do not cover the criteria for recognition of any of these items. This means that the definitions may include items which would not actually be recognised in the financial statements because they fail to satisfy recognition criteria particularly, as we will see below, the probable flow of any economic benefit to or from the business.

Whether an item satisfies any of the definitions above will depend on the substance and economic reality of the transaction, not merely its legal form.

Performance

Profit is used as a measure of performance, or as a basis for other measures (e.g. EPS). It depends directly on the measurement of income and expenses, which in turn depend (in part) on the concepts of capital and capital maintenance adopted.

The elements of income and expense are therefore defined.

Income: Increases in economic benefits during the accounting period in the form of inflows or enhancements of assets or decreases of liabilities that result in increases in equity, other than those relating to contributions from equity participants.

Expenses: Decreases in economic benefits during the accounting period in the form of outflows or depletions of assets or incurrences of liabilities that result in decreases in equity, other than those relating to distributions to equity participants.

Both revenue and gains are included in the definition of income. Revenue arises in the course of ordinary activities of an entity. Gains include those arising on the disposal of non-current assets. The definition of income also includes unrealised gains such as gains on revaluation of marketable securities.

19 Recognition of the elements of financial Statements

Items which meet the definition of assets or liabilities may still not be recognised in financial statements because they must also meet certain recognition criteria.

Recognition. The process of incorporating in the financial statements an item that meets the definition of an element and satisfies the following criteria for recognition:

- (a) it is probable that any future economic benefit associated with the item will flow to or from the entity; and
- (b) the item has a cost or value that can be measured with reliability.

(Conceptual Framework)

Regard must be given to materiality.

Probability of future economic benefits

Probability here means the degree of uncertainty that the future economic benefits associated with an item will flow to or from the entity. This must be judged on the basis of the characteristics of the entity's environment and the evidence available when the financial statements are prepared.

Reliability of measurement

The cost or value of an item, in many cases, must be estimated. The *Conceptual Framework* states, however, that the use of reasonable estimates is an essential part of the preparation of financial statements and does not undermine their reliability. Where no reasonable estimate can be made, the item should not be recognised, although its existence should be disclosed in the notes, or other explanatory material.

Items may still qualify for recognition at a later date due to changes in circumstances or subsequent events.

Recognition of items

We can summarise the recognition criteria for assets, liabilities, income and expenses, based on the definition of recognition given above.

Item	Recognised in	When
Asset	The statement of financial position	It is probable that the future economic benefits will flow to the entity and the asset has a cost or value that can be measured reliably.
Liability	The statement of financial position	It is probable that an outflow of resources embodying economic benefits will result from the settlement of a present obligation and the amount at which the settlement will take place can be measured reliably.
Income	The statement of profit or loss and other	An increase in future economic benefits related to an increase in an

	comprehensive income	asset or a decrease of a liability has arisen that can be measured reliably.
Expenses	The statement of profit or loss and other comprehensive income	A decrease in future economic benefits related to a decrease in an asset or an increase of a liability has arisen that can be measured reliably.

20 Measurement of the elements of financial

Measurement: The process of determining the monetary amounts at which the elements of the financial statements are to be recognised and carried in the statement of financial position and statement of comprehensive income. (*Conceptual Framework*)

This involves the selection of a particular basis of measurement. A number of these are used to different degrees and in varying combinations in financial statements. They include the following:

Historical cost: Assets are recorded at the amount of cash or cash equivalents paid or the fair value of the consideration given to acquire them at the time of their acquisition. Liabilities are recorded at the amount of proceeds received in exchange for the obligation, or in some circumstances (for example, income taxes), at the amounts of cash or cash equivalents expected to be paid to satisfy the liability in the normal course of business.

Current cost: The amount of cash or cash equivalents that would have to be paid if the same or an equivalent asset was acquired currently.

Realisable (settlement) value:

- **Realisable value:** The amount of cash or cash equivalents that could currently be obtained by selling an asset in an orderly disposal.
- **Settlement value:** The undiscounted amounts of cash or cash equivalents expected to be paid to satisfy the liabilities in the normal course of business.

Present value: A current estimate of the present discounted value of the future net cash flows in the normal course of business.

(*Conceptual Framework*)

Historical cost is the most commonly adopted measurement basis, but this is usually combined with other bases, e.g. inventory is carried at the lower of cost and net realisable value

Chapter 2: Understanding the use of double entry and accounting systems

1 Business transactions and documents

1.1 The main data sources in an accounting system

An accounting system or book-keeping system records data about business transactions, and this data is eventually used to prepare financial statements at the end of the accounting period.

The data that is recorded comes from a variety of documents, which are often in paper form but might be in electronic form within a computerised system.

Businesses sell goods or services to their customers. They also buy materials and parts and services from suppliers. They hire employees and pay them for the work they do. They also incur other expenses, such as the costs of building rentals, and the costs of gas, electricity and water supply. All these transactions – and more – are recorded in the accounting system of the business.

For many businesses, the main types of business transaction are:

- sales, sometimes for cash but often on credit
- purchases of goods and services, usually on credit
- cash receipts and cash payments.

There are other transactions, which are recorded differently. Payments to employees, for example, are recorded within the payroll system. Purchases of non-current assets are similar to purchases of goods in many ways, although separate records are maintained of non-current assets (in a 'non-current assets register').

For the purpose of the examination, you need to be aware of the documentation and processes within a normal sales transaction cycle and a normal purchases transaction cycle.

The things you need to know are:

- What are the main documents and what is the purpose of each document?
- What information does each document contain?

1.2 Sales transactions

A business might sell goods or services to a customer. This creates revenue or income for the business.

Cash sales

Sales might be for cash, which means that the customer pays immediately, in notes and coin, by debit card, credit card, cheque or by some less common method such as banker's draft.

When a business sells goods for cash, it should give the customer a receipt. It should also keep a record of each sale. In shops, details of each sale transaction are recorded by the equipment at the cash desk. In an old-fashioned cash register, for example, each transaction is printed on a 'till roll'. Computerised point of sale systems in supermarkets and stores record each cash sale transaction automatically.

Credit sales

Many businesses sell their goods or services on credit, which means that they give the customer time to pay. Typically a business will give its customers 30 days credit, meaning that the customer must pay by the end of 30 days from the date of sale.

A credit sale transaction may begin with an order from the customer. Orders are documented. The customer might send his own purchase order. Orders taken verbally, say by telephone, are copied on to a sales order document (or into the seller's computer system, as a **sales order**.)

When the goods are delivered to the customer, the seller often provides a **delivery note**, stating the quantity and type of goods have been delivered. When goods are sent by post, or when delivery might take some time, the seller might send notice to the customer that the goods have been despatched and are on their way (in a **goods despatched note**). For example, with internet sales the seller will often send a goods despatched note to the customer in the form of an e-mail message.

The seller will also send an invoice to the customer.

Sales invoices

For credit sales, the customer is given a sales invoice. A sales invoice is simply a request for the customer to pay, and it includes details such as:

- the goods or services purchased by the customer
- the amount payable
- if sales tax is payable, the invoice shows the amount payable before sales tax, the sales tax and the total amount payable including sales tax

The time by when the payment should be made. Customers are expected to pay invoices in full by the latest specified date on the invoice.

Sales invoices also include other information, such as:

- the name and address of the business sending the invoice (on the 'letter head' for the invoice) and other contact details
- the name and address of the customer, and possibly a customer identity number
- the sales invoice number: a business should number its sales invoices sequentially.

Some invoices have a tear-off counterfoil or **remittance advice**, which the customer is asked to send with the payment. The counterfoil includes the customer's identity number, the invoice number and the total amount payable. A counterfoil helps a business to identify what payments are for when cheques are received through the post.

Statements

Some businesses also send statements to customers, as well as invoices. Statements may be used when a customer buys goods or services regularly. Typically, statements are sent to customers every month or perhaps every three months, listing:

- the amount still owed by the customer at the beginning of the statement period
- the amounts purchased by the customer in the period (each sale/purchase transaction is itemised separately)
- amounts paid by the customer in the period (each payment is itemized separately)
- the amount owed by the customer at the end of the statement period.

Sales returns and credit notes

Sometimes a customer returns goods that have been sold to him. One reason for sales returns is that the goods might be in bad condition and of unsatisfactory quality.

When a customer returns goods, having bought them on credit, it might seem that the logical thing to do is to re-issue an invoice for a smaller amount. In practice, this does not usually happen. Instead, the seller issues the customer with a **credit note**.

Credit notes are, in effect, a reduction in an amount payable, documented as a separate transaction. For example, if there is an invoice to a customer for \$200 and the business agrees to reduce the amount payable by \$40 because some of the goods were of poor quality, a credit

note is issued to the customer for \$40. The customer is required to pay \$160, which is the invoice for \$200 less the credit note for \$40.

1.3 Sales transactions and accounting records

The data about sales transactions recorded in an accounting system comes from:

- sales invoices
- credit notes
- payments by customers (e.g. cheque and remittance advice)
- receipts (the seller's copy) in the case of cash sales.

Documents in a sales transaction that are not used to record data in the accounting system are the sales order from the customer, the delivery note or goods dispatched note and statements.

1.4 Purchase transactions

Businesses make purchases from suppliers. Purchases are similar in many respects to sales, except that the business is buying from a supplier rather than selling to a customer.

Quotation

For large purchase transactions, or for contracts for the provision of services, a number of potential suppliers might be asked to provide a price quotation. The selected potential suppliers then submit a quotation (including other details, such as terms and conditions) and the buyer decides which one to accept. In many cases, the contract might be given to the supplier who quotes the lowest price.

Purchase order

For each purchase transaction, there should be a **purchase order**. A purchase order may be made verbally, but many businesses want documentary evidence of their purchase orders. So for each purchase transaction, there is a purchase order in writing.

Goods received note

When goods are purchased, the goods are delivered together with the supplier's delivery note. The business might then make its own internal record of the goods received, and for each delivery note will prepare a **goods received note**. The goods received note will include details of the goods delivered by the supplier, with additional details such as the inventory code number of the purchased items.

Purchase invoice

If the purchase is on credit (which is usual) the supplier sends an invoice. This is called a **purchase invoice**. A purchase invoice is the same as a sales invoice, except that it is originated by the supplier. Since they come from other business entities, purchase invoices all look different, because each has the letter heading and invoice design for the particular supplier.

Purchase invoices should be paid by the latest date shown on the invoice.

Regular suppliers might send monthly statements.

Purchase returns

When goods are returned to a supplier, for example because they are faulty, the supplier will issue a credit note. The buyer might also record details of the purchase returns in an internally-produced document, a **debit note**. The details in a debit note should match the details in the credit note that the supplier provides.

Statements and credit notes from suppliers are similar to statements and credit notes sent to customers.

1.5 Purchase transactions and accounting records

The data about purchase transactions recorded in an accounting system comes from:

- purchase invoices
- credit notes from the supplier or debit notes produced internally
- payments to suppliers
- receipts (the purchaser's copy) in the case of cash purchases.

Documents in a purchase transaction that are not used to record data in the accounting system are quotations, the purchase order, and statements received each month from the supplier.

Goods received notes might be used to update inventory records, but not all business entities keep up-to-date inventory records.

1.6 From source documents to accounting records

Data in the documents described above are copied into the accounting records. Initially they are copied into 'books of prime entry' (i.e. books where an accounting entry is made for the first time). They are subsequently transferred to 'ledger accounts'.

2 The accounting equation and business transactions

2.1 A simple representation of the statement of financial position

The accounting equation is a simplified way of showing a statement of financial position. The equation is:

$$\begin{array}{ccccccc} \text{Assets} & = & \text{Equity} & + & \text{Liabilities} \\ \mathbf{A} & = & \mathbf{E} & + & \mathbf{L} \end{array}$$

Each new financial transaction affects the numbers in the accounting equation, but the accounting equation must always apply. Total assets must always be equal to the combined total of equity plus liabilities.

The accounting equation is a useful introduction to the preparation of a simple income statement and statement of financial position. It is also a useful introduction the principles of double-entry book-keeping, and the **duality concept** that every transaction has two aspects that must be recorded.

The accounting equation and the business entity concept

The accounting equation, like the statement of financial position, is based on the business entity concept, that a business is a separate entity from the person or persons who own it. The owner puts capital into the business, and the business 'owes' this to the owner.

For example, suppose that Group 4 sets up a business 'Group 4 security services' and puts some capital into the business. The accounting system of the business would consider that 'Greg's Security Services' is an entity on its own, separate from Greg, and that Greg is an owner to which the business owes the capital.

2.2 The effect of financial transactions on the accounting equation

The effect of financial transactions on the accounting equation will be explained by looking at a series of business transactions for a newly-established sole trader's business.

Example 1: setting up a business by introducing capital

Ellen has decided to set up in business selling football shirts from a stall in the market place. She begins by putting \$4,000 into a bank account for the business. This transaction sets up the business, and it is recorded in the accounting equation as follows:

Assets	\$	=	Equity	\$	+	Liabilities	\$
Cash	4,000		Capital	4,000			0

Capital has been introduced into the new business. This is recorded as the owner's capital. The new business also has cash in the bank, which is an asset. Assets and equity have both increased by \$4,000.

Example 2: borrowing money

Ellen then obtains a loan of \$3,000 from her brother to purchase a motor van for the business. The business acquires a new asset – a motor van – but has also acquired a liability in the form of the loan. Assets and liabilities have both increased by \$3,000.

After the van has been purchased, the accounting equation changes to:

Assets	\$	=	Equity	\$	+	Liabilities	\$
Cash	4,000		Capital	4,000		Loan	3,000
Van	<u>3,000</u>						
	7,000			4,000			3,000

Example 3: paying cash to buy another asset

Ellen buys a market stall and pays \$400 in cash. The business has used one asset (cash) to acquire a different asset (a stall). There is no change in the total assets, simply a change in the make-up of the assets.

The accounting equation changes to:

Assets	\$	=	Equity	\$	+	Liabilities	\$
Cash	3,600		Capital	4,000		Loan	3,000
Stall	400						
Van	<u>3,000</u>						
	7,000			4,000			3,000

Example 4: buying assets on credit

Ellen now buys some football shirts for \$1,600. He buys this on credit (e.g. does not have to pay for them immediately).

The business has acquired more assets (shirts = inventory). In doing so, it has created another liability, because it now owes money to its supplier, who is recorded as a 'trade payable'. Both assets and liabilities have increased by the same amount.

The accounting equation changes to:

Assets	\$	=	Equity	\$	+	Liabilities	\$
Cash	3,600		Capital	4,000		Loan	3,000
Stall	400						
Inventory	1,600					Trade payables	1,600
Van	<u>3,000</u>						
	8,600			4,000			4,600

Example 5: cash payment to settle a liability

Ellen pays \$1,000 to his suppliers for some of the shirts he purchased.

The payment reduces the liabilities of the business, but also reduces its assets (cash) by the same amount.

The accounting equation changes as follows:

Assets	\$	=	Equity	\$	+	Liabilities	\$
Cash	2,600		Capital	4,000		Loan	3,000
Stall	400						
Inventory	1,600					Trade payables	600
Van	<u>3,000</u>						
	7,600			4,000			3,600

Example 6: cash sales, cost of sales and profit

Ellen sells 50% of the shirts (cost = \$800) for \$1,200 in cash.

The business has sold assets that cost \$800. It has received \$1,200 in cash, and the difference is the profit on the sales. **Profit adds to the owner's capital.**

The accounting equation changes as follows:

Assets	\$	=	Equity	\$	+	Liabilities	\$
Cash	3,800		Capital	4,400		Loan	3,000
Stall	400						

Inventory	800		Trade payables	600
Van	<u>3,000</u>			
	8,000	4,400		3,600

Example 7: credit sales, cost of sales and profit

Ellen sells shirts for \$900, to a shop owner in another town. These shirts originally cost \$500. He sells the shirts on credit, giving the purchaser one month to pay. The business has sold for \$900 assets that cost \$500. The difference is the profit of \$400 on the sale. Profit adds to the owner's capital, taking the total profit earned so far from \$300 to \$700. With this transaction, however, the business is still owed money from the customer for the sale.

Money owed by a customer for a sale on credit is called a 'trade receivable'. A trade receivable is an asset.

The accounting equation changes to:

Assets	\$	=	Equity	\$	+	Liabilities	\$
Cash	3,800		Capital	4,400		Loan	3,000
Stall	400		Profit	400			
Inventory	300					Trade payables	600
Accounts receivable	900						
Van	<u>3,000</u>						
	8,400			4,800			3,600

Example 8

Suppose that the accounting equation of Ellen after several months is as follows.

Assets	\$	=	Equity	\$	+	Liabilities	\$
Cash	8,000		Capital	4,000		Loan	3,000
Stall	400		Profit	6,900			
Inventory	2000					Trade payables	2,000
Accounts receivable	2,500						
Van	<u>3,000</u>						
	15,900			10,900			5,000

Example 9

Ellen decides to take \$3,000 in cash out of his business, and he also takes inventory with a value of \$500.

The assets of the business are reduced by \$3,500 (cash + inventory), and capital is reduced by the same amount.

The accounting equation now changes as follows.

Assets	\$	=	Equity	\$	+	Liabilities	\$
Cash	5,000		Capital	4,000		Loan	3,000
Stall	400		Profit	6,900			
Inventory	1,500		Drawings	(3,500)		Trade payables	2,000
Accounts receivable	2,500						
Van	<u>3,000</u>						
	12,400			7,400			5,000

The drawings are \$3,500 (cash \$3,000 and inventory \$500). The accumulated profits remaining in the business are reduced by the drawings from \$6,900 to \$3,400.

Example 10

Alex operates a business as a sole trader. On 1 January 2014 the net assets of the business were \$60,000. During the year to 31 December 2014, the business made a profit of \$25,000 and Alex took out \$20,000 in drawings. Due to a shortage of cash in the business, he re-invested \$4,000 in early December 2014.

The net assets of the business at 30 December 2014 can be calculated as follows.

Opening net assets	+	Profit	+	Capital introduced	–	Drawings	=	Closing net assets
\$60,000	+	\$25,000	+	\$4,000	–	\$20,000	=	\$69,000

Example 11

Orla operates a business as a sole trader. On 31 December 2014 the net assets of the business were \$80,000. During the year to 31 December 2014, the business made a loss of \$5,000 and He took out \$10,000 in drawings during the year. She was also required to invest a further \$30,000 during the year.

The opening net assets of the business at 1 January 2014 can be calculated as follows:

$$\begin{array}{ccccccc} \text{Opening net} & & - & \text{Loss} & + & \text{Capital} & & - & \text{Drawings} & = & \text{Closing net} \\ \text{assets} & & & & & \text{introduced} & & & & & \text{assets} \end{array}$$

This can be rewrite as follows:

$$\begin{array}{ccccccc} \text{Opening net} & = & \text{Closing net} & + & \text{Loss} & - & \text{Capital} & + & \text{Drawings} \\ \text{assets} & & \text{assets} & & & & \text{introduced} & & \\ & = & \$80,000 & + & \$5,000 & - & \$30,000 & + & \$10,000 \\ & = & \$65,000 & & & & & & \end{array}$$

Alternatively it can be solved as follows:

Capital/net asset			
	\$		\$
Opening net asset	X	Drawings	X
Additional capital	X	Loss	X
Profit	<u>X</u>	Closing net asset	<u>X</u>
	X		X

Example 12

Suppose that a sales day book contains the following three transactions that have not yet been posted to the ledger accounts.

Customer Sale on credit/amount owed by customer

	\$
A	350
B	200
C	<u>250</u>
	800

If these transactions are posted to the ledgers:

Sales of \$800 will be recorded in the **main ledger**, both as \$800 of sales and \$800 of money now owed by customers (trade receivables).

In the **receivables ledger**, sales on credit of \$350 will be recorded in the individual account for A, sales of \$200 in the account for B Rose and sales of \$250 in the account for C.

Example 13

Suppose that the cash book (payments side) contains the following transactions that have not yet been posted to the ledgers.

Supplier Cash payment to the supplier

	\$
X	200
Y	100
Z	<u>500</u>
	800

These transactions are posted to the ledgers as follows:

- Payments of \$800 will be recorded in the main ledger, both as payments of \$800 from the bank account and \$800 of money paid to suppliers (trade payables).
- In the payables ledger, a payment of \$200 will be recorded in the individual account for X, a payment of \$100 in the account for Y and a payment of \$500 in the account for Z.

Example 14

Transaction 1: Robin sets up a business by putting \$5,000 into a bank account.

- This increases the cash of the business, and its capital.

Bank account			
	\$		\$
(1) Capital	5,000		

Capital account			
	\$		\$
		(1) Bank	5,000

- ✓ *The entry in each account shows the other account where the matching debit or credit entry appears.*
- ✓ *The numbers are included for illustrative purposes only, to help you to match the debit and credit entry for each transaction.*

Transaction 2: Robin purchases goods for \$4,000, paying \$1,500 in cash and buying \$2,500 of goods on credit.

- Total purchases are an addition to expenses (purchases). The purchases reduce cash by \$1,500 and increase trade payables by \$2,500.

Bank account			
	\$		\$
Capital	5,000	(2a) Purchases	1,500

Purchases account			
	\$		\$
(2a) Bank	1,500		
(2b) Trade payables	2,500		

Trade payables account			
	\$		\$
		(2b) Purchases	2,500

- ✓ *The purchases account is an expense account and the trade payables account is a liability account.*

Transaction 3. Robin sells goods for \$5,000. \$3,000 of these sales are in cash and the other \$2,000 are on credit.

- Total sales (income) are \$5,000, and the sales result in an increase in total assets of \$5,000, consisting of cash (\$3,000) and trade receivables (\$2,000).

Bank account			
	\$		\$
Capital	5,000	(2a) Purchases	1,500
(3a) Sales	3,000		

Sales account			

	\$		\$
		(3a) Bank	3,000
		(3b) Trade receivables	5,000

Trade receivables account			
	\$		\$
(3b) Sales	2,000		

Transaction 4. Robin purchases a Motor Vehicle for the business, costing \$2,500. He pays by cheque.

- This transaction adds to the non-current assets of the business, and reduces cash. An increase in one asset (equipment) is therefore matched by a reduction in another asset (cash).

Bank account			
	\$		\$
Capital	5,000	Purchases	1,500
Sales	3,000	(4) Motor vehicle	2,500

Motor vehicle account			
	\$		\$
(4) Bank	2,500		

Transaction 5. Robin pays rent of \$1,200 for six months, for office accommodation.

- Rent is an expense. The rental cost adds to expenses and reduces cash.

Bank account			
	\$		\$
Capital	5,000	Purchases	1,500
Sales	3,000	Motor vehicle	2,500
		(5) Rent	1,200

Rent account			
	\$		\$
(5) Bank	1,200		

Practice Questions

MCQ 1

Which of the following is an asset?

- A. A trade payable
- B. Drawings
- C. A loan
- D. A prepayment

MCQ 2

Which of the following is a liability?

- A. Depreciation
- B. Cash at bank
- C. An accrual
- D. Plant and machinery

MCQ 3

Capital is the amount:

- A. The entity's owners owe to it
- B. The entity's customers owe to it
- C. The entity owes to its creditors

- D. The entity 'owes' to its owners

MCQ 4

Which of the following are assets of an entity?

- A. Trade payables
- B. Trade receivables
- C. Bank overdraft
- D. Cash in hand
- E. Funds introduced by the owner

MCQ 5

Which of the following best describes the accruals concept?

- A. Assets are matched with liabilities
- B. Income is matched with expenses
- C. Expenses are matched with assets
- D. Income is matched with liabilities

MCQ 6

Which of the following is a non-current liability?

- A. A bank overdraft
- B. A bank loan repayable within a year
- C. A mortgage repayable in five years' time
- D. A trade payable

MCQ 7

The statement of financial position sets out the entity's

- A. Financial position over a period of time
- B. Financial performance over a period of time
- C. Financial position at one point in time
- D. Financial performance at one point in time

MCQ 8

Which of the following expenses is included in cost of sales?

- A. Sales people's salaries
- B. Management salaries
- C. Overdraft interest
- D. Cost of raw material

MCQ 9

A business has sales of £100,000, cost of sales of £60,000 and expenses of £20,000. The gross profit margin is:

- A. 60%
- B. 20%
- C. 40%
- D. 80%

MCQ 10

Which figure from a sole trader's income statement would appear in its statement of financial position?

- A. Gross profit
- B. Revenue
- C. Drawings
- D. Net profit

Chapter 3: Accounting for VAT or Sales tax

1. Accounting for VAT or Sales tax

- VAT is also known as sales tax.
- VAT can be divided into two categories input VAT (on purchase) and output VAT (on sales).
- It is one kind of indirect taxation.
- Only consumers/customers suffer the VAT or sales tax.
- VAT is usually regarded as current liability but sometimes it can be regarded as current asset.
- VAT on sales (output VAT) is debited to receivables as part of the posting from the sales day book and credited to the VAT liability account (it is owed to HMRC).
- VAT on purchases (input VAT) is debited to the VAT liability account (it is due from HMRC) and credited to payables as part of the posting from the purchases day book.
- The net amount of VAT owed to HMRC is paid to HMRC regularly.

1.1 What is VAT?

VAT is an indirect tax on the supply of goods and services. Tax is collected at each transfer point in the chain from prime producer to final consumer. Eventually, the consumer bears the tax in full and any tax paid earlier in the chain can be recovered by a registered trader who paid it.

Example

A manufacturing company, A Ltd, purchases raw materials at a cost of \$1,000 plus VAT at the standard rate of 17½%. From the raw materials A Ltd makes finished products which it sells to a retail outlet, B plc for \$1,600 plus VAT at 17½%. B plc sells the products to customers at a total price of \$2,000 plus VAT at 17½%. How much VAT is paid at each stage in the chain?

Solution

	<i>Value of goods sold</i>	<i>VAT 17½%</i>
	\$	\$
Supply to A Ltd (A Ltd pays \$175 VAT but recovers it)	1,000	<u>175</u>
Value added by A Ltd	<u>600</u>	
Sale to B plc (B plc pays \$280 VAT but recovers it)	1,600	280
Value added by B plc	<u>400</u>	

Sale to 'consumers' (customers pay \$350 VAT, and 2,000 350
cannot recover it)

1.2 How is VAT collected?

Although it is the final consumer who eventually bears the full VAT of \$350, the sum is collected and paid by the traders who make up the chain, provided they are registered for VAT. Each trader must assume that his customer is the final consumer:

- He must collect and pay over VAT at the appropriate rate on the full sales value (known as output tax) of the goods sold.
- He is normally entitled to reclaim VAT paid on his own purchases of goods, expenses and noncurrent assets (known as input tax) and so makes a net payment to the HMRC equal to the tax on value added by himself.

In the example above, the supplier of raw materials collects from A Ltd output VAT of \$175, all of which he pays over to HMRC. When A Ltd sells goods to B plc, output VAT is charged at the rate of 17½% on \$1,600 = \$280. Only \$105, however, is paid by A Ltd to HMRC, because the company is entitled to deduct input tax of \$175 suffered on its own purchases. Similarly, B plc must charge its customers \$350 in output VAT, but need only pay over to HMRC the net amount of \$70 after deducting the \$280 input VAT suffered on its purchase from A Ltd.

1.3 Registered and non-registered persons

Traders whose sales (outputs) are below a certain level need not register for VAT although they may do so voluntarily. Unregistered traders neither charge VAT on their outputs nor are entitled to reclaim VAT on their inputs. They are in the same position as a final consumer.

All outputs of registered traders are either taxable or exempt. Traders carrying on exempt activities (such as banks) cannot charge VAT on their outputs and consequently cannot reclaim VAT paid on their inputs.

Taxable outputs are chargeable at one of three rates.

- Zero rate (on books and newspapers for instance)
- Reduced rate (5% on domestic fuel)
- Standard rate: 17.5%

HMRC identifies supplies falling into each category. Persons carrying on taxable activities (even activities taxable at zero rate) are entitled to reclaim VAT paid on their inputs.

Some traders carry on a mixture of taxable and exempt activities. Such traders need to apportion the VAT suffered on inputs and can usually only reclaim the proportion of input tax that relates to taxable outputs.

Most traders account quarterly to HMRC for VAT.

- The most usual position is to have to pay the net balance to HMRC (when output tax exceeds input tax) i.e. HMRC is a payable.
- A trader who makes zero-rated supplies will have paid more input tax than it has received output tax, so will recover cash from HMRC, i.e. HMRC is a receivable.

1.4 Accounting for VAT

As a general principle the treatment of VAT in the trader's ledger accounts should reflect the trader's role as tax collector, so VAT should not be included in income or in expenses, whether of a capital or a revenue nature.

1.4.1 Irrecoverable VAT

Where the trader suffers irrecoverable VAT as a cost, as in the following cases, VAT should be included as an expense. (It cannot be claimed as input tax.)

- Persons not registered for VAT will suffer VAT on inputs as a cost. This will increase their expenses and the cost of any non-current assets they purchase.
- Registered persons who also carry on exempted activities may have a residue of input VAT which falls directly on them. In this situation the costs to which this residue applies will be inflated by the irrecoverable VAT.
- Non-deductible inputs will be borne by all traders.
 - VAT on cars purchased and used in the business is not reclaimable (VAT on a car acquired new for resale, i.e. by a car trader, is reclaimable).
 - VAT on business entertaining is not deductible as input tax other than VAT on entertaining staff.

Where VAT is not recoverable it must be regarded as part of the cost of the items purchased and included in the income statement or statement of financial position as appropriate.

1.5 VAT and discounts

VAT is charged on the goods or services total on an invoice (or credit note) net of both:

- Trade discount and
- Cash discount.

This general principle is carried to the extent that where a discount is offered at the point of sale, VAT is charged on the amount net of the offered discount even where it is subsequently not taken up.

Worked example: VAT and discounts

Matt usually sells goods at \$130 each, he gives Anil a trade discount of \$10 so he sells goods to Anil for \$120. He also offers a cash discount of 5% for prompt payment. Matt is registered for VAT. This means that $\$120 \times 5\% = \6 cash discount is available.

How much output VAT should Matt include on Anil's invoice?

Solution

If the discount had not been offered output VAT of $\$120 \times 17\frac{1}{2}\% = \21.00 would be due. But because of the discount, Matt's sales invoice will show:

INVOICE	\$
List price	130.00
Trade discount	<u>(10.00)</u>
Goods value	120.00
VAT ($120 \times 95\% \times 17\frac{1}{2}\%$)	<u>19.95</u>
Invoice total	<u>139.95</u>
Cash discount available ($\$120 \times 5\%$)	\$6.00

If Anil takes up the discount, he need only pay \$133.95 in full settlement ($\$139.95 - \6), but even if he does not take the discount, the amount of VAT is not adjusted.

1.6 VAT and irrecoverable debts

Most registered persons are obliged to record VAT when a supply is made or received (effectively when a sales invoice is raised or a purchase invoice recorded). This may have the effect that output tax has to be paid to HMRC before it has all been received from customers. If an amount due from a customer is subsequently written off as irrecoverable, the VAT element may not be recoverable from HMRC for some time after the sale.

1.7 Calculating VAT from a gross amount

If you are told that an amount includes VAT at 17.5% (a gross amount), you can calculate the VAT element by multiplying the gross amount by $\frac{17.5\%}{117.5\%}$ or $\frac{7}{47}$.

Example: VAT calculation

A sale of \$200 attracts VAT at 17.5% is \$35. So, the gross amount is \$235.

To get back to the VAT element:

$$\$235 \times 7/47 = \$35$$

1.8 Summary of accounting entries for VAT

So far we saw how VAT is initially recorded in the books of original entry. Let's summarise it now.

- (a) Sales revenue shown in the income statement must exclude output VAT. However trade receivables will include VAT, as they reflect the total amount due from customers. The sales day book is the book of original entry for VAT on credit sales.
- (b) Expenses shown in the income statement must exclude input VAT. However, trade payables will include input VAT, as they reflect the total amount payable to suppliers. The purchases day book is the book of original entry for VAT on credit purchases.
- (c) Sales revenue received and expenses paid as cash transactions in the cash book or petty cash book must have the VAT recorded in these books of original entry, and then posted as above in (a) and (b).
- (d) Irrecoverable VAT on expenses or non-current assets must be included in the cost of the expense or non-current asset in the income statement or statement of financial position.
- (e) The net amount due to HMRC should be included in other payables (or other receivables) in the statement of financial position.

Chapter 4: Inventory

1 End-of-year adjustments for inventory

1.1 The need for end-of-year adjustments

At the end of a financial period ('end of year') a business calculates the profit or loss it has made for the year, and produces a statement of financial position as at the end of the year.

- The items of income and expenses are transferred to the income statement to calculate the profit or loss for the financial period.
- The assets, liabilities and capital are set out in the statement of financial position. The profit for the year is added to capital, or the loss is subtracted from capital.

However, certain adjustments must be made to income, expenses, assets and liabilities, in order to apply the accruals basis to accounting, and the prudence concept to the valuation of receivables. These adjustments are made at the end of the financial year, because they are not concerned with regular accounting transactions that arise in the normal course of business operations. They are not needed until it is time to prepare the financial statements for the year.

Adjustments are needed for:

- opening and closing inventory
- accrued expenses and prepaid expenses
- bad and doubtful debts
- non-current assets and depreciation.

Having made the adjustments, an income statement and statement of financial position can be prepared. This section explains the end-of-year adjustments for inventory.

1.2 Opening and closing inventory and the cost of sales

In an income statement, the gross profit for a period = Sales – Cost of sales. The accruals concept is applied, and sales are matched with the cost of making those sales in order to calculate gross profit. However costs of purchases during a period are not the same as the cost of sales, because of changes in inventory levels.

$$\begin{aligned}\text{Cost of sales} &= \text{Opening inventory} + \text{Purchases} - \text{Closing inventory} \\ &= \text{Opening inventory} + \text{Purchases} - \text{Purchase return} + \text{Carriage inward} - \\ &\quad \text{Closing inventory}\end{aligned}$$

The cost of sales is shown in an income statement, and is used to calculate the gross profit (or loss) earned during an accounting period.

Example

	\$	\$
Sales		180,000
Opening inventory	10,000	
Purchases	100,000	
Closing inventory	<u>(10,000)</u>	
COS		<u>(100,000)</u>
Gross profit		80,000

1.3 Recording opening and closing inventory

In order to prepare an income statement, it is therefore necessary to obtain values for opening inventory and closing inventory, and to record these in the accounting system. There are two main methods of recording inventory, a continuous inventory system and a period-end system.

There is a ledger account (in the main ledger) for inventory. However, inventory can be accounted for in the ledger in either of two ways, depending on which method of recording inventory is used.

- In a **continuous inventory system**, all movements of inventory are recorded in the inventory account. This includes all purchases and all issues of inventory. This means that all transactions involving the receipt or issue of inventory must be recorded, and at any time, the balance on the inventory account should be the value of inventory currently held. This type of inventory system is time consuming, and is not normally used by small businesses.
- The second method of accounting for inventory is the **period-end method**. In simple accounting systems such as the accounts of sole traders, it is usual to have a purchases account to record purchases from suppliers. The inventory account in the main ledger is used only to record the value of inventory at the beginning/end of the financial year. In the period-end method, the value of inventory is established only once in each financial year, at the end of the year.

1.4 Period-end method: accounting procedures

In a period-end system, inventory is normally valued just once each year, at the end of the financial year. The value of inventory at the end of one year (i.e. closing inventory) becomes the opening inventory at the beginning of the next year.

Until the end of the year, the balance on the inventory account (a debit balance) is the value of opening inventory at the beginning of the year.

At the end of the financial year, the closing inventory is counted and valued. The opening inventory value is replaced in the inventory account by the value of closing inventory, in the way described below.

The appropriate book-keeping entries in the main ledger are as follows:

For the opening inventory

- Credit the inventory account with the value of the opening inventory
- Debit the income statement with the value of the opening inventory.

The income statement (as well as the inventory account) is an account in the main ledger, and is part of the double entry book-keeping system.

For the closing inventory

- Debit the inventory account with the value of the closing inventory
- Credit the income statement with the value of the closing inventory.

The closing balance on the inventory account is therefore the value of the closing inventory, which is carried forward as the opening balance at the beginning of the next period.

The end-of-year adjustments for inventory are shown in the T account below:

Inventory account			
Current year	\$		\$
Opening inventory b/f	A	Income statement	A
Income statement	<u>B</u>	Closing inventory c/f	<u>B</u>
	<u>A+B</u>		<u>A+B</u>
Next year			

Opening inventory b/f

B

In a period-end system, all purchases from suppliers are recorded in a Purchases account:

Debit Purchases

Credit Trade payables

Example

In Year 2, Bubbles had opening inventory of \$10,000. Sales during the year were \$80,000 and purchases were \$30,000. Closing inventory at the end of Year 2 was \$12,000. The entries in the main ledger of Bubbles can be summarised as follows:

Sales account

	\$		\$
Income statement	80,000	Receivables	80,000

Purchases account

	\$		\$
Trade payables 30,000	80,000	Income statement 30,000	80,000

Inventory account

	\$		\$
Opening balance b/f	10,000	Income statement	10,000
Income statement	<u>12,000</u>	Closing balance c/f	<u>12,000</u>
	<u>22,000</u>		<u>22,000</u>
Opening balance b/f	12,000		

Income statement

	\$		\$
Opening inventory	10,000	Sales	80,000
Purchases	30,000	Closing inventory	<u>12,000</u>

Gross profit c/d	<u>52,000</u>		
	92,000		<u>92,000</u>
		Gross profit b/d	<u>52,000</u>

This part of the income statement can be presented as a report, in vertical format, as follows:

	\$	\$
Sales		80,000
Opening inventory	10,000	
Purchase	30,000	
Closing inventory	<u>(12,000)</u>	
Cost of sales		<u>(28,000)</u>
		<u>52,000</u>

If you have difficulty remembering the double entry rules for the opening and closing inventory adjustments, it might be helpful to remember the following points.

- In a period-end system of accounting for inventory, the double entries are between the inventory account and the income statement.
- The cost of opening inventory is included in the cost of sales. It is an expense, and expenses are a debit entry. So debit the income statement (and credit the inventory account) with the cost of the opening inventory.
- The cost of closing inventory is included in the statement of financial position as an asset, so there must be a debit balance for the closing inventory.

So debit Inventory (and credit Income statement) with the cost of the closing inventory.

1.5 Continuous inventory method: accounting procedures

When the continuous inventory method is used, a record is kept of all receipts of items into inventory (at cost) and all issues of inventory to cost of sales. Each issue of inventory is given a cost, and the cost of the items issued is either the actual cost of the inventory (if it is practicable to establish the actual cost) or a cost obtained using a valuation method such as FIFO or AVCO.

Each receipt and issue of inventory is recorded in the inventory account. This means that a purchases account becomes unnecessary, because all purchases are recorded in the inventory account.

Debit: Inventory

Credit: Trade payables

The balance on the inventory account is an asset, but the account also records expenses (purchases)

Inventory account (continuous inventory system)			
	\$		\$
Opening inventory	10,000	Cost of Sales	85,000
Purchases	90,000	Purchase return	5,000
	_____	Closing inventory	<u>10,000</u>
	<u>100,000</u>		<u>100,000</u>
Opening inventory	10,000		

1.6 Transactions between the year-end and the inventory count

To establish a 'correct' valuation for closing inventory, it might be necessary to have an end-of-year inventory count. An inventory count is essential when a period-end inventory accounting system is used. An inventory count is a physical count of the inventory items held at the end of the financial year.

However, for practical reasons it is usually impossible to conduct the inventory count on the last day of the financial year. In many cases, the inventory count takes place on a day soon before the end of the year, and no further transactions are allowed to occur until the new financial year begins.

Sometimes, the annual inventory count might not take place until a few days after the end of the financial year. When this happens, there might be some transactions in the new financial year, between the end of the previous financial year and the date of the inventory count.

The inventory valuation obtained from the inventory count must therefore be adjusted to remove the transactions in the new financial year, in order to obtain a valuation for inventory as at the end of the previous year.

Example

A business entity has a financial year ending 31 December 2015. An inventory count on 5 January gave a total inventory value of \$95,000 as at that date. However between 31 December 2014 and 5 January 2015, the following transactions occurred:

	\$
Purchases of goods	10,000
Sales of goods from inventory (profit margin = 40% on sales price)	40,000
Goods returned to supplier	5,000

To prepare the financial statements for the year to 31 December we must adjust the inventory valuation on 5 January to remove the effect of the transactions that occurred since 31 December.

To do this we must:

- add back inventory that has been sold since the end of the year, at cost
- add back inventory that has been returned to suppliers since the end of the year
- deduct the cost of inventory purchased and received into inventory since the end of the year

In this example, the cost of inventory at 31 December is calculated as follows:

	\$
Inventory at 5 January	95,000
Less: Purchases of goods since 31 December	(10,000)
Add back:	
Sales of goods from inventory at cost ($40\% \times \$40,000$) since 31 Dec	16,000
Goods returned to supplier since 31 December	<u>5,000</u>
Inventory at 31 December	<u>106,000</u>

2 Valuation of inventory

2.1 The requirements for valuation of inventory

The valuation of inventory can be extremely important for financial reporting, because the valuations affect both the cost of sales (and profit) and also total asset values in the statement of financial position.

There are several aspects of inventory valuation to consider:

- Should the inventory be valued at cost, or might a different valuation be more appropriate?
- Which items of expense can be included in the cost of inventory?
- What valuation method should be used when it is not practicable to identify the actual cost of inventory?

Rules for dealing with each of these problems are provided by the international accounting standard IAS 2 Inventories.

2.2 Measurement of inventory: lower of cost or net realisable value

The discussion of inventory so far has assumed that inventory consists of items purchased from suppliers and then re-sold. The nature of inventories in reality varies with the type of business. Inventories might include:

- goods purchased and held for resale
- finished goods produced
- work in progress being produced
- raw materials and components.

It is a requirement of IAS 2 **Inventories** that inventory must be measured in the financial statements at the **lower** of:

- cost, or
- net realisable value (NRV).

This is an example of the accounting concept of prudence.

When the cost of inventory exceeds its net realisable value, it is **written down in value** to net realisable value. The amount of the 'write-off' (i.e. reduction in inventory value) is treated as an expense in the period and charged against profit.

Net realisable value

Net realisable value is the amount that can be obtained from disposing of the inventory in the normal course of business, less any further costs that will be incurred in getting it ready for sale or disposal.

- Net realisable value is usually higher than cost. Inventory is therefore usually valued at cost.
- However, when inventory loses value, perhaps because it has been damaged or is now obsolete, net realisable value will be lower than cost.

The cost and net realisable value should be compared for each separately identifiable item of inventory, or group of similar inventories, rather than for inventory in total.

Note: IAS 2 uses the term 'measurement' of inventory. You may prefer to think of this as a 'valuation' of inventory. 'Measurement' here means expressing inventory as a monetary amount.

Example

In Year 2, A business has four items of inventory. A count of the inventory has established that the amounts of inventory currently held, at cost, are as follows:

	\$
Inventory item A1	5000
Inventory item A2	6000
Inventory item B1	8000
Inventory item C1	3000

Inventory items A1 and C1 are no longer used in normal business operations, due to a major change in business strategy. The inventory of item A1 could be disposed of for \$4,800 less selling costs of \$800. The inventory of item C1 could be disposed of for \$7,000 less selling costs of \$200.

Requirement

What should be the value for inventory in the statement of financial position?

Solution

<i>Item</i>	<i>Cost</i>	<i>NRV</i>	<i>Lower of cost or net realisable value</i>	<i>Balance sheet value</i>
Inventory item A1	5,000	$4,800 - 800 = 4,000$	4,000	4,000
Inventory item A2	6,000	6,000	6,000	6,000
Inventory item B1	8,000	8,000	8,000	8,000
Inventory item C1	<u>3,000</u>	$7,000 - 200 = 6,800$	<u>3,000</u>	<u>3,000</u>
	<u>22,000</u>	<u>24,800</u>	<u>21,000</u>	<u>21,000</u>

Lower of cost and NRV: events after the end of the accounting period

Inventory must be valued at the lower of cost and net realisable value, but it might not become apparent that NRV is less than cost until after the end of the financial period.

For example, suppose that a company has 100 units of an item at the end of the accounting period on 31 December Year 1, and these units have a cost of \$20 each or \$2,000 in total. The units might be sold in January Year 2, but only for \$15 each net of selling expenses. If the company has not yet published its financial statements for Year 1, it should amend the value of the inventory value as at 31 December. Since the units were sold for only \$15 in January, it is clear that their net realisable value at 31 December was only \$15, even though this only became apparent later.

The inventory at 31 December Year 1 should therefore be stated at net realizable value, \$1,500, and the write-off of \$500 should be included as an expense in profit and loss for Year 1.

2.3 The cost of inventories

IAS2 states that 'the cost of inventories shall comprise all costs of purchase, costs of conversion and other costs incurred in bringing the inventories to their present location and condition.

Purchase cost

The **purchase cost** of inventory will consist of the following:

- the purchase price
- plus import duties and other non-recoverable taxes (but excluding recoverable sales tax)
- plus transport, handling and other costs directly attributable to the purchase (carriage inwards), if these costs are additional to the purchase price.

The purchase price **excludes** any trade discounts, and is the cost after deduction of trade discount.

Conversion costs

When materials purchased from suppliers are converted into another product in a manufacturing or assembly operation, there are also conversion costs to add to the purchase costs of the materials.

Conversion costs must be included in the cost of finished goods and unfinished work in progress. Conversion costs consist of:

- costs directly related to units of production, such as costs of direct labour (i.e. the cost of the labour employed to perform the conversion work)

- fixed and variable **production** overheads, which must be allocated to costs of items produced and closing inventories. (Fixed production overheads must be allocated to costs of finished output and closing inventories on the basis of the **normal production capacity** in the period)
- other costs incurred in bringing the inventories to their present location and condition.

If you have not yet studied cost and management accounting, you need to be aware of some of the costs that are included in production overheads (also known as factory overheads).

Production overheads include:

- costs of indirect labour, including the salaries of the factory manager and factory supervisors
- depreciation costs of non-current assets used in production
- costs of carriage inwards, if these are not included in the purchase costs of the materials

Other costs

Other costs can be included in the cost of inventories only to the extent that they are incurred in bringing the inventory to its present location and condition. Costs that should **not** be included in the cost of inventories include:

- Abnormal amounts of wasted materials
- Storage costs
- Administrative overheads
- Costs of selling the inventory.

Only production overheads are included in costs of finished goods inventories and work-in-progress. Administrative costs and selling and distribution costs must not be included in the cost of inventory.

2.4 Carriage inwards and carriage outwards

Two expenses that you might come across are carriage inwards and carriage outwards. Even though they are both expenses they are reported differently in the income statement.

Carriage inwards

This is the cost a business might incur in getting its purchases delivered to its business premises. Sometimes the supplier may pay any delivery costs but if the business has to pay its own delivery costs it records these costs as carriage inwards.

The double entry is:

Debit: Carriage inwards

Credit: Bank

Cost of carriage inwards is part of the cost of bringing the inventory to its current location and condition. The cost is usually added to the purchase cost of the goods and so this cost is included in the cost of sales and the calculation of gross profit.

Carriage outwards

Carriage outwards is the cost of delivering goods to customers. This is a normal selling expense, which is treated as an expense in the income statement. The cost of carriage outwards is not included in the cost of inventory or cost of sales and so does not affect gross profit (only net profit).

2.5 Cost formulas for inventory

With some inventory items, particularly large and expensive items, it might be possible to recognise the actual cost of each item. In practice, however, this is unusual because the task of identifying the actual cost for all inventory items would be too time-consuming and complex. A system is therefore needed for measuring the cost of inventory.

The historical cost of inventory is usually measured by one of the following methods:

- First in, first out (FIFO)
- Weighted average cost (AVCO)

Another method of measuring cost is last in, first out (LIFO), but this is not permitted by international accounting standard IAS 2, for the purpose of financial statements.

The retail method

IAS2 Inventories allows certain techniques for the measurement of cost in certain circumstances. In particular it states that the retail method is often used in the retail industry to establish cost.

Retailing businesses have large inventories of rapidly-changing items, for which the profit margin is similar, and it is often impractical to use any other costing method except for the retail method.

In the retail method, the cost of inventory is determined by taking the selling price of the inventory items and reducing the selling price to take out the appropriate percentage gross profit margin. For example if a retail store sells goods at cost plus 50%, and has inventories at the year-end with a sales value of \$600,000, the cost of its closing inventories can be measured as $\$600,000 \times (100/150) = \$400,000$.

2.6 Disclosures of accounting policies for inventory

IAS2 Inventories requires that the financial statements should disclose the accounting policies used by the entity for inventory valuation, including the cost formula used.

2.7 Inventory and drawings by the business owner

The owner of a sole trader business might decide to take some inventory for his or her personal use. For example, the owner of a local shop might take some of the goods bought for the shop and use them for personal consumption.

When this happens, it is important that the financial statements of the sole trader should provide a faithful representation of the financial performance of the business. In order to achieve this objective:

- Drawings by the business owner in the form of inventory should be accounted for as drawings (withdrawals of capital).
- The cost of sales should exclude the items taken by the owner as drawings.

Drawings of inventory might be common in small sole trader businesses, but are less common in bigger business entities, where stricter controls over inventory might be considered necessary. Small businesses normally use the period-end inventory system, and when the owner takes some inventory for personal use, the appropriate accounting entry in the main ledger is:

Debit: Drawings

Credit: Purchases

The inventory taken by the owner is valued at cost (not selling price).

This accounting adjustment therefore reduces the total cost of purchases, so that the cost of sales will exclude the cost of the inventory taken.

If a continuous inventory system is used, the appropriate accounting entry would be:

Debit: Drawings

Credit: Inventory

3 FIFO and weighted average cost methods

3.1 First-in, first-out method of valuation (FIFO)

The FIFO and weighted average cost (AVCO) methods of inventory valuation are used within continuous inventory systems. They can also be used to establish a cost for closing inventory with the period-end inventory system.

With the first-in, first-out method of inventory valuation, it is assumed that inventory is consumed in the strict order in which it was purchased or manufactured. The first items that are received into inventory are the first items that go out.

To establish the cost of inventory using FIFO, it is necessary to keep a record of:

- the date that units of inventory are received into inventory, the number of units received and their purchase price (or manufacturing cost)
- the date that units are issued from inventory and the number of units issued. With this information, it is possible to put a cost to the inventory that is issued (sold or used) and to identify the cost of the items still remaining in inventory.

Since it is assumed that the first items received into inventory are the first units that are used, it follows that the value of inventory at any time should be the cost of the most recently-acquired units of inventory.

Example

	<i>Quantity</i>	<i>Unit cost</i>	<i>Total Cost</i>	<i>Market Value</i>
	<i>Units</i>	<i>\$</i>	<i>\$</i>	
Opening balance, 1 May	100	2	200	
Receipts, 3 May	400	2.1	840	2.11
Issues, 4 May	200			2.11
Receipts, 9 May	300	2.12	636	2.15
Issues, 11 May	400			2.2
Receipts, 18 May	100	2.4	240	2.4

Issues, 20 May	100	2.42
Closing balance, 31 May	200	2.45
		<u>1,916</u>

Requirement:

- (a) What was the cost of the material issued from store in October, using the FIFO valuation method?
- (b) What was the value of the closing inventory on 31 October?

Solution:

<i>Date of issue</i>	<i>Quantity issued</i>	<i>Value</i>	<i>\$</i>	<i>\$</i>
	<i>Units</i>			
4-May	200	100 b/f at \$2	200	
		100 at \$2.10	<u>210</u>	
				410
11-May	400	300 at \$2.10	630	
		100 at \$2.12	<u>212</u>	
				842
20-May	100	100 at \$2.12		<u>212</u>
Cost of issues				1464
Closing inventory value	200	100 at \$2.12	212	
		100 at \$2.40	<u>240</u>	
				<u>452</u>
				<u>1,916</u>

Using a tabular format, as below, is a practical way of tracking items when carrying out a FIFO calculation:

	\$2.00	\$2.10	\$2.12	\$2.40	Total
b/f	100				100
Receipt 3 May		400			400
Issue 4 May	-100	-100			-200
Receipt 9 May			300		300
Issue 11 May		-300	-100		-400

Receipt 18 May		100	100
Issue 20 May	-100		-100
	-100	-100	200

Points to note

1. The cost of materials issued plus the value of closing inventory equals the cost of purchases plus the value of opening inventory (\$1,916).
2. The market price of purchased materials is rising dramatically. In a period of inflation, there is a tendency with FIFO for materials to be issued at a cost lower than the current market value, although closing inventories tend to be valued at a cost approximating to current market value.

3.2 Weighted average cost (AVCO) method

With the weighted average cost (AVCO) method of inventory valuation it is assumed that all units are issued at the current weighted average cost per unit.

The normal method of measuring average cost is the **continuous basis method**.

With the continuous basis AVCO method, a new average cost is calculated whenever more items are purchased and received into store. The weighted average cost is calculated as follows:

$$\frac{\text{Cost of inventory currently in store} + \text{Cost of new items received}}{\text{Number of units currently in store} + \text{Number of new units received}}$$

Items 'currently in store' are the items in store immediately before the new delivery is received.

Example

	Quantity	Unit cost	Total Cost	Market Value
	Units	\$	\$	
Opening balance, 1 May	100	2	200	
Receipts, 3 May	400	2.1	840	2.11
Issues, 4 May	200			2.11
Receipts, 9 May	300	2.12	636	2.15
Issues, 11 May	400			2.2
Receipts, 18 May	100	2.4	240	2.4
Issues, 20 May	100			2.42

Closing balance, 31 May	200	2.45	
			<u>1,916</u>

Solution

<i>Date</i>	<i>Received</i> Units	<i>Issued</i> Units	<i>Balance</i> Units	<i>Total</i> <i>inventory</i> <i>value</i> \$	<i>Unit cost</i> \$	\$
Opening inventory			100	200	2	
3-May	400		500	<u>840</u>	2.1	
				1,040	2.08	
4-May		200	300	<u>-416</u>	2.08	416
				624	2.08	
9-May	300		600	<u>636</u>	2.12	
				1,260	2.1	
11-May		400	200	<u>-840</u>	2.1	840
				420	2.1	
18-May	100		300	<u>240</u>	2.4	1,916
				660	2.2	
20-May		100		<u>-220</u>	2.2	<u>220</u>
Cost of issues						1,476
Closing inventory value			200	440		<u>440</u>
						1,916

Points to note

1. The cost of materials issued plus the value of closing inventory equals the cost of purchases plus the value of opening inventory (\$1,916).
2. In a period of inflation, using the cumulative weighted average pricing system, the value of material issues will rise gradually, but will tend to lag a little behind the current market value at the date of issue. Closing inventory values will also be a little below current market value.

Periodic weighted average pricing

This average method differs from the cumulative weighted average method. Instead of calculating a new inventory value per unit whenever a receipt occurs, a single average is calculated at the end of the period based on all purchases for the period.

Worked example: Periodic weighted average pricing

Using periodic weighted average pricing, the issue costs and closing inventory would be as follows:

$$\begin{aligned}\text{Periodic weighted average price} &= \frac{\$200 + \$1,716}{(100 + 800) \text{ units}} \\ &= \$2.129 \text{ per unit}\end{aligned}$$

This average price is used to value all the units issued and the units in the closing inventory.

		\$
Cost of issues	= 700 units × \$2.129	1,490
Closing inventory value	= 200 units × \$2.129	<u>426</u>
		1,916

Notice that once again the cost of materials issued plus the value of closing inventory equals the cost of purchases plus the value of opening inventory (\$1,916).

3.3 Materials valuation methods and inflation

As a general rule, the two methods of inventory valuation shown here will give significantly different valuations for the cost of sales and the value of closing inventory during a period of high inflation.

With FIFO during a period of high inflation, the cost of sales will be lower than the current replacement cost of materials used. The closing inventory value should be close to current value, since they will be the units bought most recently ('last').

In the example used above to illustrate FIFO and AVCO, the valuations of the cost of goods issued and closing inventory were as follows:

Valuation method	Cost of goods issued	Closing inventory
------------------	----------------------	-------------------

	\$	\$
FIFO	5,100	2,300
AVCO	5,290	2,110

The cost of goods issued is lowest using FIFO. The valuation of closing inventory is highest with FIFO. This is typical during a period when prices are rising steadily.

Practice questions

MCQ 1

Kally has the following inventory movements during May.

	<i>Units</i>	<i>\$ per unit</i>
<i>Opening inventory</i>	40	9
2 May Goods in	60	10
10 May Goods out	50	
15 May Goods in	70	11
18 May Goods out	45	
24 May Goods in	80	11

Assuming that the business values inventory on a FIFO basis, what will be the value of closing inventory at the end of the month?

- A \$1,615
- B \$1,655
- C \$1,700
- D \$1,705

MCQ 2

A trader used the LIFO method to value inventory at the end of July at \$3,110. Sales and purchases in July were as follows.

<i>Date</i>	<i>Purchases (units)</i>	<i>Sales (units)</i>
3 July	100 at \$20/unit	
6 July		80

10 July		40
15 July	50 at \$22/unit	
22 July		20
27 July	80 at \$25/unit	

The opening inventory at 1 July was 50 units valued at \$15 per unit. The trader needs to adopt the FIFO method.

What is the effect of this change on the trader's profit?

- A \$190 decrease
- B \$420 decrease
- C \$420 increase
- D \$190 increase

MCQ 3

The inventory records for Simmons last month were as follows.

<i>Date</i>	<i>Purchases (units)</i>	<i>Sales (units)</i>
2 February		500
13 February	800	80
21 February		400
29 February		200

Opening inventory was 600 units valued at \$12,000. Purchases in February were at \$31.25 per unit.

The total cost of sales in February, using the AVCO method, is (to the nearest \$):

- A \$37,000
- B \$28,000
- C \$17,625
- D \$22,000

MCQ 4

What would be the effect on a business's profit of discovering that inventory with a cost of \$1,250 and a net realisable value of \$1,000 had been omitted from the inventory count at the end of the reporting period?

- A An increase of \$1,250
- B An increase of \$1,000
- C A decrease of \$250
- D No effect

MCQ 5

June Ltd has three lines of inventory at the end of its reporting period.

	X	Y	Z
Cost	1.50	6.50	5.00
Selling price	4.25	8.00	3.5
Selling cost	0.75	2.00	0.50
Unit held	100	200	250

At what value should inventory appear in the financial statements at the end of the reporting period?

- A \$2,700
- B \$2,325
- C \$2,300
- D \$2,100

MCQ 6

Colby manufactures cosmetics and toiletries. It has decided to repackage its puffer talc product in new covers, and discount the selling price.

The details of puffer talc are as follows.

Per item

Cost of manufacture	\$2.50
---------------------	--------

Repackaging cost to be incurred	\$0.75
Selling price	\$3.00
Discount on selling price	10%

At what amount should each item of puffer talc be included in inventory?

- A \$3.00
- B \$2.70
- C \$2.25
- D \$1.95

MCQ 7

During the reporting period Malcolm took items with a selling price of \$280 for his own use. He trades at a 40% mark-up and had a draft profit of \$15,800 before making any adjustments for this matter. His final profit is

- A \$15,520
- B \$15,800
- C \$15,600
- D \$16,000

Chapter 5: Non-current assets

1 Non-current assets: basic provisions

Non-current assets are long-term assets held by a business. This chapter looks at tangible and intangible non-current assets.

Tangible non-current assets are 'physical' long-term assets. The main category included in the IAS 1 format for the statement of financial position is property, plant and equipment. The accounting treatment of these is dealt with in IAS 16 Property, plant and equipment.

Intangible non-current assets are long-term items bringing future benefits to the company, but that do not have a physical existence. They include deferred development costs and purchased goodwill.

1.1 Capital and revenue expenditure

Expenditure can be classified as either capital expenditure or revenue expenditure. Capital expenditure is on the purchase of non-current assets (see below) which are for long-term use in the business. Revenue expenditure is all other expenditure and includes all the day to day running costs of the business. For example if a business purchases a car for a salesman to use the cost of the car is an example of capital expenditure and this cost will be included in the statement of financial position as a non-current asset of the business. However the road tax for the car, the petrol required and any servicing costs are all revenue expenditure and will be charged to the income statement.

1.2 Valuation of non-current assets

Non-current assets are normally valued in the statement of financial position at their original cost, minus depreciation. When a non-current asset is purchased (rather than constructed) its cost is the purchase price plus any expenses incidental to the acquisition. When a non-current asset is constructed for the company's own use, the cost will include the production or construction costs, including an amount for 'directly attributable' costs (indirect costs).

The carrying value of a non-current asset that has a limited economic life must be reduced by depreciation, which will write off the asset's cost (less any estimated residual value of the asset) in a systematic way over the expected useful life of the asset. Both tangible and intangible assets must be depreciated. However, whereas the term 'depreciation' is applied to tangible non-current assets, the term 'amortisation' is applied to intangible non-current assets.

Usually land does not have a limited economic life, and so does not have to be depreciated. An exception to this rule is land such as a quarry, which is depleted by the activities of the business.

The buildings constructed on land, however, do have a limited economic life, and ought to be depreciated.

If a non-current asset suffers an impairment, the fall in value must be charged as an expense in the

Income statement/statement of comprehensive income and the asset should be included in the statement of financial position at its reduced value.

Non-current assets are valued at cost minus depreciation under the 'historical cost convention' of accounting. However, companies may apply alternative accounting rules to their assets, and revalue non-current assets to a current cost or current market value. As long as the company applies a consistent policy, one class of non-current assets may be revalued whilst other groups are reported at historical cost. Many companies therefore apply the alternative accounting rules to their land and buildings, and revalue these to current market value.

When a non-current asset is revalued, the increase in value should be added to a revaluation reserve. In addition, depreciation charges on the asset, charged as an expense in the income statement/statement of comprehensive income, must be based on the revalued amount, rather than on the historical cost.

(Note: references to the income statement in this chapter apply to the income statement or single statement of comprehensive income.)

2 Depreciation

The cost of a non-current asset, less its estimated residual value, is allocated fairly between accounting periods by means of depreciation. The allowance for depreciation is both:

- charged against profit
- deducted from the value of the non-current asset in the statement of financial position.

If an asset's life extends over more than one accounting period or it earns profits over more than one period it is a non-current asset.

With the exception of land, every non-current asset eventually wears out over time. Machines, cars and other vehicles, fixtures and fittings, and even buildings do not last for ever. When a business acquires a non-current asset, it will have some idea about how long its useful life will be, and it might decide what to do with it.

- (a) Keep on using the non-current asset until it becomes completely worn out, useless, and worthless.
- (b) Sell off the non-current asset at the end of its useful life, either by selling it as a second-hand item or as scrap.

Since a non-current asset has a cost, and a limited useful life, and its value eventually declines, it follows that a charge should be made in the income statement to reflect the use that is made of the asset by the business. This charge is called depreciation.

2.1 Definition of depreciation

Depreciation accounting is governed by IAS 16 Property, plant and equipment. This section will deal with some of the IAS 16 definitions concerning depreciation.

- Depreciation is the result of systematic allocation of the depreciable amount of an asset over its estimated useful life. Depreciation for the accounting period is charged to net profit or loss for the period either directly or indirectly.
- Depreciable assets are assets which:
 - Are expected to be used during more than one accounting period
 - Have a limited useful life
 - Are held by an entity for use in the production or supply of goods and services, for rental to others, or for administrative purposes
- Useful life is one of two things.
 - The period over which a depreciable asset is expected to be used by the entity, or
 - The number of production or similar units expected to be obtained from the asset by the entity.
- Depreciable amount of a depreciable asset is the historical cost or other amount substituted for cost in the financial statements, less the estimated residual value. (IAS 16)

An 'amount substituted for cost' will normally be a current market value after a revaluation has taken place.

IAS 16 requires the depreciable amount of a depreciable asset to be allocated on a systematic basis to each accounting period during the useful life of the asset. Every part of an item of property, plant and equipment with a cost that is significant in relation to the total cost of the item must be depreciated separately.

One way of defining depreciation is to describe it as a means of spreading the cost of a non-current asset over its useful life, and so matching the cost against the full period during which it earns profits for the business. Depreciation charges are an example of the application of the accrual assumption to calculate profits.

There are situations where, over a period, an asset has increased in value, i.e. its current value is greater than the carrying value in the financial statements. You might think that in such situations it would not be necessary to depreciate the asset. The standard states, however, that this is irrelevant, and that depreciation should still be charged to each accounting period, based on the depreciable amount, irrespective of a rise in value.

An entity is required to begin depreciating an item of property, plant and equipment when it is available for use and to continue depreciating it until it is derecognised even if it is idle during the period.

2.2 Useful life

The following factors should be considered when estimating the useful life of a depreciable asset.

- Expected physical wear and tear
- Obsolescence
- Legal or other limits on the use of the assets

Once decided, the useful life should be reviewed at least every financial year end and depreciation rates adjusted for the current and future periods if expectations vary significantly from the original estimates. The effect of the change should be disclosed in the accounting period in which the change takes place.

The assessment of useful life requires judgement based on previous experience with similar assets or classes of asset. When a completely new type of asset is acquired (i.e. through technological advancement or through use in producing a brand new product or service) it is still necessary to estimate useful life, even though the exercise will be much more difficult.

The standard also points out that the physical life of the asset might be longer than its useful life to the entity in question. One of the main factors to be taken into consideration is the physical wear and tear the asset is likely to endure. This will depend on various circumstances, including the number of shifts for which the asset will be used, the entity's repair and maintenance

programme and so on. Other factors to be considered include obsolescence (due to technological advances or improvements in production or reduction in demand for the product/service produced by the asset) and legal restrictions, e.g. length of a related lease.

2.3 Residual value

The residual value is the amount an entity expects to obtain for an asset at the end of its useful life net of disposal expenses. In most cases the residual value of an asset is likely to be immaterial. IAS 16 states that an entity must review residual values of all items at least each financial year end. Any changes in residual value are accounted for as a change in an estimate according to IAS 8. The residual value is the price the asset would fetch in today's prices. A review of residual values should be done in conjunction with a review of useful lives.

2.4 The total charge for depreciation: the depreciable amount

The total amount to be charged over the life of a non-current asset ('the depreciable amount') is usually its cost less any expected 'residual' sales value or disposal value at the end of the asset's life.

- (a) Plant and equipment costing \$20,000 which has an expected life of five years and an expected residual value of nil should be depreciated by \$20,000 in total over the five-year period.
- (b) Plant and equipment costing \$20,000 which has an expected life of five years and an expected residual value of \$3,000 at the reporting date should be depreciated by \$17,000 in total over a five-year period.

2.5 Depreciation in the accounts

When a non-current asset is depreciated, two things must be accounted for.

- (a) The charge for depreciation is a cost or expense of the accounting period.
- (b) At the same time, the non-current asset is wearing out and diminishing in value, and so the value of the non-current asset in the statement of financial position must be reduced by the amount of depreciation charged. The statement of financial position value of the non-current asset will be its 'carrying value' which is the value net of its accumulated depreciation to date.

The amount of depreciation deducted from the cost of a non-current asset to arrive at its carrying value will build up (or 'accumulate') over time, as more depreciation is charged in each successive accounting period.

For example, if plant and equipment costing \$40,000 has an expected life of four years and an estimated residual value of nil, it might be depreciated by \$10,000 per annum.

	<i>Depreciation charge for the year (Income statement)</i>	<i>Accumulated depreciation at end of the year</i>	<i>Cost of the asset</i>	<i>Carrying value at the end of the year</i>
	\$	\$	\$	\$
At beginning of its life	-	-	40,000	40,000
Year 1	10,000	10,000	40,000	30,000
Year 2	10,000	20,000	40,000	20,000
Year 3	10,000	30,000	40,000	10,000
Year 4	<u>10,000</u>	40,000	40,000	0
	<u>40,000</u>			

At the end of year 4, the full \$40,000 of depreciation charges have been made in the income statement of the four years. The carrying value of the plant and equipment asset is now nil. In theory (although perhaps not in practice) the business will no longer use the plant and equipment, which would now need replacing.

2.6 Methods of depreciation

There are several different methods of depreciation. A company must select a method for each group of assets, and apply this method consistently to those assets. The choice of method should be the one that most fairly reflects the consumption of the benefits of the non-current asset over time. The depreciation methods you need to know about are:

- Straight line method
- Reducing balance method
- Machine hour or unit method

2.7 The straight line method

This is the most commonly used method. The total depreciable amount is charged in equal instalments to each accounting period over the expected useful life of the asset. In this way, the carrying value of the non-current asset declines at a steady rate, or in a 'straight line' over time.

The annual depreciation charge is calculated as:

$$\frac{\text{Cost of asset minus residual value}}{\text{Expected useful life of the asset}}$$

For example, suppose that plant and equipment costing \$110,000 has an estimated life of 5 years and a residual value of \$10,000. The annual depreciation charge using the straight line method would be:

$$\frac{\$(110,000 - 10,000)}{5 \text{ years}} = \$20,000 \text{ per annum}$$

The cost, depreciation and carrying value of the non-current asset would be as follows:

	<i>After 1 year</i>	<i>After 2 years</i>	<i>After 3 years</i>	<i>After 4 years</i>	<i>After 5 years</i>
	\$	\$	\$	\$	\$
Cost of asset	<u>110,000</u>	<u>110,000</u>	<u>110,000</u>	<u>110,000</u>	<u>110,000</u>
Accumulated depreciation b/f	-	20,000	40,000	60,000	80,000
Charge for the year (20%)	<u>20,000</u>	<u>20,000</u>	<u>20,000</u>	<u>20,000</u>	<u>20,000</u>
At the end of the year	<u>20,000</u>	<u>40,000</u>	<u>60,000</u>	<u>80,000</u>	<u>100,000</u>
Carrying value	<u>90,000</u>	<u>70,000</u>	<u>50,000</u>	<u>30,000</u>	<u>10,000</u>

Since the depreciation charge per annum is the same amount every year with the straight line method, it is often convenient to state that depreciation is charged at the rate of x per cent per annum on the net cost of the asset. For example, if plant and equipment costing \$50,000 is depreciated to a nil residual value over five years by the straight line method, the annual depreciation charge would be 20% of cost.

The straight line method of depreciation is a fair allocation of the total depreciable amount between the different accounting periods, provided that it is reasonable to assume that the business enjoys equal benefits from the use of the asset in every period throughout its life.

2.8 The reducing balance method

The reducing balance method of depreciation calculates the annual depreciation charge as a fixed percentage of the carrying value of the asset, as at the end of the previous accounting period.

For example, take the plant and equipment bought for \$110,000 in the above example with an estimated life of 5 years and a residual value of \$10,000. To achieve this using the reducing balance method would require an annual rate of 38%.

The cost, depreciation and the carrying value of the asset will be as follows:

	<i>After 1 year</i>	<i>After 2 years</i>	<i>After 3 years</i>	<i>After 4 years</i>	<i>After 5 years</i>
	\$	\$	\$	\$	\$
Cost of asset	<u>110,000</u>	<u>110,000</u>	<u>110,000</u>	<u>110,000</u>	<u>110,000</u>
Accumulated depreciation b/f	-	41,800	67,716	83,785	93,747
Charge for the year (38%)	<u>41,800</u>	<u>25,916</u>	<u>16,069</u>	<u>9,962</u>	<u>6,176</u>
At the end of the year	<u>41,800</u>	<u>67,716</u>	<u>83,785</u>	<u>93,747</u>	<u>99,923</u>
Carrying value	<u>68,200</u>	<u>42,284</u>	<u>26,215</u>	<u>16,253</u>	<u>10,077</u>

2.9 Machine hour or units method

Another approach is to estimate the use that will be made of the non-current asset over its useful life, in terms of the number of hours it will be operated, or the number of units it will process. The depreciation charge is then calculated as the depreciable amount divided by the expected machine hours of use or the expected units to be processed, and expressed as a depreciation rate per hour or per unit.

The depreciation charge in any year is calculated as the actual number of hours the asset is used for multiplied by the rate per hour, or the actual number of units processed multiplied by the rate per unit. This method is not commonly used, but it is a fair way of applying the accruals concept to the calculation of profit, where it is considered that the consumption of the asset's value relates to the use made of the asset in each accounting period.

Choosing a method of depreciation, as well as deciding on the appropriate useful life for a non-current asset, calls for the exercise of judgement.

- (a) The straight line method is the simplest and the most commonly used in practice.
- (b) The reducing balance method is an accelerated method of charging depreciation which leads to a higher charge in earlier years. Since repair and maintenance costs tend to increase as assets grow older these methods lead to a more even allocation of total non-current asset costs (depreciation plus maintenance).
- (c) The machine hour method is suited to assets which depreciate primarily through use rather than through passing of time. Such assets might include mines and quarries, which are subject to gradual exhaustion of the minerals that they contain, and also delivery

Lorries, which may be argued to depreciate in accordance with the number of miles travelled.

2.10 The need for consistency

Having selected a depreciation method for a category of non-current assets, a business must apply the method consistently from one year to the next. Similarly, it is up to the business to decide what a sensible life span for a non-current asset should be, but once that life span has been chosen, it should not be changed unless something unexpected happens to the non-current asset.

A business may depreciate different categories of non-current assets in different ways. For example, if a business owns three cars, then each car would normally be depreciated in the same way (e.g. by the straight line method) but another category of asset, say, photocopiers, might be depreciated using a different method (e.g. by the machine hour method).

2.11 Misconceptions about depreciation

Depreciation is a process of allocation of the cost of a non-current asset over several accounting periods.

It is worth mentioning here two common misconceptions about the purpose and effects of depreciation.

- (a) It is sometimes thought that the carrying value (CV) of an asset should equal the current net realisable value, and that the object of charging depreciation is to reflect the fall in value of an asset over its life. This misconception is the basis of a common, but incorrect, argument that properties (say) need not be depreciated in times when property values are rising. It is true that historical cost statements of financial position often give a misleading impression of property when a property's carrying value in the statement of financial position is much below its market value. However, in such a case it is open to a business to revalue its assets. This is a separate problem from the requirement to allocate the property's cost over successive accounting periods.
- (b) Another misconception is that depreciation is provided so that an asset can be replaced at the end of its useful life. This is not the case.
 - If there is no intention of replacing the asset, it could then be argued that there is no need to provide for any depreciation at all.
 - If prices are rising, the replacement cost of the asset will exceed the amount of depreciation provided.

2.12 Depreciation is not a cash expense

Depreciation spreads the cost of a non-current asset (less its estimated residual value) over the asset's life. The cash payment for the asset will be made when, or soon after, the asset is purchased. Annual depreciation of the asset in subsequent years is not a cash expense - rather it allocates costs to those later years for a cash payment that has occurred previously. This is in line with the accruals basis of accounts preparation.

For example, suppose a business purchased some shop fittings for \$6,000 on 1 July 20X5 and paid for them in cash on that date. Subsequently, depreciation may be charged at \$600 per annum for ten years.

So each year \$600 is deducted from profits and the carrying value of the fittings goes down, but no actual cash is being paid. The cash was all paid on 1 July 20X5. So annual depreciation is not a cash expense, but rather an allocation of the original cost to later years.

2.13 A fall in value of a non-current asset

When the 'market' value of a non-current asset falls so that it is worth less than the amount of its carrying value and the fall in value is not going to be recovered from future use of the asset, the asset should be written down to its new low market value. We say that the asset has been 'impaired'. The charge in the income statement for the diminution in value of the asset during the accounting period should then be:

3 Non-current asset disposals

When a non-current asset is sold, there is likely to be a profit or loss on disposal. This is the difference between the net sale price of the asset and its carrying value at the time of disposal.

Property, plant and equipment are not purchased by a business with the intention of reselling them in the normal course of trade. However, they might be sold off at some stage during their life, either when their useful life is over, or before then. A business might decide to sell off a non-current asset long before its useful life has ended.

Whenever a business sells something, it will make a profit or a loss. When non-current assets are disposed of, there will be a profit or loss on disposal. These gains or losses are reported in the income and expenses part of the income statement. They are commonly referred to as 'profit on disposal of non-current assets' or 'loss on disposal'.

3.1 The principles behind calculating the profit or loss on disposal

The profit or loss on the disposal of a non-current asset is the difference between:

- (a) The carrying value of the non-current asset at the time of its sale.
- (b) Its net sale price, which is the price minus any costs of making the sale.

A profit is made when the sale price exceeds the carrying value, and a loss is made when the sale price is less than the carrying value.

Suppose a company purchased an asset on 1 January 20X1 for \$25,000. It had an estimated life of five years and an estimated residual value of nil. The asset was eventually sold after three years on 1 January 20X4 to another trader who paid \$17,500 for it.

The profit or loss on disposal, assuming that the business uses the straight line method for depreciation (\$5,000 per annum), would be

	\$
Cost of asset	25,000
Less accumulated depreciation (three years)	<u>15,000</u>
Carrying value at date of disposal	10,000
Sale price	<u>17,500</u>
Profit on disposal	7,500

4 IAS 16: Property, plant and equipment

IAS 16 Property, plant and equipment covers the major categories of tangible non-current assets. As well as depreciation it looks at recognition criteria, components of cost and revaluations.

The standard gives a large number of definitions.

- Property, plant and equipment are tangible assets that:
 - are held for use in the production or supply of goods or services, for rental to others, or for
 - administrative purposes; and
 - are expected to be used during more than one period.
- Cost is the amount of cash or cash equivalents paid or the fair value of the other consideration given to acquire an asset at the time of its acquisition or construction.

- Residual value is the net amount that an entity would currently obtain for an asset at the end of its useful life after deducting the expected costs of disposal.
- Entity specific value is the present value of the cash flows an entity expects to arise from the continuing use of an asset and from its disposal at the end of its useful life, or expects to incur when settling a liability.
- Fair value is the amount for which an asset could be exchanged between knowledgeable, willing parties in an arm's length transaction.
- Carrying amount is the amount at which an asset is recognised in the statement of financial position after deducting any accumulated depreciation and accumulated impairment losses.
- An impairment loss is the amount by which the carrying amount of an asset exceeds its recoverable amount.

(IAS 16)

4.1 Recognition

In this context, recognition simply means incorporation of the item in the business's accounts, in this case as a non-current asset. The recognition of property, plant and equipment depends on two criteria.

- (a) It is probable that future economic benefits associated with the asset will flow to the entity
- (b) The cost of the asset to the entity can be measured reliably

These recognition criteria apply to subsequent expenditure as well as costs incurred initially.

Property, plant and equipment can amount to substantial amounts in financial statements, affecting the presentation of the company's financial position (in the statement of financial position) and the profitability of the entity, through depreciation and also if an asset is wrongly classified as an expense and taken to the income statement.

Looking at the first of the two recognition criteria the degree of certainty attached to the flow of future economic benefits must be assessed. This should be based on the evidence available at the date of initial recognition (usually the date of purchase). The entity should thus be assured that it will receive the rewards attached to the asset and it will incur the associated risks, which will only generally be the case when the rewards and risks have actually passed to the entity. Until then, the asset should not be recognised.

Regarding the second criterion it is generally easy to measure the cost of an asset as the transfer amount on purchase, i.e. what was paid for it. Self-constructed assets can also be measured easily by adding together the purchase price of all the constituent parts (labour, material etc.) paid to external parties.

For very large and specialised items, an apparently single asset should be broken down into its composite parts. This occurs where different parts have different useful lives and different depreciation rates are applied to each part e.g. an aircraft where the body and engines have different useful lives.

4.2 Initial measurement

Once an item of property, plant and equipment qualifies for recognition as an asset, it will initially be measured at cost.

The standard lists the components of the cost of an item of property, plant and equipment.

- Purchase price, less any trade discount or rebate
- Import duties and non-refundable purchase taxes
- Directly attributable costs of bringing the asset to working condition for its intended use, e.g.:
 - The cost of site preparation
 - Initial delivery and handling costs
 - Installation costs
 - Testing
 - Professional fees (architects, engineers)
- Initial estimate of the unavoidable cost of dismantling and removing the asset and restoring the site on which it is located

Additional guidance is given regarding 'directly attributable costs' as follows:

- (a) These costs bring the asset to the location and working conditions necessary for it to be capable of operating in the manner intended by management, including those costs to test whether the asset is functioning properly.
- (b) They are determined after deducting the net proceeds from selling any items produced when bringing the asset to its location and condition.

The standard also states that income and related expenses of operations that are incidental to the construction or development of an item of property, plant and equipment should be recognised in the income statement.

The following costs will not be part of the cost of property, plant or equipment unless they can be attributed directly to the asset's acquisition, or bringing it into its working condition.

- Administration and other general overhead costs
- Start-up and similar pre-production costs
- Initial operating losses before the asset reaches planned performance

All of these will be recognised as an expense rather than an asset.

The 'cost' will be the total of the construction costs (although abnormal costs, e.g. waste material, labour and other resources should be excluded). In the case of self-constructed assets, the same principles are applied as for acquired assets. An example of a self-constructed asset is when a building company builds its own head office.

4.3 Measurement subsequent to initial recognition

The standard offers two possible treatments here, essentially a choice between keeping an asset recorded at cost and revaluing it to fair value.

- (a) **Cost model.** Carry the asset at its cost less depreciation (and any accumulated impairment losses).
- (b) **Revaluation model.** Carry the asset at a revalued amount, being its fair value at the date of the revaluation less any subsequent accumulated depreciation (and subsequent accumulated impairment losses). IAS 16 makes clear that the revaluation model is available only if the fair value of the item can be measured reliably.

4.4 Revaluations

When an asset is revalued the gain is recorded in the revaluation reserve and depreciation is then charged on the revalued amount.

The market value of land and buildings usually represents fair value, determined from market-based evidence. Such valuations are usually carried out by professionally qualified valuers.

In the case of plant and equipment, fair value can also be taken as market value. Where a market value is not available, however, depreciated replacement cost should be used. There may be no market value where types of plant and equipment are sold only rarely or because of their specialised nature (i.e. they would normally only be sold as part of an ongoing business).

The frequency of valuation depends on the volatility of the fair values of individual items of property, plant and equipment. The more volatile the fair value, the more frequently revaluations should be carried out.

Where the current fair value is very different from the carrying value then a revaluation should be carried out.

Most importantly, when an item of property, plant and equipment is revalued, the whole class of assets to which it belongs should be revalued.

All the items within a class should be revalued at the same time, to prevent selective revaluation of certain assets and to avoid disclosing a mixture of costs and values from different dates in the financial statements. A rolling basis of revaluation is allowed if the revaluations are kept up to date and the revaluation of the whole class is completed in a short period of time.

How should any increase in value be treated when a revaluation takes place? The 'debit' will be the increase in value in the statement of financial position, but what about the credit? IAS 16 requires the increase to be credited to a revaluation surplus (i.e. part of owners' equity), unless the increase is reversing a previous decrease which was recognised as an expense. To the extent that this offset is made, the increase is recognised as income; any excess is then taken to the revaluation reserve.

Revaluation gains and losses that are recognised through the revaluation reserve are reported as other comprehensive income in the statement of comprehensive income.

Example

Heap Co has a freehold property that is valued at \$4m in the statement of financial position, with accumulated depreciation of \$250,000 on the building. The property has been revalued and its current value is now \$5.6 million, but with accumulated depreciation of \$400,000 on this revalued amount. The net increase in value of the asset is the increase in the total valuation (\$1.6 million)

minus the increase in the accumulated depreciation of \$150,000. The net increase in valuation is therefore \$1,450,000.

The adjustment to the statement of financial position should be:

- (a) increase the asset from \$4 million to \$5.6 million
- (b) increase accumulated depreciation from \$250,000 to \$400,000
- (c) increase the revaluation surplus by \$1,450,000.

The surplus on revaluation of \$1,450,000 is reported as other comprehensive income in the statement of comprehensive income.

In future years, depreciation should be charged against profits based on the revalued amount of the building, \$5.6 million.

4.5 Depreciation

The standard states:

- The depreciable amount of an item of property, plant and equipment should be allocated on a systematic basis over its useful life.
- The depreciation method used should reflect the pattern in which the asset's economic benefits are consumed by the entity.
- The depreciation charge for each period should be recognised as an expense unless it is included in the carrying amount of another asset.

Land and buildings are dealt with separately even when they are acquired together because as we have already seen land normally has an unlimited life and is therefore not depreciated. In contrast buildings do have a limited life and must be depreciated. Any increase in the value of land on which a building is standing will have no impact on the determination of the building's useful life.

Depreciation is usually treated as an expense, but not where it is absorbed by the entity in the process of producing other assets. For example, depreciation of plant and machinery can be incurred in the production of goods for sale (inventory items). In such circumstances, the depreciation is included in the cost of the new assets produced.

A review of the useful life of property, plant and equipment should be carried out at least at each financial year end and the depreciation charge for the current and future periods should be adjusted if expectations have changed significantly from previous estimates. Changes are changes in accounting estimates and are accounted for prospectively as adjustments to future depreciation.

The depreciation method should also be reviewed at least at each financial year end and, if there has been a significant change in the expected pattern of economic benefits from those assets, the method should be changed to suit this changed pattern. When such a change in depreciation method takes place the change should be accounted for as a change in accounting estimate and the depreciation charge for the current and future periods should be adjusted.

4.6 Retirements and disposals

When an asset is permanently withdrawn from use, or sold or scrapped, and no future economic benefits are expected from its disposal, it should be withdrawn from the statement of financial position. An asset is withdrawn from use when no future economic benefit is expected from either its use or disposal, for example an obsolete machine which cannot be used in a business and has no sale value.

Gains or losses are the difference between the estimated net disposal proceeds and the carrying amount of the asset. They should be recognised as income or expense in the income statement. An entity cannot classify as revenue (i.e. in the top line of the income statement) a gain it realises on the disposal of an item of property, plant and equipment.

4.7 Disclosure

The standard has a list of disclosure requirements, for each class of property, plant and equipment.

- (a) Measurement bases for determining the gross carrying amount (if more than one, the gross carrying amount for that basis in each category)
- (b) Depreciation methods used
- (c) Useful lives or depreciation rates used
- (d) Gross carrying amount and accumulated depreciation (aggregated with accumulated impairment losses) at the beginning and end of the period
- (e) Reconciliation of the carrying amount at the beginning and end of the period showing:

- (i) Additions
- (ii) Disposals
- (iii) Acquisitions through business combinations
- (iv) Increases/decreases during the period from revaluations and from impairment losses
- (v) Impairment losses recognised in the income statement
- (vi) Impairment losses reversed in the income statement
- (vii) Depreciation
- (viii) Net exchange differences (from translation of statements of a foreign entity)
- (ix) Any other movements.

The financial statements should also disclose the following.

- (a) Any recoverable amounts of property, plant and equipment
- (b) Existence and amounts of restrictions on title, and items pledged as security for liabilities
- (c) Accounting policy for the estimated costs of restoring the site
- (d) Amount of expenditures on account of items in the course of construction
- (e) Amount of commitments to acquisitions

Revalued assets require further disclosures.

- Basis used to revalue the assets
- Effective date of the revaluation
- Whether an independent valuer was involved
- Nature of any indices used to determine replacement cost
- Carrying amount of each class of property, plant and equipment that would have been included in the financial statements had the assets been carried at cost less accumulated depreciation and accumulated impairment losses.
- Revaluation surplus, indicating the movement for the period and any restrictions on the distribution of the balance to shareholders.

The standard also encourages disclosure of additional information, which the users of financial statements may find useful.

- (a) The carrying amount of temporarily idle property, plant and equipment

- (b) The gross carrying amount of any fully depreciated property, plant and equipment that is still in use
- (c) The carrying amount of property, plant and equipment retired from active use and held for disposal
- (d) The fair value of property, plant and equipment when this is materially different from the carrying amount

The following format (with notional figures) is commonly used to disclose non-current assets movements.

5 IAS 40: Investment property

An entity may own land or a building as an investment rather than for use in the business. It may therefore generate cash flows largely independently of other assets which the entity holds.

Consider the following definitions.

Investment property is property (land or a building – or part of a building – or both) held (by the owner or by the lessee under a finance lease) to earn rentals or for capital appreciation or both, rather than for:

- (a) Use in the production or supply of goods or services or for administrative purposes, or
- (b) Sale in the ordinary course of business

Examples of investment property include:

- (a) Land held for long-term capital appreciation rather than for short-term sale in the ordinary course of business
- (b) A building owned by the reporting entity (or held by the entity under a finance lease) and leased out under an operating lease

An accounting standard IAS 40 Investment property was introduced to set down special rules for these types of property.

5.1 Recognition

Investment property should be recognised as an asset when two conditions are met.

- (a) It is probable that the future economic benefits that are associated with the investment property will flow to the entity.
- (b) The cost of the investment property can be measured reliably.

5.2 Initial measurement

An investment property should be measured initially at its cost, including transaction costs.

A property interest held under a lease and classified as an investment property shall be accounted for as if it were a finance lease. The asset is recognised at the lower of the fair value of the property and the present value of the minimum lease payments. An equivalent amount is recognised as a liability.

5.3 Measurement subsequent to initial recognition

IAS 40 requires an entity to choose between two models.

- The fair value model
- The cost model

Whatever policy it chooses should be applied to all of its investment property.

Where an entity chooses to classify a property held under an operating lease as an investment property, there is no choice. The fair value model must be used for all the entity's investment property, regardless of whether it is owned or leased.

5.4 Fair value model

Fair value is the amount for which an asset could be exchanged between knowledgeable, willing parties in an arm's length transaction.

- (a) After initial recognition, an entity that chooses the fair value model should measure all of its investment property at fair value, except in the extremely rare cases where this cannot be measured reliably. In such cases it should apply the IAS 16 cost model.
- (b) A gain or loss arising from a change in the fair value of an investment property should be recognised in net profit or loss for the period in which it arises.
- (c) The fair value of investment property should reflect market conditions at the reporting date.

This is not the same as a revaluation, where increases in carrying amount above a cost-based measure are recognised as revaluation surplus. Under the fair value model all changes in fair value are recognised in the income statement.

5.5 Cost model

The cost model is the cost model in IAS 16. Investment property should be measured at depreciated cost, less any accumulated impairment losses. An entity that chooses the cost model should disclose the fair value of its investment property.

5.6 Changing models

Once the entity has chosen the fair value or cost model, it should apply it to all its investment property. It should not change from one model to the other unless the change will result in a more appropriate presentation. IAS 40 states that it is highly unlikely that a change from the fair value model to the cost model will result in a more appropriate presentation.

5.7 Transfers

Transfers to or from investment property should only be made when there is a change in use. For example, owner occupation commences so the investment property will be treated under IAS 16 as an owner-occupied property.

When there is a transfer from investment property carried at fair value to owner-occupied property or inventories, the property's cost for subsequent accounting under IAS 16 or IAS 2 should be its fair value at the date of change of use.

Conversely, an owner-occupied property may become an investment property and need to be carried at fair value. An entity should apply IAS 16 up to the date of change of use. It should treat any difference at that date between the carrying amount of the property under IAS 16 and its fair value as a revaluation under IAS 16.

5.8 Disposals

Derecognise (eliminate from the statement of financial position) an investment property on disposal or when it is permanently withdrawn from use and no future economic benefits are expected from its disposal.

Any gain or loss on disposal is the difference between the net disposal proceeds and the carrying amount of the asset. It should generally be recognised as income or expense in the income statement.

5.9 Disclosures

These relate to:

- Choice of fair value model or cost model
- Whether property interests held as operating leases are included in investment property
- Criteria for classification as investment property
- Assumptions in determining fair value
- Use of independent professional valuer (encouraged but not required)
- Rental income and expenses
- Any restrictions or obligations

An entity that adopts the fair value model must also disclose a reconciliation of the carrying amount of the investment property at the beginning and end of the period.

For the cost model additional disclosures relate mainly to the depreciation method. In addition, an entity which adopts the cost model must disclose the fair value of the investment property.

6 Intangible assets

Intangible assets are defined by IAS 38 as non-monetary assets without physical substance. Intangible assets should initially be measured at cost, but subsequently they can be carried at cost or at a revalued amount.

6.1 Definition

An intangible asset is an identifiable non-monetary asset without physical substance. The asset must be:

- (a) controlled by the entity as a result of events in the past, and
- (b) something from which the entity expects future economic benefits to flow.

Examples of items that might be considered as intangible assets include computer software, patents, copyrights, motion picture films, customer lists, franchises and fishing rights. An item should not be recognised as an intangible asset, however, unless it fully meets the definition in the standard.

An intangible asset must be identifiable i.e. distinguishable from goodwill. With non-physical items, there may be a problem with 'identifiability'.

- (a) If an intangible asset is acquired separately through purchase, there may be a transfer of a legal right that would help to make an asset identifiable.
- (b) An intangible asset may be identifiable if it is separable, i.e. if it could be rented or sold separately. However, 'separability' is not an essential feature of an intangible asset.

Another element of the definition of an intangible asset is that it must be under the control of the entity as a result of a past event. The entity must therefore be able to enjoy the future economic benefits from the asset, and prevent the access of others to those benefits. A legally enforceable right is evidence of such control, but is not always a necessary condition.

- (a) Control over technical knowledge or know-how only exists if it is protected by a legal right.
- (b) The skills of employees, arising out of the benefits of training costs, are most unlikely to be recognisable as an intangible asset, because an entity does not control the future actions of its staff.
- (c) Similarly, market share and customer loyalty cannot normally be intangible assets, since an entity cannot control the actions of its customers.

An item can only be recognised as an intangible asset if economic benefits are expected to flow in the future from ownership of the asset. Economic benefits may come from the sale of products or services, or from a reduction in expenditures (cost savings).

An intangible asset, when recognised initially, must be measured at cost. It should be recognised if, and only if both the following occur.

- (a) It is probable that the future economic benefits that are attributable to the asset will flow to the entity.
- (b) The cost can be measured reliably.

Management has to exercise its judgement in assessing the degree of certainty attached to the flow of economic benefits to the entity. External evidence is best.

- (a) If an intangible asset is acquired separately, its cost can usually be measured reliably as its purchase price (including incidental costs of purchase such as legal fees, and any costs incurred in getting the asset ready for use).
- (b) When an intangible asset is acquired as part of a business combination (i.e. an acquisition or takeover), the cost of the intangible asset is its fair value at the date of the acquisition.

IFRS 3 which we will look at later explains that the fair value of intangible assets acquired in business combinations can normally be measured with sufficient reliability to be recognised separately from goodwill.

6.2 Internally generated goodwill

Internally generated goodwill is a value attributable to a business from factors other than its tangible assets. It consists of elements such as having a strong reputation with customers for quality or giving value for money, a high and favourable public profile or a skilled work force.

Internally generated goodwill cannot be recognised as an asset.

The standard deliberately precludes recognition of internally generated goodwill because it requires that, for initial recognition, the cost of the asset rather than its fair value should be capable of being measured reliably and that it should be identifiable and controlled. Thus you do not recognise an asset which is subjective and cannot be measured reliably.

6.3 Research and development costs

In many companies, especially those producing food, or 'scientific' products such as medicines, or 'high technology' product, there is a large amount of expenditure on research and development (R+D). When R+D is a large item of cost its accounting treatment may have a significant influence of the profits of a business and its valuation in the statement of financial position. The issue with R+D costs is whether these costs should be

- (a) treated as an expense, and written off against profit in full in the year they are incurred, or
- (b) capitalised as an intangible asset because they represent value that the business has created, and that the business will benefit from for several years into the future.

Research activities by definition do not meet the criteria for recognition under IAS 38. This is because, at the research stage of a project, it cannot be certain that future economic benefits will probably flow to the entity from the project. There is too much uncertainty about the likely success or otherwise of the project. Research costs should therefore be written off as an expense as they are incurred.

Examples of research costs

- (a) Activities aimed at obtaining new knowledge

- (b) The search for, evaluation and final selection of, applications of research findings or other knowledge
- (c) The search for alternatives for materials, devices, products, processes, systems or services
- (d) The formulation, design, evaluation and final selection of possible alternatives for new or improved materials, devices, products, systems or services

Development costs qualify for recognition as intangible assets provided that the following strict criteria can be demonstrated.

- (a) The technical feasibility of completing the intangible asset so that it will be available for use or sale.
- (b) Its intention to complete the intangible asset and use or sell it.
- (c) Its ability to use or sell the intangible asset.
- (d) How the intangible asset will generate probable future economic benefits. Among other things, the entity should demonstrate the existence of a market for the output of the intangible asset or the intangible asset itself or, if it is to be used internally, the usefulness of the intangible asset.
- (e) Its ability to measure the expenditure attributable to the intangible asset during its development reliably.

In contrast with research costs development costs are incurred at a later stage in a project, and the probability of success should be more apparent. Examples of development costs include the following.

- (a) The design, construction and testing of pre-production or pre-use prototypes and models
- (b) The design of tools, jigs, moulds and dies involving new technology
- (c) The design, construction and operation of a pilot plant that is not of a scale economically feasible for commercial production
- (d) The design, construction and testing of a chosen alternative for new or improved materials, devices, products, processes, systems or services

6.4 Other intangibles

The standard prohibits the recognition of internally generated brands, mastheads (newspaper headers such as 'The Times'), publishing titles and customer lists and similar items as intangible

assets. These all fail to meet one or more (in some cases all) of the definition and recognition criteria and in some cases are probably indistinguishable from internally generated goodwill.

6.5 Cost of an internally generated intangible asset

The costs allocated to an internally generated intangible asset should be only costs that can be directly attributed or allocated on a reasonable and consistent basis to creating, producing or preparing the asset for its intended use. The principles underlying the costs which may or may not be included are similar to those for other non-current assets and inventory.

The cost of an internally generated intangible asset is the sum of the expenditure incurred from the date when the intangible asset first meets the recognition criteria. If, as often happens, considerable costs have already been recognised as expenses before management could demonstrate that the criteria have been met, this earlier expenditure should not be retrospectively recognised at a later date as part of the cost of an intangible asset.

6.6 Recognition of an expense

All expenditure related to an intangible which does not meet the criteria for recognition either as an identifiable intangible asset or as goodwill arising on an acquisition should be expensed as incurred.

The IAS gives examples of such expenditure.

- Start-up costs
- Training costs
- Advertising costs
- Business relocation costs

Prepaid costs for services, for example advertising or marketing costs for campaigns that have been prepared but not launched, can still be recognised as a prepayment.

6.7 Measurement of intangible assets subsequent to initial recognition

The standard allows two methods of valuation for intangible assets after they have been first recognised.

Applying the cost model, an intangible asset should be carried at its cost, less any accumulated amortisation (and less any accumulated impairment losses).

The revaluation model allows an intangible asset to be carried at a revalued amount, which is its fair value at the date of revaluation, less any subsequent accumulated amortisation and any subsequent accumulated impairment losses.

- (a) The fair value must be able to be measured reliably with reference to an active market in that type of asset.
- (b) The entire class of intangible assets of that type must be revalued at the same time (to prevent selective revaluations).
- (c) If an intangible asset in a class of revalued intangible assets cannot be revalued because there is no active market for this asset, the asset should be carried at its cost less any accumulated amortisation and impairment losses.
- (d) Revaluations should be made with such regularity that the carrying amount does not differ from that which would be determined using fair value at the reporting date.

This treatment is not available for the initial recognition of intangible assets. This is because the cost of the asset must be reliably measured.

The guidelines state that there will not usually be an active market in an intangible asset; therefore the revaluation model will usually not be available. For example, although copyrights, publishing rights and film rights can be sold, each has a unique sale value. In such cases, revaluation to fair value would be inappropriate. A fair value might be obtainable however for assets such as fishing rights or quotas or taxi cab licences.

6.8 Useful life

An entity should assess the useful life of an intangible asset, which may be finite or indefinite. An intangible asset has an indefinite useful life when there is no foreseeable limit to the period over which the asset is expected to generate net cash inflows for the entity.

Many factors are considered in determining the useful life of an intangible asset, including: expected usage; typical product life cycles; technical, technological, commercial or other types of obsolescence; the stability of the industry; expected actions by competitors; the level of maintenance expenditure required; and legal or similar limits on the use of the asset, such as the expiry dates of related leases. Computer software and many other intangible assets normally have short lives because they are susceptible to technological obsolescence.

However, uncertainty does not justify choosing a life that is unrealistically short.

The useful life of an intangible asset that arises from contractual or other legal rights should not exceed the period of the rights, but may be shorter depending on the period over which the entity expects to use the asset.

6.9 Amortisation period and amortisation method

An intangible asset with a finite useful life should be amortised over its expected useful life.

- (a) Amortisation should start when the asset is available for use.
- (b) Amortisation should cease at the earlier of the date that the asset is classified as held for sale in accordance with IFRS 5 Non-current assets held for sale and discontinued operations and the date that the asset is derecognised.
- (c) The amortisation method used should reflect the pattern in which the asset's future economic benefits are consumed. If such a pattern cannot be predicted reliably, the straight-line method should be used.
- (d) The amortisation charge for each period should normally be recognised in profit or loss.

The residual value of an intangible asset with a finite useful life is assumed to be zero unless a third party is committed to buying the intangible asset at the end of its useful life or unless there is an active market for that type of asset (so that its expected residual value can be measured) and it is probable that there will be a market for the asset at the end of its useful life.

The amortisation period and the amortisation method used for an intangible asset with a finite useful life should be reviewed at each financial year-end.

6.10 Intangible assets with indefinite useful lives

An intangible asset with an indefinite useful life should not be amortised. (IAS 36 requires that such an asset is tested for impairment at least annually.)

The useful life of an intangible asset that is not being amortised should be reviewed each year to determine whether it is still appropriate to assess its useful life as indefinite. Reassessing the useful life of an intangible asset as finite rather than indefinite is an indicator that the asset may be impaired and therefore it should be tested for impairment.

7 Goodwill

Purchased goodwill arising on consolidation is retained in the statement of financial position as an intangible asset under IFRS 3. It must then be reviewed annually for impairment.

Internally generated goodwill cannot be recognised.

Goodwill is created by good relationships between a business and its customers.

- (a) By building up a reputation (by word of mouth perhaps) for high quality products or high standards of service
- (b) By responding promptly and helpfully to queries and complaints from customers
- (c) Through the personality of the staff and their attitudes to customers

The value of goodwill to a business might be extremely significant. However as we have seen in Section 6, internally generated goodwill is not usually valued in the accounts of a business at all, and we should not normally expect to find an amount for such goodwill in its statement of financial position. Internally generated goodwill does not meet the definition of an intangible asset in IAS 38 or an asset in the Framework.

For example, the welcoming smile of the shop staff may contribute more to a shop's profits than the fact that a new electronic cash register has recently been acquired. Even so, whereas the cash register will be recorded in the accounts as a non-current asset, the value of staff would be ignored for accounting purposes.

On reflection, we might agree with this omission of goodwill from the accounts of a business.

- (a) The goodwill is inherent in the business but it has not been paid for, and it does not have an 'objective' value. We can guess at what such goodwill is worth, but such guesswork would be a matter of individual opinion, and not based on hard facts.
- (b) Goodwill changes from day to day. One act of bad customer relations might damage goodwill and one act of good relations might improve it. Staff with a favourable personality might retire or leave to find another job, to be replaced by staff who need time to find their feet in the job, etc. Since goodwill is continually changing in value, it cannot realistically be recorded in the accounts of the business.

7.1 Purchased goodwill

There is one exception to the general rule that goodwill has no objective valuation. This is when a business is sold. People wishing to set up in business have a choice of how to do it – they can either buy their own long-term assets and inventory and set up their business from scratch, or they can buy up an existing business from a proprietor willing to sell it. When a buyer purchases an existing business, he will have to purchase not only its long-term assets and inventory (and perhaps take over its accounts payable and receivable too) but also the goodwill of the business.

Purchased goodwill is then shown in the buyer's statement of financial position because it has been paid for. It has no tangible substance, and so it is an intangible non-current asset.

When a business is sold, there is likely to be some purchased goodwill in the selling price. But how is the amount of this purchased goodwill decided?

This is not really a problem for accountants, who must simply record the goodwill in the accounts of the new business. The value of the goodwill is a matter for the purchaser and seller to agree upon in fixing the purchase/sale price. However, two methods of valuation are worth mentioning here.

- (a) The seller and buyer agree on a price for the business without specifically quantifying the goodwill. The purchased goodwill will then be the difference between the price agreed and the value of the tangible net assets in the books of the new business.
- (b) However, the calculation of goodwill often precedes the fixing of the purchase price and becomes a central element of negotiation. There are many ways of arriving at a value for goodwill and most of them are related to the profit record of the business in question.

No matter how goodwill is calculated within the total agreed purchase price, the goodwill shown by the purchaser in his accounts will be the difference between the purchase consideration and his own valuation of the tangible net assets acquired.

Purchased goodwill normally arises when one company (a parent company) takes over another company (a subsidiary) usually by purchasing a controlling interest in shares. This is referred to as a business combination.

Suppose, for example that a company purchases another business for \$20 million. The acquired business has net assets of \$15 million. The excess of the purchase price over the net assets acquired is \$5 million and is purchased goodwill.

7.2 IFRS 3: Business combinations

IFRS 3 covers the accounting treatment of goodwill acquired in a business combination.

Goodwill acquired in a business combination is recognised as an asset and is initially measured at cost. Cost is the excess of the cost of the combination over the acquirer's interest in the net fair value of the acquirer's identifiable assets, liabilities and contingent liabilities.

After initial recognition goodwill acquired in a business combination is measured at cost less any accumulated impairment losses. It is not amortised. Instead it is tested for impairment at least annually, in accordance with IAS 36 Impairment of assets.

Negative goodwill arises when the acquirer's interest in the net fair value of the acquiree's identifiable assets, liabilities and contingent liabilities exceeds the cost of the business combination. IFRS 3 refers to negative goodwill as the 'excess of acquirer's interest in the net fair value of acquiree's identifiable assets, liabilities and contingent liabilities over cost'.

Negative goodwill can arise as the result of errors in measuring the fair value of either the cost of the combination or the acquiree's identifiable net assets. It can also arise as the result of a bargain purchase.

Where there is negative goodwill, an entity should first reassess the amounts at which it has measured both the cost of the combination and the acquiree's identifiable net assets. This exercise should identify any errors.

Any negative goodwill remaining should be recognised immediately in profit or loss (that is, in the income statement).

IFRS 3 requires extensive disclosures. These include a reconciliation of the carrying amount of goodwill at the beginning and end of the period, showing separately:

- (a) The gross amount and accumulated impairment losses at the beginning of the period
- (b) Additional goodwill recognised during the period

- (c) Impairment losses recognised during the period
- (d) Net exchange differences arising during the period, and
- (e) The gross amount and accumulated impairment losses at the end of the period

8 IAS 36: Impairment of assets

Impairment is determined by comparing the carrying amount of the asset with its recoverable amount.

Assets should not be carried at above their recoverable amount. An entity should write down the carrying value of an asset to its recoverable amount if the carrying value of an asset is not recoverable in full. In this case the asset is said to have been impaired.

- Impairment: a fall in the value of an asset, so that its 'recoverable amount' is now less than its carrying value in the statement of financial position.
- Carrying amount is the net value at which the asset is included in the statement of financial position (i.e. after deducting accumulated depreciation and any impairment losses). (IAS 36)

The basic principle underlying IAS 36 is relatively straightforward. If an asset's value in the accounts is higher than its realistic value, measured as its 'recoverable amount', the asset is judged to have suffered an impairment loss. It should therefore be reduced in value, by the amount of the impairment loss. The amount of the impairment loss should be written off against profit immediately.

The main accounting issues to consider are therefore as follows.

- (a) How is it possible to identify when an impairment loss may have occurred?
- (b) How should the recoverable amount of the asset be measured?
- (c) How should an 'impairment loss' be reported in the accounts?

8.1 Identifying a potentially impaired asset

An entity should assess at each reporting date whether there are any indications of impairment to any assets. The concept of materiality applies, and only material impairment needs to be identified.

If there are indications of possible impairment, the entity is required to make a formal estimate of the recoverable amount of the assets concerned.

IAS 36 suggests how indications of a possible impairment of assets might be recognised. The suggestions are based largely on common sense.

- (a) External sources of information
 - (i) A fall in the asset's market value that is more significant than would normally be expected from passage of time over normal use.
 - (ii) A significant change in the technological, market, legal or economic environment of the business in which the assets are employed.
 - (iii) An increase in market interest rates or market rates of return on investments likely to affect the discount rate used in calculating value in use.
 - (iv) The carrying amount of the entity's net assets being more than its market capitalisation.
- (b) Internal sources of information: evidence of obsolescence or physical damage, adverse changes in the use to which the asset is put, or the asset's economic performance

Even if there are no indications of impairment, the following assets must always be tested for impairment annually.

- (a) An intangible asset with an indefinite useful life
- (b) Goodwill acquired in a business combination

8.2 Measuring the recoverable amount of the asset

What is an asset's recoverable amount?

The recoverable amount of an asset should be measured as the higher value of:

- (a) the asset's fair value less costs to sell; and
- (b) its value in use. (IAS 36)

An asset's fair value less costs to sell is the amount net of selling costs that could be obtained from the sale of the asset. Selling costs include sales transaction costs, such as legal expenses.

- (a) If there is an active market in the asset, the net selling price should be based on the market value, or on the price of recent transactions in similar assets.
- (b) If there is no active market in the assets it might be possible to estimate a net selling price using best estimates of what 'knowledgeable, willing parties' might pay in an arm's length transaction.

Net selling price cannot be reduced, however, by including within selling costs any restructuring or reorganisation expenses, or any costs that have already been recognised in the accounts as liabilities.

The value in use of an asset is measured as the present value of estimated future cash flows (inflows minus outflows) generated by the asset, including its estimated net disposal value (if any) at the end of its expected useful life.

8.3 Recognition and measurement of an impairment loss

If the recoverable amount of an asset is lower than the carrying amount, the carrying amount should be reduced by the difference (i.e. the impairment loss) which should be charged as an expense in the income statement.

The rule for assets held at a revalued amount (such as property revalued under IAS 16) is:

The impairment loss is to be treated as a revaluation decrease under the relevant IAS.

In practice this means:

- To the extent that there is a specific revaluation surplus held in respect of the specific asset, the impairment loss should be charged to revaluation surplus.
- Any excess should be charged to the income statement.

8.4 Cash generating units

As a basic rule, the recoverable amount of an asset should be calculated for the asset individually. However, there will be occasions when it is not possible to estimate such a value for an individual asset, particularly in the calculation of value in use. This is because it may be difficult to attribute cash inflows and outflows to the individual assets.

If it is not possible to calculate the recoverable amount for an individual asset, the recoverable amount of the asset's cash generating unit should be measured instead.

A cash generating unit is the smallest identifiable group of assets for which independent cash flows can be identified and measured.

8.5 Accounting treatment of an impairment loss

If, and only if, the recoverable amount of an asset is less than its carrying amount in the statement of financial position, an impairment loss has occurred. This loss should be recognised immediately.

- (a) The asset's carrying amount should be reduced to its recoverable amount in the statement of financial position.
- (b) The impairment loss should be recognised immediately in the income statement (unless the asset has been revalued in which case the loss is treated as a revaluation decrease).

After reducing an asset to its recoverable amount, the depreciation charge on the asset should then be based on its new carrying amount, its estimated residual value (if any) and its estimated remaining useful life.

An impairment loss should be recognised for a cash generating unit if (and only if) the recoverable amount for the cash generating unit is less than the carrying amount in the statement of financial position for all the assets in the unit. When an impairment loss is recognised for a cash generating unit, the loss should be allocated between the assets in the unit in the following order.

- (a) First, to the goodwill allocated to the cash generating unit
- (b) Then to all other assets in the cash-generating unit, on a pro rata basis

In allocating an impairment loss, the carrying amount of an asset should not be reduced below the highest of:

- (a) Its fair value less costs to sell
- (b) Its value in use (if determinable)
- (c) Zero

Any remaining amount of an impairment loss should be recognised as a liability if required by other IASs.

Example: impairment loss

A company that extracts natural gas and oil has a drilling platform in the Caspian Sea. It is required by legislation of the country concerned to remove and dismantle the platform at the end of its

useful life. Accordingly, the company has included an amount in its accounts for removal and dismantling costs, and is depreciating this amount over the platform's expected life.

The company is carrying out an exercise to establish whether there has been an impairment of the platform.

- (a) Its carrying amount in the statement of financial position is \$3m.
- (b) The company has received an offer of \$2.8m for the platform from another oil company. The bidder would take over the responsibility (and costs) for dismantling and removing the platform at the end of its life.
- (c) The present value of the estimated cash flows from the platform's continued use is \$3.3m.
- (d) The carrying amount in the statement of financial position for the provision for dismantling and removal is currently \$0.6m.

Requirement

What should be the value of the drilling platform in the statement of financial position, and what, if anything, is the impairment loss?

Solution

Fair value less costs to sell	=	\$2.8m
Value in use	=	PV of cash flows from use less the carrying amount of the provision/liability = $\$3.3\text{m} - \$0.6\text{m} = \$2.7\text{m}$
Recoverable amount	=	Higher of these two amounts, i.e. \$2.8m
Carrying value	=	\$3m
Impairment loss	=	\$0.2m

9 Investments

A company may have investments e.g. shares in another company. These would be treated as a financial asset under IAS 39.

This is an extremely complex standard outside the scope of your syllabus. You should assume that investments are recognised at their cost.

Chapter 6: Accruals and prepayments

1. Accruals and prepayments

The accrual principle requires that we match expenses with the revenue generated by them. We sometimes therefore need to carry forward actual expenditure to a subsequent period (a prepayment), or account for expenditure incurred before it is actually paid for (an accrual).

Gross profit should be calculated by matching revenue and cost of sales. Net profit should be calculated by charging the expenses which relate to that period. For example, in preparing the income statement for a six month period, it would be appropriate to charge six months' expenses for rent, local property taxes, insurance and telephone costs, etc. However, expenses may not actually be paid for during the period to which they relate.

Definitions

Accruals (accrued expenses): Expenses which are charged against the profit for a particular period, even though they have not yet been paid for.

Prepayments (prepaid expenses): Expenses which have been paid in one reporting period, but are not charged against profit until a later period, because they relate to that later period.

The following examples clarify the principle involved, that expenses should be matched against income in the period to which they relate. Accruals and prepayments are the means by which we move charges into the correct reporting period.

- If we pay in this period for something which relates to the next reporting period, we use a prepayment to transfer that charge forward to the next period.
- If we have incurred an expense in this period which will not be paid for until the next period, we use an accrual to bring the charge back into this period.

1.1 Accruals

To set up an accrual:

DEBIT	Expense (income statement)	\$X
CREDIT	Accrual (liability on the statement of financial position)	\$X

Worked example: Accruals

A company ends his motor spares business's reporting period on 28 February each year. His telephone was installed on 1 April 2014 and he receives his telephone bill quarterly at the end of each quarter. We need to calculate the telephone expense to be charged to the income statement for the year ended 28 February 2015.

Telephone expense for the three months ended:

	\$
30.6.2014	23.50
30.9.2014	27.20
31.12.2015	33.40
31.3.2015	36.00

All the bills were paid on the final day of each three-month period.

Solution

As at 28 February 2015, no telephone bill had been received in respect of 2015 because it was not due for another month. However, the accrual principle means we cannot ignore the telephone expenses for January and February, and so an accrual of \$24 is made, being two thirds of the final bill of \$36.

The telephone expenses for the year ended 28 February 2015 are as follows:

	\$
1 March – 31 March 2014 (no telephone)	0.00
1 April – 30 June 2014	23.50
1 July – 30 September 2014	27.20
1 October – 31 December 2014	33.40
1 January – 28 February 2015 (two months: $\$36 \times 2/3$)	24.00
	108.10

The charge for the period 1 January – 28 February 2015 is two thirds of the bill received on 31 March. The accrual will also appear in the statement of financial position of the business as at 28 February 2015, as a current liability.

The journal to set this up is as follows:

DEBIT	Electricity	\$24
-------	-------------	------

CREDIT Accrual (current liability) \$24

Example

	2012	2013	2014
	\$	\$	\$
31 January	–	491.52	753.24
30 April	279.47	400.93	192.82
31 July	663.80	700.94	706.20
31 October	117.28	620.00	156.40

Roth started in business as a paper plate and cup manufacturer on 1 January 2012, preparing financial statements to 31 December 2012. He is not registered for VAT. Electricity bills received were as follows.

Requirement

What should the electricity charge be for the year ended 31 December 2012? Prepare a journal to record the accrual or prepayment as at 31 December 2012.

1.2 Prepayments

To set up a prepayment:

DEBIT	Prepayment (asset in the statement of financial position)	\$X
CREDIT	Expense (income statement)	\$X

Worked example: Prepayments I

A business opens on 1 January 2015 in a shop where the rent is \$20,000 per year, payable quarterly in advance at the beginning of each three month period. Payments were made as follows:

	\$
1 January 2015	5,000
31 March 2015	5,000
30 June 2015	5,000
30 September 2015	5,000
31 December 2015	5,000

Requirement

What will the rental charge be for the year ended 31 December 2015?

Solution

The total amount paid in the year is \$25,000. The yearly rental, however, is only \$20,000. The last payment was a prepayment as it is a payment in advance for the first three months of 2015. The charge for 2015 is therefore:

	\$
Paid in year	25,000
Prepayment	<u>(5,000)</u>
	20,000

The double entry for this prepayment is:

DEBIT	Prepayments (current asset)	\$5,000
CREDIT	Rent	\$5,000

1.3 Accounting for accruals and prepayments

- Both accruals and prepayments are usually included as current liabilities/assets as they nearly always clear very soon after the end of the reporting period.
- In order not to double count accrued expenditure, or fail to account for prepaid expenditure at all, closing accruals and prepayments must be reversed at the start of the next reporting period:

DEBIT	Accruals	DEBIT	Expense
CREDIT	Expense	CREDIT	Prepayment

You can see from the double entry shown for both these examples that the other side of the entry is taken to the statement of financial position: an asset or a liability account that are needed only at the end of each reporting period.

- Prepayments are included in current assets in the statement of financial position as they represent money that has been paid out in advance of the expense being incurred. They usually clear within 12 months of the date of the statement of financial position. The

balance on the prepayment ledger account is brought down as a debit balance at the beginning of the next period.

- Accruals are included in current liabilities as they represent liabilities which have been incurred but for which no invoice has yet been received. They nearly always clear soon after the end of the reporting period. The balance on the accruals account is brought down as a credit balance at the beginning of the next period.

Transaction	DR	CR	Description
Accrual	Expense	Liability (accrual)	Expense incurred in period, not paid/recorded
Prepayment	Asset (prepayment)	(Reduction in) expense	Expense paid/recorded in period, not incurred until next period

Example

Red is a business dealing in pest control. Its owner, Roxy, employs a team of eight people who were paid \$12,000 per annum each in the year to 31 December 2014. At the start of 2015 he raised salaries by 10% to \$13,200 per annum each.

On 1 July 2015, he hired a trainee at a salary of \$8,400 per annum.

He pays his work force on the first working day of every month, one month in arrears, so that his employees receive their salary for January on the first working day in February, etc.

Requirements

- Calculate the cost of salaries charged in Ratsnuffer's income statement for the year ended 31 December 2015.
- Calculate the amount actually paid in salaries during the year (i.e. the amount of cash received by the work force).
- State the amount of the accrual for salaries which will appear in Ratsnuffer's statement of financial position as at 31 December 2015.

Practice Questions:

MCQ 1

Which of the following is the correct calculation for cost of sales?

- A Sales – purchases
- B Opening inventory + purchases + closing inventory + carriage inwards
- C Opening inventory + purchases – closing inventory + carriage inwards
- D Sales – opening inventory – purchases + closing inventory – carriage inwards

MCQ 2

Cost of sales is \$14,000. Purchases for the period are \$14,000, carriage inwards is \$1,000, carriage outwards is \$1,500 and closing inventory is \$13,000. What was the opening inventory figure?

- A \$10,500
- B \$11,500
- C \$12,000
- D \$13,000

MCQ 3

If a business has paid property tax of \$1,000 for the year to 31 March 20X9, what is the prepayment in the financial statements for the 12 month reporting period ending on 31 December 20X8?

- A \$0
- B \$250
- C \$750
- D \$1,000

MCQ 4

Rupa has the following balances in her ledger accounts.

	\$
Purchases	75,000
Carriage outwards	800
Carriage inwards	1,000
Discounts received	2,000

Opening inventory	10,000
Closing inventory	12,000

What is Rupa's cost of sales?

- A \$72,000
- B \$73,000
- C \$74,000
- D \$74,800

MCQ 5

On 5 May 20X8 Portals pays a rent bill of \$1,800 for the eighteen months ended 30 June 20X9. What is the charge in the income statement and the entry for rent in the statement of financial position in respect of the 12 month reporting period ended 31 March 20X9?

- A \$1,200 with prepayment of \$300
- B \$1,200 with accrual of \$600
- C \$1,500 with accrual of \$300
- D \$1,500 with prepayment of \$300

MCQ 6

A firm made the following rent payments.

- \$9,000 for the six months ended 31 March 20X6
- \$12,000 for the six months ended 30 September 20X6
- \$11,196 for the 12 months ended 30 September 20X7

The charge to the income statement for the 12 month reporting period ended 31 December 20X6 was

- A \$13,299
- B \$19,299
- C \$24,897
- D \$22,098

MCQ 7

Elizabeth paid \$2,500 for gas during the reporting period. At the beginning of the period she owed \$500; at the end she owed \$1,000.

What charge should have appeared in her income statement for that reporting period?

- A \$2,000
- B \$2,500
- C \$3,000
- D \$3,500

MCQ 8

At the beginning of September Barney & Co were owed \$200 in rent. At the end of September they were owed \$400. \$800 cash for rent was received during September.

What entry will be made in the income statement for September for rent receivable?

- A Debit \$600
- B Debit \$1,000
- C Credit \$600
- D Credit \$1,000

Chapter 7: Receivables and allowance

1. Irrecoverable debts

Writing off an irrecoverable debt:

DEBIT	Irrecoverable debts expense	\$X
CREDIT	Trade receivables	\$X

Accounting for receipt of cash in respect of a debt previously written off:

DEBIT	Cash	\$X
CREDIT	Irrecoverable debts expense	\$X

The fact that a customer's cheque is returned unpaid does not automatically mean the customer's debt should be written off. Customers who buy goods on credit might fail to pay for them, perhaps out of dishonesty, or because they have gone bankrupt and cannot pay, or because there is a dispute between the parties about the amount payable.

For one reason or another, a business might decide to give up expecting payment of the debt and to write it off.

Definitions

Irrecoverable debt: A debt which is not expected to be paid.

Writing off: Charging the cost of the debt against the profit for the period.

1.1 Writing off irrecoverable debts

When a business decides that a particular debt will not be paid, the whole amount of the receivable in question is 'written off' as an expense in the income statement:

DEBIT	Irrecoverable debts expense (income statement)	\$X
CREDIT	Trade receivables (statement of financial position)	\$X

Irrecoverable debts written off are presented for as follows:

- Sales are shown at their final invoice value in the income statement. The sale has been made, expense has been incurred making it and gross profit should be earned. The subsequent failure to collect the debt is a separate administrative matter.
- Irrecoverable debts expense is shown as an administrative expense.

- The receivable is removed from the receivables control account and ledger.

Suppose an invoice for services rendered to a customer for \$100 is never going to be paid. The net effect of the way we account for this as follows:

	\$
Revenue (in the income statement)	100
Irrecoverable debt written off (administrative expense)	<u>(100)</u>
	0

Overall however a loss is made on the transaction since the entity has incurred costs in rendering the service, and these will not be recovered. The business has also foregone the profit it could have made on the transaction in selling the good or service to a different customer.

When a debt is written off, the value of the receivable as a current asset is zero. It is no longer recognised as an asset because the business is unlikely to generate any benefits from it.

Irrecoverable debts written off and subsequently paid

An irrecoverable debt which has been written off might be unexpectedly paid.

Whether it is paid in the same reporting period or a subsequent one, the entry is:

DEBIT	Cash	\$X
CREDIT	Irrecoverable debt expense	\$X

We do not need to credit receivables as this has already been done when the debt was initially written off.

Worked example: Irrecoverable debt subsequently paid

We have the following information on Lora for the year to 31 December 2015.

	\$
Inventory, 1 January 2015	6,000
Purchases	22,000
Inventory, 31 December 2015	8,000
Cash sales	100,000

Credit sales	70,000
Discounts allowed	1,200
Discounts received	5,000
Irrecoverable debts expense	9,000
Debts paid in 2015 which were previously written off as irrecoverable in 2014	<u>2,000</u>
Other expenses	<u>31,800</u>

Solution

	\$	\$
Sales (100,000 + 70,000)		170,000
Opening inventory	6,000	
Purchases	122,000	
Less closing inventory	<u>(8,000)</u>	
Cost of sales		<u>(120,000)</u>
Gross profit		50,000
Add discounts received		<u>5,000</u>
Expenses		55,000
Discounts allowed	1,200	
Irrecoverable debts expense (9,000 – 2,000)	7,000	
Other expenses	<u>31,800</u>	
		<u>(40,000)</u>
Net profit		15,000

1.2 Dishonoured cheques and irrecoverable debts

We have seen that when a customer's cheque is dishonoured, we debit trade receivables (reinstating the debt) and credit cash (removing the 'receipt').

Cheques may be dishonoured for administrative reasons that have nothing to do with a customer's actual inability to pay its debt, so do not presume that it will never be paid.

2 Allowances for receivables

- If there is doubt that a specific debt will be recovered an allowance can be made, which is set off against receivables in the statement of financial position.
- On setting up an allowance for irrecoverable debts, and on increasing an existing allowance:

DEBIT	Irrecoverable debts expense (income statement)	\$X
CREDIT	Allowance for receivables (statement of financial position)	\$X

- When a smaller allowance is needed at the end of a subsequent reporting period, the entries are reversed:

DEBIT	Allowance for receivables	\$X
CREDIT	Irrecoverable debts expense	\$X

Specific debts owed to the business are identified as certain never to be collected when irrecoverable debts are written off.

However, because of the risks involved in selling goods on credit, the business may conclude that some other specific debts have a risk of being irrecoverable. We call such balances 'doubtful receivables'. We leave them as an asset on the statement of financial position, but create an allowance (a credit balance) which we set off against the receivable.

Definition

Allowance for receivables: An amount in relation to specific debts that reduces the receivables asset to its prudent valuation in the statement of financial position. It is offset against trade receivables, which are shown at the net amount.

An allowance for receivables provides for potential irrecoverable debts, as a precaution by the business.

The business will thereby be more likely to avoid claiming profits which subsequently fail to materialize because some specific debts turn out to be irrecoverable.

- When an allowance is first made, it is charged as an expense in the income statement along with the irrecoverable debt expense for the period in which the allowance is created. The other side of the entry credits an account in the statement of financial position, the allowance for receivables. The double entry is:

DEBIT	Irrecoverable debts expense (income statement – administrative expense)	\$X
CREDIT	Allowance for receivables (statement of financial position)	\$X

- When an allowance already exists, but is subsequently increased, the amount of the increase in allowance is debited to irrecoverable debt expense, and credited to the allowance.
- When an allowance already exists, but is subsequently reduced, the amount of the decrease in allowance is credited to irrecoverable debt expense in the income statement for the period in which the reduction in allowance is made, and debited to the allowance.

Example: Allowance for receivables

A business commences operations on 1 July 2014, and in the twelve months to 30 June 2015 makes credit sales of \$300,000 and writes off irrecoverable debts of \$6,000. Cash received from customers during the reporting period is \$244,000.

	\$
Credit sales during the reporting period	300,000
Add receivables at 1 July 2014	<u>0</u>
Total debts owed to the business	300,000
Less cash received from credit customers	<u>(244,000)</u>
	56,000
Less irrecoverable debts written off	<u>(6,000)</u>
Trade receivables outstanding at 30 June 2015	<u>50,000</u>

Of these outstanding debts collection of an amount of \$5,000 is doubtful.

The business accounts for its irrecoverable and doubtful debts as follows:

	\$	\$
DEBIT Irrecoverable debts expense (\$6,000 + \$5,000)	11,000	
CREDIT Allowance for receivables		5,000
CREDIT Trade receivables		6,000

In the statement of financial position, the value of trade receivables (after the debt write-off, i.e. \$50,000) must be shown with the allowance for receivables netted off.

	\$
Total receivables at 30 June 2015	50,000
Less, allowance for receivables	<u>(5,000)</u>

Amount in the statement of financial
position

45,000

3 Accounting for irrecoverable debts and receivables allowances

- The irrecoverable debts expense account will be debited with debts written off and with increases in allowances for receivables. It will be credited with amounts received in respect of debts written off, and with reductions in receivables allowances.
- The trade receivables account is only affected when it is credited when a debt is written off. It is unaffected by accounting entries related to the allowance for receivables.

3.1 Irrecoverable debts written off: ledger accounting entries

The double entry bookkeeping is split into two separate transactions. To recap:

- When it is decided that a particular debt will not be paid, the customer is no longer called an outstanding receivable, and becomes an irrecoverable debt.

DEBIT	Irrecoverable debts expense account	\$X
CREDIT	Trade receivables	\$X

In the receivables ledger, personal accounts of the customers whose debts are irrecoverable will be credited off the ledger.

- At the end of the reporting period, the balance on the irrecoverable debt expense account is transferred to the profit and loss ledger account (like all other expense accounts).

DEBIT	Profit and loss ledger account	\$X
CREDIT	Irrecoverable debts	\$X

- Where an irrecoverable debt is subsequently recovered, the accounting entries will be as follows.

DEBIT	Cash	\$X
CREDIT	Irrecoverable debts expense account	\$X

Example

At 1 October 20X5 a business had total outstanding debts of \$8,600. During the 12 month reporting period to 30 September 20X6 the following transactions took place.

- (a) Credit sales \$44,000.
- (b) Payments from customers \$49,000.
- (c) Two debts, for \$180 and \$420, were declared irrecoverable and the customers are no longer purchasing goods from the company. These are to be written off.

Requirement

Prepare the trade receivables account and the irrecoverable debts account for the reporting period.

3.2 Allowance for receivables: ledger accounting entries

If particular customers are regarded as being less likely to pay but the debt is not seen as irrecoverable as such, the trade receivables balance is completely untouched. An allowance account is set up by the following entries:

DEBIT	Irrecoverable debts expense	\$X
CREDIT	Allowance for receivables	\$X

When preparing the statement of financial position, the credit balance on the allowance account is deducted from the balance on the receivables account.

In subsequent reporting periods, the allowance will be adjusted as follows.

- Carry down the new allowance required in the allowance for receivables account.
- Calculate the charge or credit to the income statement.

If the allowance has risen:

DEBIT	Irrecoverable debts expense	\$X
CREDIT	Allowance for receivables	\$X

with the amount of the increase

If the allowance has fallen:

DEBIT	Allowance for receivables	\$X
CREDIT	Irrecoverable debts expense	\$X

with the amount of the decrease.

Worked example: Accounting entries for allowance for receivables

Company X has total receivables outstanding at 31 December 20X2 of \$28,000. He believes there is a chance that \$280 of these balances may not be collected and wishes to make an appropriate allowance.

Before now, he has not made any allowance for receivables at all.

On 31 December 20X3 his trade receivables are \$40,000. He believes an allowance of \$2,000 needs to be made against specific debts in the receivables ledger.

What accounting entries should Alex make on 31 December 20X2 and 31 December 20X3, and what figures for trade receivables will appear in his statements of financial position as at those dates?

Solution

At 31 December 20X2:

DEBIT	Irrecoverable debts expense	\$280
CREDIT	Allowance for receivables	\$280

In the statement of financial position receivables will appear as follows.

	\$
Trade receivables	28,000
Less allowance for receivables	<u>(280)</u>
	<u>27,720</u>

At 31 December 20X3:

ALLOWANCE FOR RECEIVABLES

	\$		\$
Balance c/d (2)	2,000	Balance b/d (1)	280
	<u> </u>	Irrecoverable debts expense (3)	<u>1,720</u>
	2,000		2,000

So on completing step (3) he will make the following entries:

DEBIT	Irrecoverable debts expense	\$1,720
-------	-----------------------------	---------

CREDIT Allowance for receivables \$1,720

In the statement of financial position trade receivables will be shown as follows.

	\$
Trade receivables	40,000
Less allowance for receivables	<u>(2,000)</u>
	<u>38,000</u>

In practice, a statement of financial position would normally show only the net figure (\$27,720 in 20X2, \$38,000 in 20X3).

Practice question

MCQ 1

An irrecoverable debt arises in which of the following situations?

- A A customer pays part of the account
- B An invoice is in dispute
- C The customer goes bankrupt
- D A cheque received in settlement is dishonoured by the customer's bank

MCQ 2

An allowance for receivables at the end of a reporting period of \$4,000 is required. The allowance for receivables brought forward from the previous period is \$2,000. What change is required this reporting period?

- A Increase by \$4,000
- B Decrease by \$4,000
- C Increase by \$2,000
- D Decrease by \$2,000

MCQ 3

On 1 January 20X5 Limo had a doubtful debt allowance of \$1,000. During 20X5 he wrote off debts of \$600 and was paid \$80 by the liquidator of a company whose debts had been written off completely in 20X4. At the end of 20X5 it was decided to adjust the doubtful debts allowance to \$900.

What is the net expense for irrecoverable debts in the income statement for 20X5?

- A \$420
- B \$580
- C \$620
- D \$780

MCQ 4

Scorpio has receivables totalling \$16,000 after writing off irrecoverable debts of \$500, and he has an allowance for receivables brought forward of \$2,000. He wishes to carry forward an allowance of \$800.

What will be the effect on profit of adjusting the allowance?

- A \$700 decrease
- B \$700 increase
- C \$1,200 decrease
- D \$1,200 increase

MCQ 5

At 31 December 20X9 Ellena receivables totalled \$120,000. She wishes to have an allowance against specific receivables of \$3,600, which is 25% higher than it was before. During the year irrecoverable debts of \$3,200 were written off and irrecoverable debts (written off three years previously) of \$150 were recovered.

What is the net charge for irrecoverable debts for the 12 month reporting period ended 31 December 20X9?

- A \$720
- B \$900

C \$3,770

D \$3,950

MCQ 6

During the 12 month reporting period ended 31 December 20X8 Kaya decreased its receivables allowance by \$600. An irrecoverable debt written off in the previous reporting period amounting to \$300 was recovered in 20X8.

If the net profit of the reporting period after accounting for the above items is \$5,000, what was it before accounting for them?

A \$4,100

B \$4,700

C \$5,300

D \$5,900

MCQ 7

Keith had the following balances in its trial balance at 30 June 20X1.

	\$
Trade receivables	70,000
Irrecoverable debts expense	500
Allowance for receivables at 1 July 20X0	5,000

He wishes to carry forward at 30 June 20X1 an allowance equal to 10% of trade receivables. What is the irrecoverable debts figure in the income statement for the 12 month reporting period ended 30 June 20X1?

A Charge of \$2,450

B Credit of \$2,450

C Charge of \$2,500

D Credit of \$2,500

MCQ 8

Caprico had a receivables allowance at 1 January 20X0 of \$1,000. He calculates that at 31 December 20X0 a receivables allowance of \$1,500 is required. In addition \$2,000 of debts were written off during the reporting period, which includes \$50 previously provided for.

How much should be included in his income statement in relation to irrecoverable debts for the 12 month reporting period ended 31 December 20X0?

- A \$1,500
- B \$2,450
- C \$2,500
- D \$2,550

Chapter 8: Provision and contingencies

1 Liabilities and provisions

1.1 Definition of a liability

A liability is defined by the IASB Framework as a present obligation arising as a result of a past transaction or event. The settlement of a liability will result in an outflow of resources or economic benefit, such as the payment of cash.

The main elements in this definition are as follows:

- **Obligation.** The entity has an obligation that has arisen from an event or transaction in the past. This is often a legal obligation, such as the contractual obligation to pay a supplier for the purchase of goods or services. An obligation might be a constructive obligation where the obligation arises out of an established past practice or a valid expectation or declared policy of the business entity - such as a promise by the business entity to refund the price of goods to customers if the customers are dissatisfied.
- The **obligation exists now.** The obligation is a present obligation. It is not an obligation that will or might occur in the future. The **payment** will occur in the future, but the **obligation to pay** already exists.
- **Outflow of economic benefits.** The obligation will result in an outflow of economic benefits at some time in the future. This will normally take the form of payments in cash, or the transfer of an asset other than cash.

Examples of liabilities are loans from a bank, bonds issued by a company, trade payables, tax payable to the government, and accrued expenses.

1.2 Accounting treatment of liabilities

IAS 1 states that liabilities should normally be shown in the statement of financial position as either:

- current liabilities (payable within 12 months or within the normal trading cycle of the entity)
- non-current liabilities: these are all liabilities that are not current.

1.3 Provisions

IAS 37 *Provisions, contingent assets and contingent liabilities* defines a provision as 'a liability of uncertain timing or amount'. A provision is therefore a type of liability, and meets the definition of a liability.

IAS 37 explains how provisions differ from other liabilities.

- With a **provision**, there is uncertainty about the timing or the amount of the future payment that will be required to settle the obligation.
- With a **liability** such as a trade payable or a bank loan, the liability is for a certain amount and it is also certain (or fairly certain) when settlement (= payment) will be required.
- An **accrual is a liability** for goods or services payable in the future where the actual amount of the payment is usually not yet known (because there has not yet been an invoice from the supplier). For example, accrued electricity charges are an accrued expense for electricity based on an estimate of the amount of the next electricity bill. However, the uncertainty with an accrual is much less than the uncertainty for a provision.

1.4 Accounting for provisions

When a provision is created:

- the amount of the provision is recognised as an expense in the income statement for the period
- a liability is created in the statement of financial position for the amount of the provision. A provision should be shown in the statement of financial position. It is shown as a liability, but separate from other liabilities. (Whereas accruals are often included with trade payables as a single figure in the statement of financial position, a provision must be shown on a line of its own.)

Provisions should also be shown in the statement of financial position as either a current liability or a non-current liability, depending on when settlement of the obligation is expected to occur.

Example

A company has recently lost a legal dispute, and will have to make a payment in the future to settle the dispute. As at the end of its financial year, Year 1, the amount of the payment is uncertain, but it has been estimated as \$100,000.

The company should create a provision for the liability arising to settle the legal dispute:

Debit:	Legal costs (expense)	\$100,000
Credit:	Provision for legal costs (liability)	\$100,000

If settlement is expected in Year 2, the provision will be reported within current liabilities as a short-term provision. By creating the provision, the company incurs an expense, which will be included in profit and loss for the period.

Settlement of a provision

The liability for which a provision has been made will eventually be settled. When this happens, the liability is reduced to zero. This can be accounted for as follows:

Debit: Provision (reduce the provision to zero)

Credit: Expense account (the expense account where the provision was charged as an expense)

Example

In the previous example, suppose that the legal dispute is eventually settled in Year 2 by a payment of \$112,000.

The accounting entries in Year 2 will be:

	\$	\$
Debit: Legal expenses	112,000	
Credit: Bank		112,000

To record the actual payment

Debit: Provision	100,000	
Credit: Legal expenses		100,000

To record the reduction in the provision

Debit: Income statement	12,000	
Credit: Legal expenses		12,000

The charge for legal expenses in the Year 2 income statement

The total cost of the liability is \$112,000, but by creating a provision in Year 1 the cost is divided between Year 1 (\$100,000) and Year 2 (\$12,000). The charge for legal expenses in Year 2 is simply the difference between the actual cost of \$112,000 and the provision that had been made in the previous year.

If the cost of settling the legal dispute had been less than \$100,000, there would be a profit in Year 2 when the provision is reduced to \$0. For example, if the cost of settling the dispute in Year 2 was only \$80,000, there would be a credit to the income statement of \$20,000, increasing profit for the year.

1.5 Increasing a provision

In some cases, a long-term provision that was created in an earlier year might be increased at the end of a subsequent year, when the amount of the obligation is reassessed. When a provision is increased: the **increase** in the amount of the provision is recognised as an expense in the income statement for the period, and the provision in the statement of financial position is increased to its revised, higher amount.

Example

A company is in a long-running legal dispute, and in Year 1 it was advised by its lawyers that the company would probably be required to pay \$500,000 to settle the dispute. The company therefore made a provision for legal costs of \$500,000 in Year 1.

The dispute was not settled by the end of Year 2, when the company was advised that the likely cost of settlement would be \$850,000. The company therefore increased its provision for legal costs to \$850,000 in Year 2.

The accounting entries will be:

	\$	\$
Year 1		
Debit: Legal expenses	500,000	
Credit: Provision for legal expenses		500,000
<i>To record the provision</i>		
Debit: Income statement	500,000	
Credit: Legal expenses		500,000
<i>To charge the amount provided to profit and loss</i>		
Year 2		
Debit: Legal expenses	350,000	

Credit: Provision for legal expenses	350,000
--------------------------------------	---------

To increase the provision

Debit: Income statement	350,000
-------------------------	---------

Credit: Legal expenses	350,000
------------------------	---------

The charge for legal expenses in the Year 2 income statement

1.6 Reducing a provision

Similarly in some cases a long-term provision that was created in an earlier year might be reduced at the end of a subsequent year. When a provision is reduced:

- the **reduction** in the amount of the provision reduces expenses in the income statement for the period, and
- the provision in the statement of financial position is reduced to its revised, lower amount.

Example

A company made a provision of \$8 million for reorganisation costs at the end of Year 1. In Year 2 the reorganisation began and actual costs of reorganisation during Year 2 were \$2 million. At the end of Year 2 it was estimated that the remaining costs of reorganisation would be \$3.5 million

The accounting entries will be:

	\$	\$
Year 1		
Debit: Reorganisation costs	8,000,000	
Credit: Provision for reorganisation costs		8,000,000
<i>To record the provision</i>		

Debit: Income statement	8,000,000	
Credit: Legal expenses		8,000,000
<i>To charge the amount provided to profit and loss</i>		

Year 2

Debit: Reorganisation costs	2,000,000	
Credit: Bank		2,000,000
<i>Actual costs incurred</i>		
Debit: Provision for reorganisation costs	4,500,000	
Credit: Reorganisation costs		4,500,000
<i>To reduce the provision from \$8 million to \$3.5 million</i>		
Debit: Reorganisation costs	2,500,000	
Credit: Income statement		2,500,000
<i>To increase profit by the reduction in the provision minus actual costs incurred</i>		

1.7 Recognition and measurement of provisions

In the past, some companies were suspected of using provisions to manipulate their reported annual profits (an example of 'window dressing' of financial statements).

A company might create a provision in one year, which would have the effect of reducing profits in that year. The next year, the provision would then be used or reduced, which would have the effect of reducing costs and increasing profits for that year. Provisions could therefore be used to move profits and losses from one year to another.

IAS 37 seeks to prevent the use of provisions to manipulate or 'window dress' financial statements.

Recognising provisions

IAS 37 states that a provision should only be recognised if the following conditions are met:

The entity has a present obligation arising out of a past event or transaction.

It is probable that an outflow of economic resources (such as cash payments) will be required to settle the obligation. 'Probable' means more likely than not.

Although the amount of the obligation is uncertain, there is a reliable estimate of what it will be. This estimate might be based on a range of probable outcomes.

Examples of events or transactions that might result in a provision are:

- an obligation to settle a legal dispute, where the legal case has already been lost but the amount of the settlement has not yet been decided
- an obligation to pay clean-up costs for causing environmental damage
- an obligation to pay decommissioning costs to take an asset out of service at the end of its useful life (for example a provision for decommissioning a nuclear reactor).

IAS 37 specifically deals with certain situations where provisions may or may not be created.

- A provision cannot be made for future operating losses. There is no present obligation arising out of past events; therefore a provision cannot be made. If a company expects to make an operating loss in the next financial year, it cannot make a provision and take the loss in the current year instead.
- A provision can be made for future restructuring costs, when an entity closes down a part of its business operations, or re-organises its management structure, or decides to relocate operations to another country or region. However, a provision may only be made if there is a detailed formal plan for the restructuring and there is an expectation that the restructuring will take place.

If the reorganisation plan has been agreed but has not been formally announced and employees have not yet been told, a provision cannot be made.

Measurement of provisions

The amount of a provision should be the best estimate of the amount (before tax) that will be required to settle the obligation.

- If the obligation is for a single transaction or event, the most likely amount of the obligation should be used.
- If there are obligations for many similar transactions, an expected value should be calculated for the obligations. An example is a provision for future costs that will be incurred to honour warranty obligations.

Example

A company sells its products under warranty. It promises to bear the costs of repairing any goods that it has sold, within a 12-month period after the time of sale.

The company has estimated that the average cost of a repair is \$100, and that if all the goods it sold in the past months needed repair under warranty, the total cost of repairs would be \$2,000,000. It has also estimated that the probability that goods will be returned for repair under warranty is 5%.

A provision should be recognised. The amount of the provision will be measured as \$100,000 (= $5\% \times \$2,000,000$).

The provision will be reported as a short-term provision, but there will be a provision each year in the balance sheet for obligations under warranty agreements. This provision might increase or be reduced from one year to the next.

2. Contingent liabilities and assets

2.1 Definition of contingent liabilities and contingent assets

'Contingent' means 'dependent on something happening'.

- A **contingent liability** is a liability that will only occur if something happens in the future. It can be defined as a **possible obligation arising from an event that has already happened**, and whose existence will only be confirmed by the occurrence or non-occurrence of an uncertain future event. This uncertain future event should be not wholly within the control of the company to make it happen.
- A **contingent asset** is an asset that will arise (such as cash income) or a benefit that will occur only if something happens in the future. It is similar to a contingent liability, except that it is a possible benefit rather than a possible obligation.

2.2 Contingent liabilities and actual liabilities or provisions

A contingent liability is different from a liability (or provision) because there is doubt about whether the obligation will lead to an outflow of economic benefits.

The liability is 'contingent' (dependent) on something that will happen or will not happen in the future.

Examples of contingent liabilities include the following.

- The outcome of a legal dispute, in which the company might be required to make a large payment to settle the dispute (contingent liability) or might receive a substantial amount of money in settlement (contingent asset). The legal decision has not yet been made; therefore it is too soon to make a provision.
- The possibility of having to pay a fine to a regulating body for a breach of regulations (contingent liability).
- The possibility of having to meet an obligation under a guarantee given to a bank on behalf of another company. A contingent liability exists when there is a risk that this other company will fail to repay the loan and the bank will call on the guarantee. The guarantee might therefore be a contingent liability.

2.3 Recognising contingent liabilities

A decision has to be made whether an item is a contingent liability or not.

- Is the item a contingent liability or an actual liability? For example, should the item be a provision? With a provision, the obligation will **probably** result in an outflow of economic benefits **and** a reliable estimate can be made of the amount of the obligation. With a contingent liability:
 - the obligation is a possible obligation, but not a probable obligation (so that it is less than 50% likely to happen), or
 - there is an obligation but the outflow of economic benefits is not probable (= less than 50% likely to happen), or
 - there is an obligation but a reliable estimate of the amount of the obligation cannot be made.
- Is the item a contingent liability, or is there only a remote possibility that it will happen? If the likelihood that an actual obligation will arise is remote, the item should be ignored altogether, and should not be treated as a contingent liability for the purpose of financial reporting. IAS 37 uses the concept of 'probable' to distinguish between actual liabilities (or provisions), contingent liabilities and items to be ignored.

2.4 Contingent liabilities: the accounting rules

The accounting rules for contingent liabilities are provided by IAS 37. The rules are set out below:

<i>Is there a present</i>	<i>Will it give rise to the outflow of</i>	<i>Can the amount of the</i>	<i>The item is:</i>

<i>obligation as a result of a past event?</i>	<i>economic benefits?</i>	<i>obligation be measured reliably?</i>	
Yes	Probable (more than 50%)	Yes	A liability (or provision) . Include in the financial statements
Yes	Not probable (more than 50%)	-	A contingent liability . Report the item as a contingent liability in a note to the financial statements
Yes	Probable	No	A contingent liability . Report the item as a contingent liability in a note to the financial statements
Possible, it depends on a future event	Likelihood is not remote	-	A contingent liability . Report the item as a contingent liability in a note to the financial statements
Possible, it depends on a future event	Likelihood is remote	-	Ignore. Do not report in a note to the accounts.

IAS 37 defines probable as 'more likely than not', i.e. more than 50% probability.

Having decided whether an item is a liability (or provision, which is a form of liability), a contingent liability or a remote possibility, the accounting rules are therefore:

- recognise a liability or provision in the financial statements and include in the statement of financial position (and as an expense in profit and loss)
- do not recognise a contingent liability in the financial statements and do not include in the statement of financial position (or in profit and loss): instead, give details of the contingent liability in a note to the financial statements
- ignore entirely items where the possibility of an obligation arising is remote.

2.5 Contingent assets

There are similar problems with contingent assets. Is the item a contingent asset or not?

- Is it a contingent asset, or is it an actual asset? If the future benefit is certain or 'virtually certain' it is an actual asset and the item should be 'recognised' in the financial statements. It should be included as an actual asset in the statement of financial position.
- Is it a contingent asset, or is the likelihood that it will happen not sufficiently high to treat it as a contingent asset? If the likelihood of future economic benefits is not strong enough, the item should be ignored for the purpose of financial reporting.

For example suppose that a company is in a legal dispute and is claiming \$10 million from another company for breach of contract. Should this be treated as an asset, a contingent asset, or ignored?

IAS 37 uses the concepts of 'virtual certainty', 'probable' to distinguish between actual assets, contingent assets and items to be ignored. The rules in IAS37 are as follows:

Is there an asset?	Will it give rise to the inflow of economic benefits?	The item is:
Yes	Yes	An asset . Include in the financial statements
Possibly	Virtually certain	An asset . Include in the financial statements
Possibly	Probable (more than 50% probability)	Possibly A contingent asset . Report the item as a contingent asset in a note to the financial statements.
Possibly	Not probable	Possibly Ignore. Do not report in a note to the accounts.

Having decided whether an item is an actual asset, a contingent asset or less than 50% probable, the accounting rules are therefore:

- recognise an asset in the financial statements and include in the statement of financial position (and as income in profit and loss)
- do not recognise an asset in the financial statements and do not include in the statement of financial position (or in profit and loss): instead, give details of the contingent asset in a note to the financial statements
- ignore entirely items where the possibility of economic benefits arising is less than 50%.

2.6 Contingent assets and contingent liabilities: disclosure requirements

When an item is reported as a contingent liability or a contingent asset, it is not recorded in the main ledger accounts. The note to the financial statements simply gives a narrative description of the item – including the nature of the item and the uncertainties relating to the amount or the timing of the item.

IAS 37 also includes the following requirements:

- When any disclosures required about a provision, a contingent asset or a contingent liability are not possible, because it is not practicable to provide the information, this fact should be disclosed.
- In the **very rare** occasions when disclosure of the information could seriously prejudice the entity in a dispute with another person (about the matter to which the provision or contingent item relates), the required information need not be disclosed. However, the note to the accounts should describe the general nature of the dispute and the reason why the required information has not been disclosed.

Practice questions

MCQ 1

Should a provision be created in each of the following situations?

- (1) to provide for future anticipated operating losses of \$150,000
- (2) to provide for restructuring costs of \$250,000 when the restructuring has been announced to the employees and has been formally planned by the directors.

- A Yes in situation 1, No in situation 2
 B Yes in situation 1, Yes in situation 2
 C No in situation 1, No in situation 2
 D No in situation 1, Yes in situation 2

MCQ 2

A company is facing a legal case for serious injuries supposedly caused by one of its products. The claims total 2 million of damages.

At 31 December Year 2014 the company lawyers believe that it is probable that the company will **not** be found liable, although the likelihood of an obligation arising is stronger than 'remote'. However as the case continued by 31 December Year 2015 the lawyer's advice was that the company will probably be found liable.

What is the accounting treatment in the financial statements for each of years 1 and 2?

- A Ignore in Year 1, disclose a contingent liability in Year 2
- B Disclose a contingent liability in Years 1 and 2
- C Disclose a contingent liability in Year 1 and recognise a provision in Year 2
- D Recognise a provision in Year 1 and continue to recognise it in Year 2

MCQ 3

Blog is a limited liability company. It has to deal with the following items at the end of its financial year.

- (1) Blog has provided a guarantee for a bank loan to another business entity. The likelihood of a liability actually arising from the guarantee is assessed as 'possible'.
- (2) Blog provides warranties to customers for its products. Experience shows that about 5% of sales give rise to a claim under a warranty.

How should these items be reported (if at all) in the financial statements?

- A (1) should be disclosed as a contingent liability and a provision should be made for (2)
- B (1) and (2) should both be treated as provisions
- C (1) should not be disclosed at all and a provision should be made for (2)
- D (1) and (2) should both be treated as contingent liabilities

MCQ 4

Which of the following statements are correct about the requirements of IAS37: Provisions, contingent liabilities and contingent assets?

- (1) Contingent assets must not be recognised in financial statements unless an inflow of economic benefits is virtually certain to arise.

- (2) A contingent asset must be disclosed in a note if an inflow of economic benefits is probable.
- (3) No disclosure is required for a contingent liability if the likelihood of a transfer of economic benefits arising is remote.

- A 1 and 2 only are correct
- B 1 and 3 only are correct
- C 2 and 3 only are correct
- D All three statements are correct

MCQ 5

A company is in a legal dispute with a supplier. The supplier is making a claim for losses suffered as a result of an alleged breach of contract by the company. The supplier is claiming \$700,000. The company has denied any liability but has offered \$150,000 as an out-of-court settlement. The company's lawyers have advised that if the case goes to court, the most likely outcome is that the company will lose the case and will be required to pay \$450,000 in compensation to the supplier.

What amount should be provided in respect of the claim by the supplier?

- A Nothing, because there is only a contingent liability
- B \$100,000
- C \$450,000
- D \$750,000

MCQ 6

Which of the following statements are correct about provisions and contingent liabilities?

- (1) If it is probable that a liability will occur and result in an outflow of economic benefits, but its value is not certain, a provision should be created.
- (2) A reduction in a provision increases profit for the year.
- (3) A provision can be made for future reorganisation costs, but only if certain conditions are met.
- (4) 4 A provision can be made for future operating losses, but only if certain conditions are met.

- A 1 and 2 only are correct
- B 1, 2 and 3 only are correct
- C 1 and 4 only are correct
- D 2, 3 and 4 only are correct

Chapter 9: Capital structure and finance cost

1 Limited liability companies and sole traders compared

1.1 Comparing companies and sole traders

Limited liability companies differ from the businesses of sole traders and partnerships in several ways.

- A company is a legal entity or legal person, separate from its owners. A company can hold assets in its own name and owe money in its own name. It is also liable to tax on the profits that it makes.
- In contrast, a sole trader is the legal owner of any assets of his business. The sole trader is liable for tax on his personal income, including income from his business: the sole trader's business is not itself taxable.
- Companies are managed by a board of directors. In a small company, the owner or owners are likely to be the directors. In larger companies, the directors are not the only owners of the business, and might not have any share in the ownership at all.
- The directors of larger companies should therefore be accountable to the company's owners, the shareholders. One way of making directors accountable is to require them to present financial statements regularly to the owners.
- The owners of a limited liability company are its ordinary shareholders (also called equity shareholders or, in the US, common stockholders). The ownership of a company is represented by a quantity of ordinary shares, and the share of the ownership of each shareholder is proportional to the number of shares that he owns.
- In larger companies, shareholders are not usually involved in the day-to-day operational management of their company.

Limited liability

Limited liability means that the liability of shareholders in their company is restricted to the capital they have invested. Provided that their shares have been paid for in full, they cannot be held liable for any debts or other liabilities that the company incurs. The company itself, as a legal person, is responsible itself and liable for its own debts.

In contrast, the individual sole trader is personally responsible for any debts of the business, and unlike company shareholders does not enjoy 'limited liability'.

1.2 Advantages and disadvantages of operating as a limited liability company

There are advantages and disadvantages in establishing a business as a limited company, rather than as a sole trader's business or a partnership.

- Limited liability. As explained above, the personal liability of individual shareholders for the liabilities of their company is restricted to the amount of the investment they have made in the company. This reduces the personal financial risk for the business owners. It is a major reason why there are many small companies.
- Ownership of the business can be shared by large numbers of shareholders.
- Transferring ownership in companies is much easier than transferring a personal business. Shares can be bought and sold, or transferred as a gift.
- A company structure is required for businesses that want to raise capital on a stock market.

There are disadvantages in a company structure, especially for small businesses.

- Companies are subject to stricter regulation than sole traders, in matters such as financial reporting and auditing. Extra regulation costs money.
- If a small company wants to borrow money, the lender (typically a bank) might demand personal guarantees from the company's owners. If so, the benefits of limited liability are lost.
- Companies might be required to make their financial statements available for public inspection, for example by filing a copy with a government department or agency. Sole traders are able to maintain privacy for their financial statements.
- There might be tax benefits from operating as a company rather than as a sole trader, or tax benefits from being a sole trader rather than setting up a company.
- The relative tax benefits are likely to vary from country to country and over time, as the tax laws in a country are altered.

1.3 Companies and financial reporting

Although there are many small companies, and several large partnership businesses, most large businesses are established as companies. The shareholders of companies often rely on financial statements for information about their company.

Companies can also have complex ownership structures, for which special accounting rules are required.

There are also legal requirements that apply exclusively to companies (company law) and not to other types of business. These include regulations relating to the preparation, content and auditing of financial statements. Companies whose shares are traded on a stock market are required to comply with the relevant regulations for stock market trading, which include requirements for compliance with relevant accounting standards in published financial statements.

Consequently, although some international accounting standards can apply to types of business, many focus on the financial statements of companies.

The capital of a sole trader

In the financial statements of a sole trader, the equity capital of the owner recorded in a single capital account.

If the owner puts additional capital into the business, there is an addition to owners' capital, recorded as a credit entry in the capital account.

Debit: Asset account
 (Bank account, or an asset account if the owners puts a no cash asset into the business)
 Credit: Capital

Drawings

If the owner takes drawings, these reduce capital. Initially drawings are recorded a drawings account, but at the end of the financial year, drawings reduce owner's capital.

If the owner takes out cash:

Debit: Drawings
 Credit: Bank

If the owner takes out inventory for personal use:

Debit: Drawings
 Credit: Purchases (at cost)

At the end of the financial year, total drawings are deducted from capital:

Debit: Capital
 Credit: Drawings

Profits and losses

Profits add to capital:

Debit: Income statement (with profit for the year)

Credit: Capital

Losses reduce capital:

Debit: Capital

Credit: Income statement (with loss for the year)

Capital in limited liability companies

The same basic principles apply to capital in limited liability companies. However there are no drawings. Instead the company pays dividends to its shareholders.

A company does not have a single account for owners' capital. Instead there are a number of different accounts for share capital and reserves.

2 Share capital and reserves

The capital of a limited company, as reported in the company's statement of financial position, consists of share capital and reserves.

In the main ledger, there are separate accounts for (1) ordinary share capital and (2) each reserve.

2.1 Share capital

The ownership of a company is represented by shares and the owners are called shareholders. Each share of a particular class of shares gives its holder the same rights as every other share in the same class, including the right to receive a dividend.

For example, suppose that one shareholder has 10,000 shares in a company and another shareholder has 1,000 shares of the same class. The shareholders have equal rights to receive dividends on their shares. The first shareholder will receive 10 times more dividends in total than the second shareholder, because he has 10 times more shares.

2.2 Different classes of shares

Many companies have just one class of shares. These are ordinary shares (or 'common stock'). Ordinary shares are **equity shares**, and in the financial statements ordinary shares are shown as

part of **equity**. A company might have other classes of shares called **preference shares** (or 'preferred stock'). Preference shares are described in a later section.

2.3 Nominal value of shares

All shares have a nominal value or face value. (This is not the price at which they are issued, nor their market value.) For example:

- Company A might have 100,000 ordinary shares of \$1 each. The nominal value is \$1 per share and the total nominal value of the company's shares is \$100,000.
- Company A might issue another 100,000 ordinary shares of \$1 at a price of \$2.50 per share. After the new shares have been issued, the nominal value of the issued share will be \$350,000.
- Company B might have 1,000,000 ordinary shares of \$0.50 each. The nominal value is \$0.50 per share and the total nominal value of the company's shares is \$500,000.

2.4 Share capital: authorised, issued, called up and paid up

There is a difference between authorised and issued share capital.

- The **authorised share capital** of a company is the maximum number of shares that the company is permitted to issue. This maximum limit on share issues is set by the company's constitution. The company cannot issue new shares if the total shares in issue would then exceed the authorised share capital limit. (The requirement that companies should have a stated amount of authorised share capital does not apply in every country. In the UK for example, companies may choose whether or not to have authorised share capital.)
- When a company has an authorised share capital, the authorised share capital limit can be increased but only with the formal approval of the shareholders.
- The **issued share capital** is the nominal value of the shares that have actually been issued. Dividends are paid on issued shares. Issued share capital cannot exceed the authorised share capital.
- When new shares are issued, it is usual to ask shareholders to pay the full issue price immediately, when the shares are issued. Occasionally, a company might ask for the price of the shares to be paid in instalments. The called-up part of the share capital might therefore be less than the full nominal value. The **called-up share capital** is the amount of the nominal value of issued shares that the shareholders have been asked to pay so far.

- **Paid-up share capital** is the amount of called-up capital that has actually been paid by the shareholders. If all the shareholders have not yet paid what they owe for their shares, paid-up share capital is less than the called-up share capital.

Example

A company has authorised share capital of 4 million ordinary shares of \$1 each. It has issued share capital of 2 million shares, all fully paid.

The company decides to issue another 500,000 ordinary shares of \$1, bringing the total issued share capital up to 2,500,000 shares of \$1.

The company might decide to ask for payment for the new shares in instalments, and in the first instalment, the amount called up is \$0.50 for each new share.

The called-up share capital is therefore \$2,250,000 (\$2,000,000 for the existing shares and \$250,000 on the new shares).

Suppose that a shareholder is late in paying the money for 10,000 new shares he is acquiring. The paid-up share capital on the new shares will be \$245,000 ($= \$0.50 \times (500,000 - 10,000)$ shares). Called-up share capital not yet paid is \$5,000 ($= \$0.50 \times 10,000$ shares).

Reserves

The equity of a company consists of the issued equity share capital plus reserves. Share capital is shown in the statement of financial position at its nominal value (or called-up amount, if this is less). Reserves are the shareholders' capital in the company, in excess of the nominal value of the shares.

In the statement of financial position of a company, equity share capital and reserves might be presented as follows:

	\$000	\$000
Ordinary share capital: 10 million shares of \$1		10,000
Reserves		
Share premium	7,500	
Revaluation reserve	4,000	

Retained earnings	<u>24,500</u>	
		<u>36,000</u>
Total equity capital		46,000

There are two broad categories of reserves in the statement of financial position of a company:

- **Capital reserves:** these are reserves representing long-term capital of the company, from which dividends cannot be paid. Capital reserves include the share premium account and the revaluation reserve. The share premium account is explained below. The revaluation reserve was described in the earlier chapter on non-current assets.
- **Revenue reserves:** these are accumulated retained profits of the company. Revenue reserves can be paid out as dividends, if required. Revenue reserves are usually all included in a single **retained earnings reserve** or **accumulated profits reserve**.

When there is a profit for the year, the accounting entries are:

Debit: Income statement (profit)

Credit: Retained earnings reserve

The balance on the retained earnings reserve account is reduced by any **dividends** paid by the company.

Debit: Retained earnings reserve

Credit: Dividends

When the dividends are paid

Debit: Dividends

Credit: Bank or Cash.

Share premium account

When a company issues new shares, the issue price of the shares is usually higher than the nominal value of the shares. The difference between the actual issue price of new shares and their nominal value is called share premium. When new shares are issued, the amount of the share premium is added to a share premium account.

The share premium account is a capital reserve account.

Example

A company issues 50,000 ordinary shares of \$1 each. The issue price of the shares is \$2.00 per share.

The share premium is $\$2.00 - \$1.00 = \$1.00$ per share, or \$100,000 in total (50,000 shares \times \$2.00).

The company is issuing 50,000 shares to obtain \$100,000 (50,000 \times \$2.00) in cash. In the ledger accounts, the share issue would be recorded as follows:

Debit: Bank account	\$100,000 (50,000 shares \times \$2.00, the cash obtained)
Credit: Ordinary share capital	\$50,000 (50,000 shares at nominal value)
Credit: Share premium	\$50,000

In the statement of financial position, the effect of the share issue is as follows:

	\$
Assets	
Cash	<u>100,000</u>
Equity capital	
Share capital	50,000
Share premium	<u>50,000</u>
	<u>100,000</u>

3 Issuing shares: rights issues and bonus issues

3.1 Rights issues: new share issues for cash

Occasionally, a company might issue new shares to obtain cash. An issue of new shares for cash might be in the form of a rights issue.

In a rights issue the existing shareholders have the right to purchase the new shares in proportion to their existing shareholding. For example in a 1 for 4 rights issue, existing shareholders are given the opportunity to buy one new share for every four shares they currently hold.

If existing shareholders do not want to buy the new shares that are offered to them, the shares will be sold to other investors.

When a stock market company makes a rights issue, the price at which the new shares are offered is below the current market price for the shares that are already in issue.

Example

White plc has 2 million shares of \$1 each in issue. These shares are traded on the stock market at a current market price of \$3 each. The company now decides to make a 1 for 4 rights issue at \$2.00 per share.

This means that the company will issue 500,000 new shares ($2,000,000 \times 1/4$) at \$2.00 each. The shares will be offered to the existing shareholders, who are given the opportunity to buy one new share for every four shares that they currently own.

The nominal value is \$1 per share, therefore the share premium is \$2.00 per share. The total amount of cash raised from the share issue is \$1,000,000 ($1,000,000 \text{ shares} \times \2.00).

This should be accounted for as follows:

Debit: Bank account	\$1,000,000
Credit: Ordinary share capital	\$500,000 (500,000 shares at nominal value)
Credit: Share premium	\$500,000 ($500,000 \times \1.00)

Exercise 2

A summary balance sheet of Tulip Company is as follows:

	\$000
Non-current assets	850
Current assets	<u>150</u>
Total assets	<u>1,000</u>
Equity and liabilities	

Share capital: ordinary shares of \$0.50 each	400
Share premium	100
Retained earnings	<u>200</u>
Total equity	700
Non-current liabilities	200
Current liabilities	<u>100</u>
Total equity and liabilities	<u>1,000</u>

The company now makes a 1for 4 rights issue, and the new shares are issued at a price of \$1.00 each.

Required

Prepare a summary statement of financial position of the company immediately after the rights issue. Ignore the costs of the share issue.

Advantages of a rights issue

There are several advantages with issuing shares in the form of a rights issue.

- A rights issue is a method of raising new capital in the form of cash. Companies might need new capital to expand their business.
- Existing shareholders have the opportunity to buy a proportion of the new shares, so that they retain the same proportion of the total shares in the company as before.
- Since the price of the new shares is below the current market price, the issue should be attractive to shareholders.

Note: A country's company law might require new issues of shares for cash to be made as a rights issue, unless the shareholders agree otherwise. (UK company law, for example, gives shareholders these rights.)

Disadvantages of a rights issue

There are also some disadvantages with rights issues.

- A rights issue usually involves raising a large amount of cash. When a company does not need a large amount of cash, it will try to persuade the shareholders to permit a different method of issuing shares to raise the cash required.

- A rights issue might be unsuccessful when the stock market is depressed and share prices are falling.
- A rights issue can be expensive. It is usually cheaper to obtain new finance by borrowing.

Bonus issue of shares (capitalisation issue)

A bonus issue of shares (also called a capitalisation issue) is an issue of free new shares to existing shareholders in proportion to their existing shareholding. For example, if there is a 1 for 3 bonus issue, shareholders will receive one new share free of charge for every three shares they currently hold.

- The company raises no money from a bonus issue.
- A bonus issue is simply a way of converting reserves into share capital.

A bonus issue is accounted for in the main ledger as follows:

Debit: Reserves (with the nominal value of the new shares)

Credit: Ordinary share capital

The reserves are reduced when there is a bonus issue, and the nominal value of the issued share capital is increased.

The reserve that is reduced (debited) is normally the **share premium**. If the share premium is not big enough, it is reduced to zero, and any remaining reduction of reserves is made by reducing retained earnings.

Example

Colby Company has 10,000,000 ordinary shares of \$1 in issue, and a share premium of \$7,000,000. It decides to make a 1 for 2 bonus issue.

The effect of the bonus issue is as follows:

The issued share capital before the bonus issue is 10,000,000 shares of \$1 = \$10,000,000. 5,000,000 new shares are issued ($10,000,000 \times 1/2$). These have a nominal value of \$5,000,000 ($5,000,000 \times \1).

Share capital

\$

Share premium

\$

Before the bonus issue	10,000,000	7,000,000
Bonus issue	5,000,000	5,000,000
After the bonus issue	15,000,000	2,000,000

A summary balance sheet of Capco Company is as follows:

	\$000
Non-current assets	850
Current assets	<u>150</u>
Total assets	<u>1,000</u>
Equity and liabilities	
Share capital: ordinary shares of \$0.50 each	400
Share premium	100
Retained earnings	<u>200</u>
Total equity	700
Non-current liabilities	200
Current liabilities	<u>100</u>
Total equity and liabilities	<u>1,000</u>

The company makes a 1 for 2 bonus issue.

Requirement

Prepare a summary balance sheet immediately after the bonus issue.

Advantages of a bonus issue

A company whose shares are traded on a stock market can use a bonus issue to increase the number of shares in issue. This will bring down the share price and might help to make the shares more marketable.

A bonus issue can be used to reduce the share premium account, or even remove the share premium account entirely from the statement of financial position.

Disadvantages of a bonus issue

Except for the advantages listed above, a bonus issue serves no practical purpose. No cash is raised from the issue.

If a bonus issue exceeds the size of the share premium account, retained earnings will be reduced by the issue. This would convert profits that are distributable as profits into long-term share capital that cannot be distributed.

Bonus issue and rights issue in the same year

In your examination you might be given a question in which a company makes both a bonus issue and a rights issue in the same year, and you might be asked to calculate the balance on the share capital account and the share premium account after the shares have been issued.

You can work out an answer by preparing a table with a column for the share capital account and a column for the share premium account. For a rights issue, calculate the premium per share, which is the difference between the nominal value and the issue price of the shares. The shares might have a nominal value of 25 cents or 50 cents, so be careful when you calculate the premium. Share capital is increased by the nominal value of the shares issued and the premium is added to the share premium account.

For a bonus issue, add the nominal value of the share issued to the share capital account and deduct the same amount from share premium.

Example

At 1 July 2014, Red Company has 10,000,000 ordinary shares of \$0.25 in issue, and a share premium of \$2,000,000.

On 1 December 2014 the company makes a 1 for 4 bonus issue.

On 1 March 2015 it makes a 2 for 4 rights issue at a price of \$1.00 per share. All the shares in the issue were taken up by shareholders.

The share capital and share premium account balances at 30 June 2015 can be calculated as follows:

	Share capital	Share premium
	\$	\$
At 1 July 2014	2,500,000	2,000,000
1 for 4 bonus issue	<u>625,000</u>	<u>(625,000)</u>
After the bonus issue	3,125,000	1,375,000

Right issue	<u>1,562,500</u>	<u>4,687,500</u>
	4,687,500	6,062,500

Note: Before the rights issue there were 12.5 million shares in issue ($= 6,250,000 \times \$1/\0.25). The number of shares issued in the rights issue is therefore 10,000,000 ($= 25,000,000 \times 2/5$).

These shares have a nominal value of \$2,500,000 and the premium per share is \$1.50 ($= \$1.75 - \0.25) which is \$15,000,000 in total.

4 Preference shares

4.1 Long-term capital of a company

The long-term capital of a company consists of:

- Equity capital, reported in the statement of financial position as ordinary share capital and reserves
- Preference shares
- Long-term debt

All companies have equity capital, but not all companies have long-term debt. Even fewer companies have preference shares.

4.2 The nature of preference shares

A company might issue preference shares. There might be just one 'class' of preference shares, but there might also be more than one 'class'. Preference shares have some similarities with ordinary shares. The main point of similarity is that preference shareholders receive dividends each year on their shares.

However, preference shares differ from ordinary shares because they give their holders preferential rights, ahead of ordinary shareholders. This includes the right to receive dividends on their shares before dividends can be paid to the ordinary shareholders.

The dividend on preference shares is usually a fixed amount each year. This fixed amount is a percentage of the nominal value of the shares.

Example

A company might have in issue 20 million 6% preference shares of \$1 each. The total annual dividend payable (which is called a 'preference dividend') is \$1,200,000. This is because the nominal value of the shares is \$20 million and dividends are 6% of the nominal value.

Preference dividends are normally paid every six months, so in this example the company would make two preference dividend payments each year of \$600,000.

4.3 Redeemable and irredeemable preference shares

Most classes of preference shares are either redeemable or irredeemable.

- Redeemable preference shares will be bought back by the company at a date in the future, and cancelled. When a company buys back and cancels shares, the shares are 'redeemed'. Shares might be redeemed at their nominal value (par value) but the redemption price might be higher.
- Irredeemable preference shares will not be redeemed. Like ordinary shares, they are 'permanent' share capital.

In practice most preference shares issued by companies are redeemable.

Example

A company might have two classes of preference shares in issue. There might be 5% redeemable preference shares and 7.5% irredeemable preference shares. The redeemable preference shares might be redeemable at par at a specified date in the future. When the redemption date arrives the company will buy back the shares and cancel them.

For the purpose of financial reporting, each different class of preference shares should be accounted for separately.

4.4 Preference shares: equity or debt?

Companies are required to show equity capital separately from liabilities in the statement of financial position. Long-term debt is a non-current liability.

There is no special place in the statement of financial position for preference shares, and preference shares must be classified either as equity or as debt. The rules for deciding whether preference shares are equity or debt are fairly complex, but as a general rule:

- Redeemable preference shares are usually treated as debt capital in financial reporting and

- Irredeemable preference shares are likely to be included in equity.

A consequence of treating preference shares as either equity or debt capital, depending on circumstances, the dividends paid to preference shareholders are also treated in one of two ways:

- When preference shares are treated as debt capital and included in non-current liabilities, dividends paid to the preference shareholders are reported as a finance cost in the income statement, similar to interest costs on a loan. These preference dividends reduce the reported profit.
- When preference shares are treated as equity, dividends paid to the shareholders are treated as equity dividends.

5 Dividends

5.1 Preference dividends

A company does not have to pay dividends. If its profits are too low, the directors might decide not to pay any dividend, or to pay just some dividends to some classes of shareholders.

Preference shareholders are entitled to receive their dividend before the ordinary shareholders can receive any dividend.

As stated in the previous section, preference dividends are reported differently in the financial statements, depending on whether the preference shares are treated as debt capital or equity capital.

- When preference shares are treated as debt capital, the preference dividend each year is reported as a finance charge and included in profit and loss for the year.
- When preference shares are treated as equity, the preference dividends are included within the equity dividend for the purpose of financial reporting.

Accounting for preference dividends

When preference dividends are treated as a finance cost, they are accounted for as follows:

Debit: Preference dividends

Credit: Bank

Dividend payment

Debit: Finance charges (expense)

Credit: Preference dividends

Recording preference dividends as a finance charge (expense in profit and loss) for the year

5.2 Equity dividends

Equity dividends are dividends paid to the equity shareholders. In most companies, the ordinary shareholders are the only equity shareholders. Dividends are usually stated at an amount per share: for example a company might make a dividend payment of 60 cents per share.

Equity dividends reduce the company's distributable profits. When a company pays an equity dividend, the balance on the retained earnings reserve is reduced.

Interim and final dividends

Many companies make two (or possibly more) dividend payments each year to the ordinary shareholders.

- There might be a payment during the financial year, based on profits for the first six months of the year. This mid-year dividend is called an interim dividend.
- There is usually a payment after the end of the financial year, based on profits for the full year. This is called a final dividend.

The timing of equity dividend payments needs to be understood, and so it might be useful to describe an example. Suppose that a company has a financial year that ends on 31 December.

- In July Year 1 it might declare an interim dividend of 30c per share, payable on 31 October Year 1.
- In February Year 2, it might propose a final dividend of 95c per share for the year ended 31 December Year 1. This proposed dividend is therefore announced before the financial statements for Year 1 are approved by the company's directors and published.
- The proposed dividend might require approval by the shareholders at an annual general meeting of the company, held in April Year 2.
- The final dividend for Year 2 might be paid on 15 May Year 2.
- In July Year 2 the company might declare an interim dividend of 33c per share, payable on 30 October Year 2.

The important points to note about this timetable for dividends are that:

- During the course of a financial year, a company might make two payments of equity dividends, the final dividend for the previous financial year and the interim dividend for the current financial year.
- When a company publishes its financial statements for a year, the directors might have proposed a final dividend for the year, but this proposed dividend will not yet have been approved by the shareholders.

A distinction must be made between:

- equity dividends actually paid in the year
- the proposed equity dividend that has not yet been paid when the financial statements are prepared and published.

5.3 Accounting for equity dividends

Equity dividends are not included in the income statement of a company or in the statement of comprehensive income. Instead:

Equity dividends actually paid during the year are reported as a reduction in retained earnings in the statement of changes in equity. Equity dividend payments also reduce retained earnings in the statement of financial position.

The **proposed final dividend** is reported as a note to the financial statements, but is not included in the income statement, statement of changes in equity or the statement of financial position.

The accounting entries for equity dividends are therefore as follows.

Debit: Equity dividends

Credit: Bank

Dividend payments

Debit: Retained earnings reserve

Credit: Equity dividends

Recording equity dividend payments as a deduction from retained earnings.

Accounting for equity dividends: summary

Dividends paid to equity shareholders are similar to drawings made by sole traders or partners from their capital. Dividends are paid out of revenue reserves (the retained earnings reserve account).

A dividend is usually declared as either:

- a dividend per share in cents per share, or
- a percentage of the nominal value of the shares.

In the UK, dividends are usually paid twice each year. During a financial year, the amount of dividend charged against retained earnings is therefore:

- the final dividend for the previous year and
- the interim dividend for the current year.

The accounting rules for dividends can be summarised as follows.

Total dividends paid are not shown in the income statement, as part of the income statement itself.

The **proposed final dividend** for the accounting year is not shown in the statement of financial position, **unless** (in a very unusual circumstance) the final dividend is proposed and approved before the end of the financial year.

Total dividends actually paid during the year (the final dividend for the previous year and the interim dividend in the current year) are reported as deductions from equity (deductions from retained earnings) in another financial statement, the **statement of changes in equity**.

The final proposed dividend for the year, if it is proposed after the end of the year (which is the normal practice), is disclosed in a note to the financial statements, as a non-adjusting event after the reporting date.

6 Loan capital

6.1 Features of loans and loan notes

'Loan capital' is long-term borrowing. A loan is a liability, and is included in noncurrent liabilities in the statement of financial position provided that repayment of the loan will not fall due within the next 12 months.

Bank loans

Loans in the form of a borrowing instrument, such as bonds or notes.

Longer-term bank loans to business entities are usually at a variable rate of interest, so the interest rate payable on the loan rises or falls with changes in the market rates of interest.

Bonds and notes are financial instruments issued by companies that enable them to borrow from investors. Companies issue bonds or notes and these are purchased by investors. In return the company promises to:

- pay interest on the face value of the bonds or notes and
- redeem the bonds or notes at a date in the future.

Interest is usually at a fixed annual rate of interest.

The difference between bonds and loan notes is the time to redemption when they are issued. Loan notes are usually redeemable within up to about seven years from the date of their issue. Bonds are usually longer-term and redeemable after ten years or more.

6.2 Accounting for loans and loan notes

The rules on accounting for financial instruments are fairly complex, and the complexities are outside the scope of the examination syllabus. For the purpose of your examination, you need to be aware that:

Loan capital is a long-term liability, and is included in the statement of financial position within non-current liabilities. However when the bank loan, loan notes or bonds are redeemable within 12 months, they become current liabilities.

The interest on loans and loan notes is an expense in profit and loss, and included within finance costs. The accruals basis is applied, which means that interest is charged against profit on a time apportionment basis, not on the basis of when the interest payments are actually made.

Example

A company issued loan notes on 1 March. The notes have a face value of \$10 million and interest is payable at an annual rate of 10%. Interest payment dates are six monthly. On 31 October and 30

April each year. The interest rate of 10% is a market rate of interest and the loan notes are redeemable a par after five years.

The financial year of the company ends on 31 December.

The loan notes should be accounted for in the year of issue as follows:

Interest to be included in interest costs/finance costs for the year is \$10 million \times 12% \times (10 months/12 months) = \$1,000,000.

There is a non-current liability for \$10 million (the amount of the loan).

There is accrued interest for two months (November and December) amounting to \$10 million \times 10% \times (2 months/12 months) = \$200,000. This will be included in current liabilities in the statement of financial position as at 31 December.

In the ledger accounts, the transactions might be recorded as follows. These show liabilities for the loan (\$10 million) and accrued interest (\$200,000) at the end of the year.

Loan notes account			
	\$		\$
		1 May Bank	10,000,000
Interest charges account			
	\$		\$
31 Oct Bank	800,000	31 Dec Income statement	1,000,000
31 Dec Accrual c/f	<u>200,000</u>		<u> </u>
	<u>1,000,000</u>		<u>1,000,000</u>
		1 Jan Accrual b/f	200,000

7 Statement of changes in equity

7.1 The requirement for a statement of changes in equity

A set of financial statements for a company must include a statement of changes in equity (SOCIE) in order to comply with the requirements of IAS1: **Presentation of financial statements**. The SOCIE is a part of the financial statements of a company, together with the statement of financial

position, statement of comprehensive income, statement of cash flows and notes to the financial statements.

For each 'component of equity', a SOCIE shows the amount at the beginning of the period for that component of equity, changes during the period, and its amount at the end of the period.

The purpose of the statement is simply to show how the total amount of equity has changed during the year, and which parts of equity have increased or decreased in amount, and by how much.

7.2 Components of equity

Components of equity include:

- share capital
- share premium
- retained earnings
- revaluation reserve

In other words the components of equity are share capital and each equity reserve.

For each component of equity, the **SOCIE should show changes resulting from:**

- profit or loss for the period
- each item of other comprehensive income (e.g. a gain on a property revaluation)
- 'transactions with owners in their capacity as owners'.

7.3 Transactions with owners in their capacity as owners

The owners of a company are its shareholders. Transactions with owners in their capacity as owners include:

- new issues of shares
- payments of equity dividends
- repurchases and cancellations of its own shares by the company.

Transactions with owners in their capacity as owners do not appear in any other financial statement as separately identified items or transactions. Equity dividend payments reduce total retained earnings, but they are not shown in the statement of financial position or income statement. Similarly, the proceeds from new share issues add to share capital and share premium, but they are not separately disclosed in the statement of financial position.

It is only in the SOCIE that these items are disclosed as separate items.

Example: statement of changes in equity

An example of a statement of changes in equity for a single entity is shown below.

Company XYZ

Statement of changes in equity for the year ended 31 December 2015

	<i>Share capital</i>	<i>Share premium</i>	<i>Revaluation reserve</i>	<i>Retained earnings</i>	<i>Total</i>
	<i>\$000</i>	<i>\$000</i>	<i>\$000</i>	<i>\$000</i>	<i>\$000</i>
Balance at 31 December 2015	600	200	150	750	1,700
Change in accounting policy				(50)	(50)
Re-stated balance	600	200	150	700	1650
Issue of share capital	200	300			500
Dividend payments				250	250
Profit for the year				450	450
Other comprehensive income for the year	—	—	<u>50</u>	—	<u>50</u>
Balance at 31 December 20X2	<u>800</u>	<u>500</u>	<u>200</u>	<u>900</u>	<u>2400</u>

Notes

The SOCIE shows the changes during the year for each component of equity, having first made a retrospective adjustment for the effects of a change in accounting policy (in the rare event that this occurs) or for the correction of a prior period error.

Changes in each component of equity are shown, with separate disclosure of changes resulting from profit or loss, other comprehensive income, and 'transactions with owners in their capacity as owners' – new share issues and dividend payments are shown here.

The SOCIE therefore reconciles, for each component of equity, the balance at the beginning of the period and the balance at the end of the period.

Example

Blue Company had the following equity and reserves at 1 January Year 2015:

	\$000
Share capital: ordinary shares of \$1 each	400
Share premium	100
Revaluation reserve	200
Retained earnings	<u>900</u>
Total equity	1,600

During the year to 31 December Year 2015:

- The company made a 1 for 4 rights issue at a price of \$2.00 per share.
- The company then made a 1 for 2 bonus issue.

Some buildings were re-valued and the transfer to the revaluation reserve was \$120,000. This was reported in other comprehensive income for the year.

- The profit after tax for the year was \$200,000.
- Equity dividend payments during the year were \$300,000.

Requirement

Prepare a statement of changes in equity for Green Company for the year to 31 December Year 2015, to include in its financial statements for the year.

Solution

	<i>Share capital</i>	<i>Share premium</i>	<i>Revaluation reserve</i>	<i>Retained earnings</i>	<i>Total</i>
	\$000	\$000	\$000	\$000	\$000
Balance at 31 December 2014	400	100	200	900	1600

Right issue	100	100			200
Bonus issue	250	250			
Transfer to revaluation reserve			100		100
Dividend payments				300	300
Profit for the year	_____	_____	_____	<u>200</u>	<u>200</u>
Balance at 31 December 2015	<u>750</u>	<u>450</u>	<u>300</u>	<u>1400</u>	<u>1800</u>

Practice questions

MCQ 1

Which of the following items should appear as items in a company's statement of changes in equity?

- 1 Equity dividends paid
- 2 Income from investments
- 3 Profit for the financial year after tax
- 4 Gain on revaluation of non-current assets

- A 1, 3 and 4 only
 B 1 and 3 only
 C 2 and 3 only
 D 2, 3 and 4 only

MCQ 2

The following information relates to dividends declared and paid by a company, whose financial year ends on 30 June.

	\$
<i>2009</i>	
November Paid final dividend for year ended 30 June 2009. (Declared August 2009)	800,000
<i>2010</i>	
April Paid interim dividend	200,000
November Paid final dividend for year ended 30 June 2010. (Declared August 2010)	900,000

What figures (if any) should be included in the income statement of the company for the year to 30 June 2010 and in the statement of financial position as at that date?

	<i>Income statement</i>	<i>Statement of financial position: liability</i>
A	\$1,100,000	deduction \$900,000
B	\$1,000,000 deduction	Nothing
C	Nothing	\$900,000
D	Nothing	Nothing

MCQ 3

Which of the following statements are correct?

1. When a company makes a bonus issue of shares, the total of share capital plus reserves remains unchanged.
2. A company's statement of changes in equity must include the proceeds from any share issue during the period.

A 1 only is correct

B 2 only is correct

C 1 and 2 are both correct.

D Neither statement is correct.

MCQ 4

At 1 July 2009 a limited liability company's capital structure was as follows:

	\$000
Share capital: Ordinary shares of \$1 each	100,000
Share premium account	100,000

In the year ended 30 June 2010 the company made the following share issues.

1 December 2009

A bonus issue of one share for every two held, using the share premium account.

1 February 2010

A rights issue of two shares for every four held at that date, at \$2 per share.

What will be the balances on the company's share capital and share premium accounts at 30 June 2010 as a result of these issues?

	Share capital	Share premium
	\$000	\$000
A	150,000	50,000
B	225,000	125,000
C	295,000	60,000
D	540,000	160,000

MCQ 5

A limited liability company issued 500,000 ordinary shares of \$1 each at a premium of \$2 per share. The cash proceeds were correctly recorded but the full amount was credited to the sales account.

Which of the following journal entries is needed to correct this error?

		Debit	Credit
		\$	\$
A	Sales	1,500,000	
	Share capital account		500,000
	Share premium account		1,000,000
B	Share capital account	500,000	
	Share premium account	1,000,000	
	Sales		1,500,000
C	Sales	1,500,000	
	Share capital account		1,500,000
D	Share capital account	1,500,000	
	Sales		1,500,000

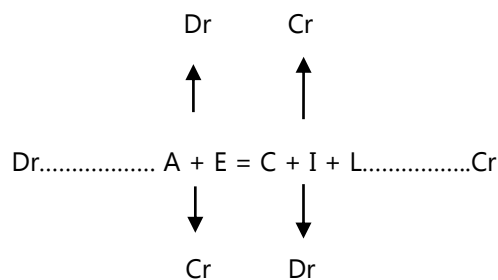
Chapter 10: Preparing trial balance

1. Trial balance

A trial balance is a list of all the debit balances and all the credit balances on the accounts in the main ledger. A trial balance can be 'extracted' from the main ledger simply by listing the balances on every account. The normal method of presentation is to present the balances in two columns, one for debit balances and one for credit balances.

- Accounts with debit balances will be asset accounts and expense accounts
- Accounts with credit balances will be liability accounts, capital account (or share capital and reserve accounts in the case of a company) and income accounts.

A simple thing to remember



Since the accounting system uses double entry principles, the total of debit balances and the total of credit balances should be equal, because for every debit entry in the main ledger there should be a matching credit entry.

	<i>Debit \$</i>	<i>Credit \$</i>
Cash at bank	6,530	
Capital		6,000
Bank loan		1,000
Purchases	5,000	
Trade payables		1000
Rent	3,000	
Shop fittings	2,000	
Sales		12,500
Trade receivables	500	
Discount received		50
Discount allowed	20	
Bank loan interest	100	
Other expenses	1,900	
Drawings	<u>1,500</u>	
	<u>20,550</u>	<u>20,550</u>

1.1 The purpose of a trial balance

A trial balance has two main purposes.

It is a **starting point for producing an income statement and a statement of financial position** at the end of an accounting period. A trial balance is extracted from the main ledger, and various year-end adjustments are then made to the accounts (which are recorded as journal entries before being entered in the main ledger). Year-end adjustments include adjustments for opening and closing inventory, depreciation charges, accruals and prepayments, writing off bad debts and adjusting the allowance for irrecoverable debts.

When the year-end adjustments have been made, an income statement and then a statement of financial position can be prepared, using the balances in the main ledger accounts.

A second purpose of a trial balance is **to check for errors in the accounting system**. Errors must have occurred if the total of debit balances and total of credit balances on the main ledger accounts are not equal. Having identified that an error (or more than one error) must exist, the task of the bookkeeper is to find the cause of the error and correct it.

This chapter is concerned with the use of a trial balance for identifying and then correcting errors. When a trial balance is used to identify errors in the accounting system, a trial balance can be extracted at any time, because total debit balances and total credit balances should always be equal.

1.2 Errors in the double entry accounting system

Errors can occur in a book-keeping system, because individuals make mistakes. There are different types of error. Some are more likely to happen in a manual accounting system rather than a computerised system, because people tend to make more mistakes when they do not have a computer to help them. However some mistakes occur in any book-keeping system, manual or computerised.

The types of error that will appear in the accounting records can be classified into four broad categories:

Transposition errors: When two digits in an amount are accidentally recorded the wrong way round.

Example: A purchase is debited in the purchase account as \$5,843, but has been incorrectly

credited in the payables control account as \$5,483. In consequence total debits will not equal to total credits: debits will exceed credit by $5,843 - 5,483 = 360$. You can often detect a transposition error by checking whether the difference between debits and credits can be divided exactly by 9 ($\$360 \div 9 = \40).

Error of omission: Failing to record a transaction at all, or making a debit or credit entry, but not the corresponding double entry.

- A business receives an invoice from a supplier for \$200, and the transaction is omitted from the books. As a result, both total debits and credits will be wrong by \$200.
- A business receives an invoice from a supplier for \$200, the payables control account is credited but no debit entry is made. In this case, the total credits would not equal total debits (because total debits are \$200 less than they ought to be).

Error of principle: Making a double entry in the belief that the transaction is being entered in the correct accounts, but subsequently finding out that the accounting entry breaks the 'rules' of an accounting principle or concept. A typical example of such an error is to treat revenue expenditure incorrectly as capital expenditure.

- Machine repairs costing \$100 (which should be treated as revenue expenditure) are debited to the cost of a non-current asset (capital expenditure). Although total debits still equal total credits, the repairs account is \$100 understated and the cost of the non-current asset is \$100 overstated.
- A business owner takes \$180 cash out of the till for his personal use. The bookkeeper incorrectly debits sales by \$180, when they should have debited drawings. This is an error of principle, so that drawings and sales are both understated by \$180.

Errors of commission: A mistake is made in recording transactions in the ledger accounts. Putting a debit entry or a credit entry in the wrong account. Telephone expenses of \$540 are debited to the electricity expense account, an error of commission. Although total debits and credits balance, telephone expenses are understated by \$540 and electricity expense is overstated by the same amount.

Casting errors (adding up): Daily credit sales in the sales day book of \$28,425 are incorrectly added up ('miscast') as \$28,825. This amount is credited to sales and debited to receivables control. Although total debits and total credits are still equal, the nominal ledger is incorrect by

\$400. Note that if the correct individual entries are made in the receivables ledger, the total on the list of balances will be right, but it will not agree with the receivables control account balance.

Compensating errors: Errors which are, coincidentally, equal and opposite to one another. Compensating errors hide trial balance errors.

Administrative expenses of \$2,822 are entered as \$2,282 in the administrative expenses ledger account. At the same time, income of \$8,931 is shown in the sales account as \$8,391. Both debits and credits are \$540 too low, and the mistake would not be apparent when the trial balance is cast.

Exercise

Write out the journal entries which would correct these errors also identify the type of errors.

- (a) A business sends an invoice for \$350 to a customer which was omitted from the books entirely.
- (b) Repairs worth \$200 were incorrectly debited to the non-current asset (building) account instead of the repairs account.
- (c) The bookkeeper of a business reduces cash sales by \$180 because he was not sure what the \$180 represented. In fact, it was drawings.
- (d) Miscellaneous expenses of \$450 are incorrectly debited to the electricity account.
- (e) A page in the purchase day book has been added up to \$29,625 instead of \$29,265.

1.3 Errors highlighted by the extraction of a trial balance

As stated earlier, one way of finding some errors in the accounting records is to extract a trial balance from the main ledger. If the total of the debit balances does not equal the total of the credit balances on the main ledger accounts then an error or several errors have been made.

If the trial balance does not balance then this will be due an error where the debits and credits are not the same, so that the error results in the debit entry in one account in the main ledger not being equal to the matching credit entry in another account.

Types of error which affect the balancing of the trial balance are as follows:

A transaction might be recorded with a debit entry in one account, but the corresponding credit entry is omitted. Similarly, a transaction might be recorded with a credit entry in one account, but the corresponding debit entry is omitted.

For example a payment might be recorded as a credit entry in the cash book but omitted from the payables ledger control account.

There could be a transposition error in one account. For example, the debit entry might be \$1,850 and the corresponding credit entry might be \$1,580. One of the entries must be incorrect.

A transaction might be recorded as a debit entry in two accounts, instead of as a debit entry in one account and a credit entry in the other account. For example, rental income might be recorded as a debit entry in the cash book and, in error, as a debit entry in the rental expense account.

Similarly, a transaction might be recorded as a credit entry in two accounts, instead of being a debit entry in one account and a credit entry in the other. For example, discounts allowed might be recorded as a credit entry in the receivables ledger control account and, in error, as a credit entry in the discounts received account.

The cash book is often used as both a book of prime entry and as a main ledger account ('cash' or 'bank'). In a manual accounting system, the total of cash receipts or cash payments on a page of the cash book is added up and the total amount of cash received or cash paid is then 'posted' to the corresponding main ledger account (such as receivables ledger control account or payables ledger control account). When a total column in the cash book is added up incorrectly, the total is said to be '**undercast**' if it is too low or '**overcast**' if it is too high.

Arithmetical errors that result in an undercast or overcast results in the balance on an account being too high or too low. When a trial balance is extracted, totals debits and total credits will therefore be different.

1.4 Errors not highlighted by the extraction of a trial balance

A trial balance is only useful in helping to identify errors where the debit and credit entries in the main ledger accounts do not match. It does not help with the identification of errors where there has not been a mis-match between debit and credit entries.

There are some types of error that do not result in a difference between total debit and total credit entries and therefore do not affect the balancing of the trial balance.

For example, a transaction might have been omitted entirely from the main ledger, with no debit entry and no credit entry.

Transactions might be recorded in the wrong account. For example, the cost of repairing a machine might be recorded incorrectly as a debit in the machinery at cost account instead of recording it as a debit in the machine repairs account.

The amount of the debit entry is correct; the error is to post the transaction to the wrong account.

There might be compensating errors. For example one error might result in debits exceeding credits by \$1,000 but another error might result in credits exceeding debits by \$1,000. If this happens, the errors will 'cancel each other out' and will not be apparent from a check on the trial balance totals for debits and credits.

Since a trial balance cannot be used to identify the existence of all errors, it has serious limitations as a method of identifying and correcting errors.

For the purpose of our examination, however, you need to be able to: identify errors in a double entry accounting system, and know how to correct them.

Corrections to errors in an accounting system are recorded as journal entries and then posted from the journal to the relevant accounts in the main ledger

2 Correcting errors

2.1 An approach to correcting errors

Errors should be corrected when they are found.

Transactions that have been omitted from the main ledger entirely should be recorded in the accounts. The omitted item can be recorded in the journal, and posted from the journal to the relevant accounts in the main ledger and, if required, the receivables or payables ledger (personal accounts).

Entries that have been made incorrectly in the accounts must be corrected by means of suitable debit and credit entries in the accounts. The correction of an error should be recorded in the journal and then posted from the journal to the relevant accounts.

In order to correct errors properly, you need to be able to:

- Identify an error
- Recognise what the correct entry in the accounts should have been and work out how to make the correction by means of double entry adjustments.
 1. What accounting entries have been made, and
 2. What the accounting entries should have been.

By comparing what has been recorded in the accounts with what should have been recorded, you can then work out the double entry adjustments that are needed to get from 'where we are' to 'where we want to be'. Some examples will help to illustrate the approach.

Example

A business has recorded a repair cost of \$1,000 to a machine as a debit in the machinery at cost account.

<i>(1) What has been recorded</i>	\$	<i>(2) What should be recorded</i>	\$	<i>(3) Correction</i>	\$
Dr Machinery account	1,000	Dr Machine repairs account	1,000	Dr. Machine repairs account	1,000
Cr Bank	1,000	Cr Bank	1,000	Cr. Machinery account	1,000

Example

A business has recorded discounts allowed of \$1,600 as a debit in the discounts received account.

<i>(1) What has been recorded</i>	\$	<i>(2) What should be recorded</i>	\$	<i>(3) Correction</i>	\$
Dr. Discount received	1,600	Dr. Discount allowed	1,600	Debit: Discounts allowed	1,600
Cr Trade receivables	1,600	Cr. Trade receivables	1,600	Credit: Discounts received	1,600

2.2 The effect of errors on profit

Unless they are corrected, accounting errors will have an effect on the reported profit for the period. An examination question might ask you to quantify this effect for a given error. In a typical question of this sort, the error might involve recording a capital expenditure item as a revenue expenditure item, or a revenue expenditure item as capital expenditure. Alternatively, a capital expenditure item might be recorded at an incorrect amount.

Example

A bookkeeper in error recorded the purchase cost of a new item of vehicle as \$2,000 when it should have been \$20,000. A draft profit of \$200,000 for the period was calculated before the discovery of the error. This included a depreciation charge of 10% (\$200) for the equipment.

What is the correct figure for profit?

Answer

	\$
Draft profit	200,000
Add back: Depreciation incorrectly charged 200	<u>200</u>
	200,200
Deduct: Correct depreciation charge (10% × \$20,000)	<u>(2,000)</u>
Adjusted figure for profit	<u>198,200</u>

Example

A bookkeeper in error recorded the \$50,000 purchase cost of a new machine as repairs and maintenance costs. A draft profit of \$200,000 for the period was calculated before the discovery of the error. Depreciation on machinery is charged at 10% on cost, with a full year's charge in the year of acquisition.

What is the correct figure for profit?

Answer

	\$
Draft profit	200,000

Add back: Repair costs incorrectly charged	<u>50,000</u>
	250,000
Deduct: Depreciation charge (10% × \$50,000)	<u>(5,000)</u>
Adjusted figure for profit	<u>245,000</u>

3 Suspense accounts

3.1 Trial balance: differences in total debits and total credits

The examples of correcting errors in the previous section involve errors where the amount of the debit entry and the amount of the credit entry were the same. These errors would not be identified by extracting a trial balance.

When errors are made where the amount of the debit entry differs from the amount of the credit entry, total debit balances and total credit balances in the main ledger accounts will differ. A trial balance of all the accounts in the main ledger will show these different amounts. It will also indicate that there is an error, or possibly several errors, in the accounting records.

These must be discovered and corrected. Until they are discovered, the first step should be to open a **suspense account**.

When errors have resulted in total debit entries and total credit entries being different, the errors are corrected using the suspense account.

A suspense account is a short-term T account that is required only until the errors have been identified and corrected.

3.2 Opening a suspense account and correcting the errors

When a suspense account is opened, an opening balance is entered in the account. This can be either a debit balance or a credit balance.

The balance entered into the suspense account should be an amount that makes equal the total debit balances and the total credit balances on all the main ledger accounts (including the balance on the suspense account).

Example

A business has prepared a trial balance of the main ledger account balances. This shows total debit balances of \$ 378,000 and total credit balances of \$356,000. A suspense account must be opened. The balance on the account to make total debit and total credit balance equal is a debit balance of \$22,000 (\$378,000 credits less \$356,000 debits).

Suspense account	
	\$
Opening balance	22,000

The errors should now be investigated, to find out what they are, and what must be done to correct them. The errors have not been fully corrected until the balance on the suspense account has been reduced to zero.

3.3 Correcting errors where a suspense account is opened

When it is clear that an error has occurred, it is often helpful to decide the answer to two questions:

Has the error resulted in different total amounts for debit and credit entries?

- If the answer is yes, making the correction will involve the suspense account
- If the answer is no, the correction should be made, but will not involve the suspense account

If the error has resulted in different total amounts for debit and credit entries, think about the main ledger account or accounts containing the error, and decide what needs to be done to correct the balance on that account.

The same approach used in the previous section for correcting errors can be used.

For each account affected by an error, you can prepare two sets of memorandum T accounts for:

- What accounting entries have been made in the accounts, and
- What the accounting entries should have been.

By comparing what has been recorded in the accounts with what should have been recorded, you can then work out the double entry adjustments that are needed to get from 'where we are' to 'where we want to be'.

However, when the error involves different total amounts of debits and credits, a debit or credit entry in the suspense account is needed as a 'balancing figure' to make the total debits and credits equal. Correcting the error(s) should reduce the balance on the suspense account to \$0.

Example

A debit entry in the rent expense account has been entered as \$6,000 when it should have been \$6,500, but the entry in the cash book (bank account) for the payment was entered correctly as \$6,500.

The debit entry in the rent account is \$500 too low, resulting in a difference between total debits and total credits. The first step is to open a suspense account and enter a balance to make total debits and total credits equal.

Suspense account			
	\$		\$
Opening balance	22,000		

We can now look at 'where we are'

(1) What has been recorded	\$	(2) What should be recorded	\$	(3) Correction	\$
Dr. Rent expense account	6,000	Dr. Rent expense	6,500	Dr. Rent expense	500
Dr. Suspense account	500	Cr. Bank	6,500	Cr. Suspense account	500
Cr. Bank account	6,500				

Example

A discount allowed of \$4,000 (expense) has been recorded as a credit entry in the discount received account (an income account) by mistake.

(1) What has been recorded	\$	(2) What should be recorded	\$	(3) Correction	\$

Dr Suspense	8,000	Dr Discount allowed	4,000	Dr. Discount allowed	4,000
Cr Discount	4,000	Cr Trade receivables	4,000	Dr Discount received	4,000
received					
Cr Trade receivables	4,000			Cr Suspense	8,000

As a result of this error, total credits are \$8,000 higher than they should be, and total debits are \$4,000 lower than they should be. This error is corrected as follows, with an entry in the suspense account to match total debits with total credits:

Example

A payment to a supplier of \$20,500 has been recorded in the cash book/bank account in the main ledger, but has not been recorded in the trade payables account. As a result, total credits exceed total debits in the trial balance by \$20,500 and a suspense account must be opened with a debit balance of \$20,500.

(1) What has been recorded	\$	(2) What should be recorded	\$	(3) Correction	\$
Dr. Suspense	20,500	Dr. Trade payables	20,500	Dr. Trade payables	20,500
account					
Cr. Bank	20,500	Cr. Bank	20,500	Cr. Suspense account	20,500

Exercise 1

At Red house Co year end, the trial balance contained a suspense account with a credit balance of \$1,040.

Investigations revealed the following errors:

- I. A sale of goods on credit for \$1,000 had been omitted from the sales account.
- II. Delivery and installation costs of \$240 on a new item of plant had been recorded as revenue expenditure in the distribution costs account.
- III. Cash discount of \$150 had been taken on paying a supplier, JW, even though the payment was made outside the time limit. JW is insisting that \$150 is still payable.
- IV. A raw materials purchase of \$350 had been recorded in the purchases account as \$850, but the trade payables account was correctly written up.

- V. The purchases day book included a credit note for \$230 as an invoice in the total column. The correct entry was made in the purchases account.

Requirements:

- (a) Prepare journal entries to correct *each* of the above errors. Narratives are *not* required.
- (b) Open a suspense account and show the corrections to be made.
- (c) Before the errors were corrected, Red house Co's gross profit was calculated at \$30,000 and the net profit for the year at \$19,000. Calculate the revised gross and net profit figures after correction of the errors.

3.4 Unknown entry

We have seen that a suspense account is opened in order to make a trial balance have equal debits and credits until the errors have been discovered. In some instances however a suspense account will be opened deliberately by the bookkeeper if the bookkeeper is uncertain of where to post one side of the double entry.

Example

A bookkeeper has received a cheque for \$2,000 but does not know who the cheque is from or what it relates to. Rather than putting the cheque to one side until it is known what it is for the bookkeeper may decide to record the debit entry in the cash book/bank account and then, not knowing where the credit entry should go, to credit the suspense account instead.

Suppose that it was eventually discovered that the cheque was for some old office furniture that had been sold then the bookkeeper would remove the credit in the suspense account with a debit entry and then correctly credit the disposal account (see later chapter) with the credit entry.

What has been recorded?

Dr. Bank	\$2,000
Cr. Suspense	\$2,000

What should be recorded?

Dr Suspense	\$2,000
Cr Disposal	\$2,000

4 Identifying errors in double entry records

4.1 Journal entries and supporting narrative

Entries in the journal are accompanied by supporting narrative to explain the nature of the entry. In practice, the narrative should always provide a proper description of the transaction that is being recorded. However, in your examination, you might be given a question that presents four double entry transactions in a journal, with supporting narrative. The question might then ask you to identify which of the journal entries is (or are) correct for the narrative explanation provided.

This type of question provides a test of your understanding of double entry accounting, including double entries needed to correct errors.

4.2 An approach to dealing with exam questions

The only way of answering this type of examination question is to study the narrative explanation and work out what the double entry should be if the narrative is correct. You should then check the double entry you consider correct with the journal entry in the question.

Example

Which of the following journal entries are correct, according to their narratives?

	Dr	Cr
	\$	\$
1) Rent expense account	10,000	
Suspense account		10,000
<i>(Correction of error in posting \$32,000 cash paid for rent to the rent expense account as \$22,000)</i>		
(2) Share premium account	200,000	
Share capital account		200,000
<i>(1 for 8 bonus issue on share capital of 1,600,000 of 50c shares)</i>		
(3) Trade investment in Company V	960,000	
Share capital account		400,000
Share premium account		560,000

(800,000 50c shares issued at \$1.20 per share in exchange for shares in V)

(4) Discounts allowed	5,000	
Discounts received	5,000	
Suspense account		10,000

(Correction of error in posting discounts received of \$5,000 as a debit in the discounts allowed account.)

Answer

Each journal entry must be checked individually.

Entry 1

If the entry in the cash book is correct, this error results in total debits and total credits being different. Rent paid (a debit balance) has been under-recorded by \$9,000, and a suspense account with a debit balance of \$9,000 must be opened.

(1) What has been recorded	\$	(2) What should have been recorded	\$	(3) Correction	\$
Dr. Rent	23,000	Dr. Rent	32,000	Dr. Rent	10,000
Dr. Suspense	9,000	Cr. Bank	32,000	Cr. Suspense	10,000
Cr. Bank	32,000			This is the entry given in the question, which is therefore correct.	

Entry 2

A bonus issue of shares is recorded by means of a credit entry to share capital and a matching debit entry in the share premium account. However the journal entry does not match the narrative because the amount of the transaction (400,000 shares of 50c each) should be for \$100,000, not \$200,000.

Entry 3

This transaction, according to the narrative, is to acquire an investment (an asset) by issuing shares at a premium. The total value of the transaction is \$960,000 (800,000 shares at \$1.20 each); therefore the cost of the asset is \$960,000 and a debit entry is required in the asset account for the investment. The corresponding credit entries should be to the share capital account (800,000 shares of 50c each = \$400,000) and share premium (800,000 shares at 70c premium each = \$560,000).

The narrative and the journal entry therefore correspond correctly with each other.

Entry 4

<i>(1) What has been recorded</i>	\$	<i>(2) What should have been recorded</i>	\$	<i>(3) Correction</i>	\$
Dr. Discount allowed	5,000	Dr. Trade payables	5,000	Dr. Suspense	10,000
Dr. Trade payables	5,000	Cr. Discount received	5,000	Cr. Discount received	5,000
Cr. Suspense	10,000			Cr Discount allowed	5,000
				<i>This is not the transaction recorded in the journal; therefore either the journal entry is wrong or the supporting narrative is incorrect.</i>	

Practice multiple choice questions

MCQ 1

Which of the following errors would cause a trial balance not to balance?

1. Failure to record a transaction at all.
 2. Cost of a new machine debited to machinery repairs account. The cash entry was made correctly.
 3. An error in adding up the cash book total.
 4. Inventory taken by the owner of the business for personal use recorded by a debit to the purchases account and a credit to drawings account.
- A. All four items
 B. 1 and 3 only
 C. 2 and 4 only
 D. 3 only

MCQ 2

Which of the following journal entries are correct, according to their narratives?

		Dr	Cr
		\$	\$
A	Discounts allowed	14,000	
	Discounts received		14,000
	<i>Correction of error: discounts received incorrectly credited to discounts allowed account</i>		
B	Wages	15,000	
	Purchases	5,000	
	Site preparation costs account		20,000
	<i>Transferring cost of site preparation work using the company's own employees and materials from inventory</i>		
C	Rental income	30,000	
	Rent expenses	30,000	
	Suspense account		60,000

Correction of error: rent expenses debited in error to rental

income account

D	Mr Haq (personal)	100,000	
	Wages and salaries expense		100,000
	<i>Payment of annual bonus to Mr Haq chief executive officer</i>		

MCQ 3

A company's trial balance failed to agree, and a suspense account was opened for the difference.

Which of the following errors would require an entry in the suspense account in order to correct them?

1. The credit side of the rental income account had been undercast. The total of the discounts allowed in the cash book had been credited to discounts received.
 2. A cash refund from a supplier had been recorded by crediting the cash book and debiting the suppliers' account.
 3. A cash payment to acquire a new equipment had been debited to equipment repairs account.
- A. 1 and 2 only
 B. 1 and 4 only
 C. 2 and 3 only
 D. 1 and 3 only

MCQ 4

The debit side of a company's trial balance totals \$1,200 more than the credit side.

Which one of the following errors would account fully for the difference?

- A. Discount received of \$600 has been debited to the discounts allowed account.
- B. \$600 paid for office cleaning has been correctly entered in the cash book and credited to the office equipment account.
- C. The petty cash balance of \$1,200 has been omitted entirely from the trial balance.
- D. A receipt of \$1,200 for royalties has been omitted from the accounting records.

Chapter 11: Control accounts and control account reconciliations

1. The meaning of a control account

A control account is an account in which total values are recorded. It is a 'total' account. Control accounts are used in the main ledger.

The receivables ledger control account is an account for recording the value of transactions in total with credit customers. The balance on the receivables ledger control account (debit balance) is the total amount currently owed by all customers.

The payables ledger control account is an account for recording the value of credit transactions in total with suppliers. The balance on the payables ledger control account (credit balance) is the total amount currently owed to all trade suppliers.

When there is a control account for receivables in the main ledger, there must be individual accounts for each credit customer in a separate receivables ledger.

Similarly when there is a control account for payables in the main ledger, there must be individual accounts for each supplier in a separate payables ledger.

For example, suppose that a company has 800 credit customers. It will probably have a receivables ledger control account in the main ledger for recording the total of transactions with its 800 customers. In addition there will be 800 individual accounts, maintained in the receivables ledger, for recording transactions with each credit customer. If the company did not have a control account in the main ledger, it would have to include the 800 individual customer accounts as accounts in the main ledger itself.

1.1 Control accounts and reconciliation as a method of identifying and correcting errors

Reconciliation means making sure that two figures or totals are consistent with each other and agree with each other. The control accounts in an accounting system can be used for control purposes, to make sure that transactions have been recorded correctly in the accounts. This is because if the transactions have been recorded correctly, the following situation should occur.

The balance on the receivables control account in the main ledger should equal the total of the balances on all the individual customer accounts in the receivables ledger. A reconciliation check can be made to make sure that these totals are the same. If they are different, the cause of the error (or errors) should be found and corrected.

Similarly, the balance on the payables control account in the main ledger should equal the total of the balances on all the individual supplier accounts in the payables ledger. A reconciliation check can be made to make sure that these totals are the same. Any differences should be investigated, and the errors corrected.

A control account reconciliation involves a comparison between these totals, looking for the reasons for any differences between them, and correcting errors that are discovered in the checking process. An advantage of having control accounts in the main ledger for receivables and trade payables is therefore that they can be used to check for errors in the book-keeping system, and help to ensure that the balances for receivables and trade payables in the financial statements are correct.

Why might there be differences?

The balance on the receivables ledger control account might differ from the total of all the balances on the accounts in the receivables ledger for the following reasons:

- The total of the credit sales in the sales day book has been debited to the receivables ledger control account in the main ledger, but one or more individual transactions were not posted from the sales day book to the individual accounts in the receivables ledger.
- The total of cash received from customers, recorded in the cash book, has been posted correctly to the receivables ledger control account in the main ledger, but one or more individual transactions were not posted from the cash book to the individual accounts in the receivables ledger.
- In a manual accounting system, incorrect totals might be posted from the books of prime entry to the main ledger. For example, a sales day book might include the following error:

	\$
Entity A	100
Company B	450
Customer C	<u>250</u>
	750

The error here is that the total value of credit sales has been totalled incorrectly (as \$750 instead of \$800). The correct amounts will be posted to the individual accounts in the receivables ledger, but an incorrect total will be posted to both the sales account and the receivables ledger control account in the main ledger.

The errors described above do not result in differences in the total of debit and credit entries in the main ledger. Consequently, the existence of an error will not be discovered by preparing a trial balance.

However, these errors should be discovered by a control account reconciliation.

Making a control account reconciliation

To make a control account reconciliation, the starting point is to compare the control account balance with the total of all the balances in the individual customer or supplier accounts.

If the totals differ, the reasons for the difference need to be discovered. When the reasons are discovered, the errors must be corrected. A correction might involve:

- changing the control account balance, or
- changing one or more balances on individual customer or supplier accounts, or both.

After the corrections have been made, the two totals should be equal, and so should both be correct. If a difference still remains between the totals, this means that at least one error remains undetected.

Receivable ledger control account

	\$		\$
Balance b/f	X	Cheque/cash received	X
Credit sales	X	Sales return/returns inward	X
Dishonoured cheque	X	Discount allowed	X
		Contra/set-off	X
		Irrecoverable debts	X
		Balance c/f	X

Payable ledger control account

	\$		\$
Cheque/cash paid	X	Balance b/f	X
Purchase return/returns inward	X	Credit purchase	X
Discount received	X		

Contra/set-off	X	
Balance c/f	X	

Interactive question 1: Payables control account

A payables control account contains the following entries:

	\$
Bank	79,500
Credit purchases	83,200
Discount received	3,750
Contra with receivables control account	4,000
Balance c/d at 31 December 2015	12,920

There are no other entries in the account. What was the opening balance brought down at 1 January 2015?

Payable ledger control account			
	\$		\$
Bank	79,500	Balance b/f	16,970
Discount received	3,750	Credit purchase	83,200
Contra/set-off	4,000		
Balance c/f	<u>12,920</u>		
	100,170		100,170

Example

Snowdrop sells goods on credit to most of its customers and maintains a receivables control account. For the year to 30 October 2015 the accountant discovers that the total of all personal accounts in the receivables ledger is \$12,802, whereas the receivables control account balance is \$12,550.

The following errors are discovered.

- Sales for the week ending 27 March 2015 amounting to \$850 had been omitted from the control account.

- A customer's debit balance of \$300 had not been included in the list of balances.
- Cash received of \$750 had been entered in a personal account as \$570.
- Discount allowed totalling \$100 had not been entered in the control account.
- A personal account debit balance had been undercast by \$200.
- A contra item of \$400 with the payables ledger had not been entered in the control account.
- An irrecoverable debt of \$500 had not been entered in the control account.
- Cash received of \$250 had been debited to a personal account.
- Discounts received of \$50 had been debited to Bell's receivables ledger account.
- A Credit note for \$200 had been omitted from the casting of the sales day book.
- Cash received of \$80 had been credited to a personal account as \$8.
- A cheque for \$300 received from a customer and entered in the control account and personal account had been dishonoured by the bank, but no adjustment had been made in the control account.

Requirements:

- Prepare a corrected receivables control account, bringing down the amended balance as at 1 November 2015.
- Prepare a statement showing the adjustments that are necessary to the list of personal account balances so that it reconciles with the amended receivables control account balance.

Solution:

(a)

Receivable ledger control account			
	\$		\$
Uncorrected balance b/d	12,550	Discount omitted (d)	100
Sales omitted	850	Contra entry omitted	400
Bank: cheque dishonoured (l)	300	Irrecoverable debt omitted	500
		Credit note omitted	200
		Amended balance c/d	<u>12,500</u>

13,70013,700

(b) STATEMENT OF ADJUSTMENTS TO LIST OF BALANCES

	\$	\$
Original total of list of balances		12,802
Add: debit balance omitted (b)	300	
debit balance undercast (e)	200	
		<u>500</u>
		13,302
Less: transposition error (c): understatement of cash received	180	
cash debited instead of credited (2 × \$250) (h)	500	
discounts received wrongly debited to Bell (i)	50	
understatement of cash received (k)	<u>72</u>	
		<u>(802)</u>
Corrected total on list of balances		<u>12,500</u>

1.2 Other points to note about control accounts**Credit balances for receivables and debit balances for payables**

Occasionally you might find that the balance on a customer's account in the receivables ledger is a credit balance. This means that the customer is owed money.

This might happen, for example, when a customer pays for goods but then returns some of them. The customer might be given a 'credit note' for the sales returns, and can deduct this from the amount payable for future transactions. A credit balance on a receivables account can also appear if the customer mistakenly pays too much.

For similar reasons, there might occasionally be debit balances on a supplier's account in the payables ledger.

To carry out a control account reconciliation, the net balances in the receivables or payables ledger should be the same as the net balance on the corresponding control account.

To obtain the total of net balances on accounts in the receivables ledger, deduct the credit balances from the debit balances.

Similarly to obtain the total of net balances on accounts in the payables ledger, deduct the debit balances from the credit balances.

2. Supplier statements: reconciliation with ledger account

2.1 Supplier statements

It is common business practice for suppliers to send monthly statements to their regular credit customers, listing the transactions that have occurred between the supplier and the customer during the month (such as sales, sales returns, payments and settlement discounts given). The statement ends with a balance showing the amount that, according to the supplier's accounting records, the customer currently owes.

2.2 Reconciliation of a statement with the supplier's ledger account

On receiving a statement from a supplier, a reconciliation check can be carried out. The purpose of this check is to compare the transactions and balance shown on the supplier's statement with the transactions and balance in the supplier's account in the payables ledger.

Any differences between the statement balance and the ledger account balance should be investigated and explained. Any problems, including errors, should be dealt with.

Reasons for differences

There are various reasons why the statement balance from a supplier might differ from the balance on the payables ledger account for the supplier.

The supplier might have omitted a transaction from the statement, in which case the supplier's accounting records are incorrect.

The customer might have omitted a transaction from its accounting records, in which case the customer's accounting records are incorrect.

Transactions that might have been omitted include sales/purchase transactions, payments, discounts, contra entries and returns/credit notes.

Carrying out a reconciliation

To carry out a reconciliation between the balance on a supplier's statement and the balance on the supplier's ledger account in the customer's payables ledger, the following steps should be taken.

Compare the two totals. If they differ, the reasons for the difference should be discovered.

The reasons for the difference can be identified fairly easily, by comparing the transactions listed in the supplier's statement with the transactions recorded in the ledger account for the supplier.

If there is an omission or other error by the supplier, the supplier should be notified. For the purpose of making the reconciliation, the supplier's statement balance should be amended to allow _____ for _____ the _____ error.

If there has been an omission or error in the customer's accounting records, the error should be corrected and the balance on the supplier's account in the payables ledger will change.

If all the differences are identified, explained and where necessary corrected, the two balances should be equal – the amended balance on the supplier's statement and the amended balance on the supplier's account in the payables ledger.

Example

Mike received a statement of account from a supplier Kaith, showing a balance to be paid of \$5,900. Mike's payables ledger account for Kaith shows a balance due to of \$3,360.

Investigation reveals the following:

- 1) Cash paid to Ash \$1,650 has not been allowed for by Ash.
- 2) Sales returned to Ash \$780 have not been allowed for by Ash.
- 3) Etna's ledger account for Ash has not been adjusted for \$110 of cash discount disallowed by Ash.

A reconciliation of the statement balance and the balance in the ledger account can be made, as follows:

Statement	\$	Ledger account	\$
Balance	5,900	Balance	3,360
Adjust for:		Adjust for:	

Cash payment	(1,650)	Discount disallowed	<u>110</u>
Sales returns)	<u>(780)</u>		
Adjusted balance	3,470	Corrected balance	3,470

3. Bank reconciliations

3.1 The cash book (bank account in the ledger) and bank statements

The cash book in the main ledger (or 'bank account' in the main ledger) is used to record receipts and payments of cash through the bank account. The balance on this account is the amount that the business believes that it has in its bank account (debit balance) or the size of its bank overdraft (credit balance).

The bank will send regular statements to the business entity, listing all the transactions that the bank has recorded in the account for the entity since the previous statement, and the current balance on the account. This statement is a bank statement.

Bank reconciliations are a useful check on the accuracy of accounting records for cash. In principle, the balance in the bank account or cash book in the main ledger and the balance shown in the bank statement should be the same. A reconciliation can therefore be carried out, to check that the two amounts agree with each other.

3.2 Differences and the need for a reconciliation

However, the two figures will not be the same, and the reconciliation needs to show that the differences can be properly accounted for. Differences between the balance in the cash book/bank account in the main ledger and the balance on the bank statement might be caused by any of the following:

Items are shown in the bank statement, but are not yet recorded in the cash book

Some transactions might not be recorded in the cash book until they are notified to the business by the bank statement. Examples are:

- bank charges
- bank interest on an overdrawn balance
- a payment from a customer that has been rejected (for example, the customer's cheque has been dishonoured).

The cash book/bank balance in the main ledger should be amended to include these transactions.

When a cheque is dishonoured, (1) credit the bank account and (2) debit the receivables account in the main ledger and also (3) debit the customer's individual account in the receivables ledger.

Items are recorded in the cash book, but are not (yet) shown in the bank statement

Some transactions might have been recorded in the cash book/bank account in the main ledger, but have not yet been recorded by the bank.

- Cheques received from customers have been paid into the bank and recorded in the cash book. However, they have not yet been processed by the bank. Processing payments through the banking system might take two or three days, perhaps even longer. These are known as **outstanding lodgements**.
- Cheques paid to suppliers have not yet been presented to the bank for payment. The payment might be recorded in the ledger as soon as the cheque is sent to the supplier. The supplier might not bank the cheque immediately, however, so the money will not actually leave the bank account until several days after sending the cheque. These are known as **unpresented cheques**.

These are **timing differences**. The transactions will eventually be processed by the bank. There are no errors or omissions in the cash book, and no further action is needed.

Errors by the bank

The bank might sometimes make an error. If so, it should be notified and asked to correct its mistake. No further action is then needed.

Errors in the cash book

Possibly, an error has been made in the cash book. This should be identified by a detailed reconciliation of the bank statement with the cash book entries, and errors that are discovered should be corrected.

3.3 Format of a bank reconciliation statement

If there are no accounting errors by the bank or the business entity, the balance in the cash book/bank account in the main ledger and the balance in the bank statement should agree with each other. This should be demonstrated in a bank reconciliation statement.

The purpose of a bank reconciliation is to show that after making adjustments for any omissions or errors, the bank account balance in the main ledger agrees with the bank statement balance.

There are two ways of presenting a bank reconciliation statement:

- One approach is to begin the statement with the balance shown in the bank statement, and make the reconciliations to arrive at the bank balance in the main ledger.
- The other approach is to start with the bank account balance in the main ledger, and reconcile this to the bank statement balance.

Cash Book			
	\$		\$
Balance b/f	X	Bank charges	X
Interest/dividend received	X	Direct debit	X
Direct credit	X	Standing order payment	X
		Dishonoured cheque	X
		Balance c/f	X

Bank reconciliation statement

	\$
Given balance	X/(X)
Bank error	X/(X)
Add: Uncredited lodgement	X
Less: Outstanding /unpresented cheques	<u>(X)</u>
	X

Note

It might be useful to remember that the bank statement presents information as recorded in the accounting system of the bank. To the bank, money in your bank account is money that it owes to you. It is therefore a credit balance. When your bank account is overdrawn, you owe money to the bank, and from the bank's point of view your account therefore has a debit balance.

Example

The cash book of a business shows a debit balance of \$4,000. A bank reconciliation shows that cheques for \$2,000 from customers that were recently paid into the bank have not yet been processed. Similarly, payments totalling \$5,000 made by the business to its suppliers and others have not yet been presented to the bank for payment. The bank has charged \$600 in bank charges. A cheque for \$400 from a customer, customer C, has been dishonoured. The balance in the account according to the bank statement is \$6,000.

A bank reconciliation statement could be prepared as follows:

Cash Book			
	\$		\$
Balance b/f	4,000	Bank charges	600
		Dishonoured cheque	400
		Balance c/f	<u>3,000</u>
	<u>4,000</u>		4,000

Bank reconciliation statement

	\$
Given balance	6,000
Add: Uncredited lodgement	2,000
Less: Outstanding cheques	<u>(5,000)</u>
	3,000

3.4 Other points to note about bank reconciliations

Overdraft balances

For a company with a bank account, money in the bank is an asset and the cash balance in the cash book is a debit balance. If there is a bank overdraft, the cash book has a credit balance, indicating that money is owed to the bank.

For the bank, the situation is the opposite way round.

Money held by the bank in a bank account for a customer is money that belongs to the customer. For the bank, deposits are therefore liabilities and an account is said to be in credit when there is money in it.

If a bank allows an overdraft to a customer, the customer owes the bank. The amount of the overdraft is a form of receivable for the bank, and is an asset. To the bank, an overdraft balance on a customer's account is therefore a debit balance (= asset).

A bank statement might therefore indicate that a customer's account has a 'debit balance', such as \$5,250 Dr. This debit balance means 'overdraft' and for the customer it is a liability and credit balance item.

Preparing a bank reconciliation with an overdraft balance

If you are given a question in which there is an overdraft balance in the bank statement, it is useful to make the negative balance clear by putting brackets around the balance.

Example

A company receives a bank statement showing an overdraft balance of \$22,000. The balance recorded in the company's cash book is a credit balance of \$12,000. A bank reconciliation revealed the following:

1. Lodgements not yet cleared by the bank (i.e. payments into the account but not recorded in the bank statement) \$24,000
2. Cheques not yet presented (i.e. payments from the account recorded in the cash book but not yet processed through the bank) \$16,000.
3. Bank charges of \$500
4. A direct debit payment of \$500
5. A dishonoured cheque from a customer \$1,000.

Items 3, 4 and 5 have not yet been recorded in the cash book.

A bank reconciliation would be made as follows, with an overdraft balance indicated as a negative figure (in brackets).

Cash Book			
	\$		\$
		Balance b/f	12,000
		Bank charges	500
		Direct debit	500
Balance c/f	<u>14,000</u>	Dishonoured cheque	<u>1,000</u>
	14,000		14,000

Bank reconciliation statement

	\$
Bank statement balance	(22,000)
Items in the cash book, not in the bank statement	
Outstanding lodgements	24,000
Unpresented cheques	<u>(16,000)</u>
Balance as per cash book	<u>(14,000)</u>

Reporting cash in the statement of financial position

Ideally a bank reconciliation should be carried out by obtaining a bank statement as at the end of the financial year. The figure for cash that should then appear in the statement of financial position is the amended or updated balance in the cash book.

In the example above this would be an overdraft balance (current liability) of \$14,000.

Practice questions**MCQ 1**

Mr. A's cash book at 31 December 2015 shows a bank balance of \$600 overdrawn. On comparing this with your bank statement at the same date, he discover the following:

- A cheque for \$60 drawn by you on 29 December 2015 has not yet been presented for payment.

- A cheque for \$100 from a customer, which was paid into the bank on 29 December 2015, has been dishonoured on 31 December 2015.

What is the correct bank balance to be shown in the statement of financial position at 31 December 2015?

- A \$700 overdrawn
- B \$650 overdrawn
- C \$660 overdrawn
- D \$760 overdrawn

MCQ 2

The cash book shows a bank balance of \$4,500 overdrawn at 31 July 2015. It is subsequently discovered that a direct debit for \$120 has been entered twice, and that a dishonoured cheque for \$400 has been debited in the cash book instead of credited.

What is the correct bank balance?

- A \$4,380 overdrawn
- B \$3,820 overdrawn
- C \$4,100 overdrawn
- D \$5,020 overdrawn

MCQ 3

A business had a balance at the bank of \$2,500 at the start of the month. During the following month, it paid for materials invoiced at \$1,000 less trade discount of 20% and cash discount of 10%. It received a cheque from a customer in respect of an invoice for \$200, subject to cash discount of 5%.

What was the balance at the bank at the end of the month?

- A \$1,970
- B \$1,980
- C \$1,990
- D \$2,000

MCQ 4

The bank statement on 31 October 2015 showed an overdraft of \$800. On reconciling the bank statement, it was discovered that a cheque drawn by your company for \$100 had not been presented for payment, and that a cheque for \$100 from a customer had been dishonoured on 30 October 2015, but that this had not yet been notified to you by the bank.

What is the correct bank balance to be shown in the statement of financial position at 31 October 2015?

- A \$1,000 overdrawn
- B \$800 overdrawn
- C \$900 overdrawn
- D \$700 overdrawn

MCQ 5

Your firm's cash book at 31 December 2015 shows a balance at the bank of \$2,500. Comparison with the bank statement at the same date reveals the following differences:

	\$
Unpresented cheques	800
Bank charges not in cash book	50
Receipts not yet credited by the bank	400
Dishonoured cheque not in cash book	150

What is the adjusted bank balance per the cash book at 31 December 2015?

- A \$2,450
- B \$2,300
- C \$2,200
- D \$2,500

MCQ 6

The following bank reconciliation statement has been prepared by a trainee accountant:

BANK RECONCILIATION 31 DECEMBER 2015

	\$
Balance per bank statement	35,000
Add: lodgements credited after date	<u>50,000</u>

	85,000
Less: outstanding cheques	<u>(43,000)</u>
Balance per cash book (credit)	42,000

Assuming the amounts stated for items other than the cash book balance are correct, what should the cash book balance be?

- A \$42,000 credit as stated
- B \$42,000 debit
- C \$28,000 debit
- D \$28,000 credit

MCQ 7

Listed below are some possible causes of difference between the cash book balance and the bank statement balance when preparing a bank reconciliation:

- 1 Dishonoured cheque
- 2 Error by bank
- 3 Bank charges
- 4 Uncredited lodgements
- 5 Unpresented cheques .

Which of these items require an entry in the cash book?

- A 1 and 3 only
- B 1, 2, 3, 4 and 5
- C 2, 4, and 5 only
- D. All of them

MCQ 8

In preparing a company's bank reconciliation statement at March 2015, the following items are causing the difference between the cash book balance and the bank statement balance:

1 Bank charges	\$380
2 Error by bank (cheque incorrectly debited to the account)	\$1,000
3 Lodgements not credited	\$4,580
4 Outstanding cheques	\$1,475

5 Direct debit	\$350
6 Cheque paid in by the company and dishonoured	\$400

Which of these items will require an entry in the bank statement?

- A 2, 4 and 6
- B 1, 5 and 6
- C 2, 3 and 4
- D All of them

MCQ 9

The following bank reconciliation statement has been prepared by a trainee accountant:

	\$
Overdraft per bank statement	4,150
Less: outstanding cheques	<u>(8,850)</u>
	4,700
Add: deposits credited after date	<u>16,690</u>
Cash at bank as calculated above	21,390

What should be the correct balance per the cash book?

- A \$11,990 balance at bank
- B \$21,390 balance at bank
- C \$11,990 overdrawn
- D \$21,390 overdrawn

MCQ 10

Which of the following statements about bank reconciliations are correct?

1. A difference between the cash book and the bank statement must be corrected by means of a journal entry.
2. In preparing a bank reconciliation, lodgements recorded before date in the cash book but credited by the bank after date should reduce an overdrawn balance in the bank statement.

3. Bank charges not yet entered in the cash book should be dealt with by an adjustment in the bank reconciliation statement.
4. If a cheque received from a customer is dishonoured after date, a credit entry in the cash book is required.

A 2 and 4

B 1 and 4

C 2 and 3

D 1 and 3

Chapter 12: Preparing basic financial statements

1 Preparing a sole trader's financial statements

This chapter draws together some of the accounting principles and practices along with some additional factors that are relevant to the preparation of a set of financial statements.

1.1 From trial balance to income statement

At the end of an accounting period, a trial balance is extracted from the main ledger. End-of-year adjustments are made to the balances to include depreciation and amortisation charges for non-current assets, accruals and prepayments, opening and closing inventories, bad debts and the allowance for irrecoverable debts.

After making all these end-of-year adjustments, the amounts in the 'extended' trial balance for income and expenses can be used to prepare an income statement for the accounting period, and calculate the profit or loss for the period. In the financial statements of a sole trader, there is no tax charge on profits.

1.2 From trial balance and income statement to statement of financial position

After making all the end-of-year adjustments and calculating the profit or loss for the period, a statement of financial position can be prepared. A statement of financial position is based on the accounting equation:

$$\text{Assets} = \text{Capital} + \text{Liabilities}$$

Asset balances and liability balances can be obtained from the 'extended' trial balance. The capital at the end of the year for a sole trader is calculated as:

	\$
Capital at the beginning of the year	X
Any new capital introduced during the year	X
Add profit (or subtract loss) for the year	X/(X)
Deduct: Drawings during the year	<u>(X)</u>
Capital at the beginning of the year	<u>XX</u>

Example

The following trial balance has been extracted from the accounts of Zonathon, a sole trader.

Zonathon

Trial balance as at 30 June 2015

	DR	CR
	\$	\$
Sales		428,000
Sales returns	2,000	
Purchases	302,000	
Purchase returns		1,000
Carriage inwards	500	
Carriage outwards	900	
Wages and salaries	64,000	
Rent	14,000	
Heating and lighting	5,000	
Inventory as at 1 July 2014	15,000	
Drawings	22,000	
Allowance for receivables		4,000
Equipment – at cost	102,000	
Motor vehicles – at cost	44,000	
Accumulated depreciation:		
– equipment		22,500
– motor vehicles		9,000
Trade receivables	51,000	
Trade payables		42,000
Bank		3,300
Sundry expenses	8,500	
Cash	500	
Capital as at 1 July 2014	<u> </u>	<u>121,600</u>
	631,400	631,400

The following additional information as at 30 June 2015 is also available.

- \$400 is owed for heating and lighting expenses.
- \$700 has been prepaid for rent.
- It is decided that a bad debt of \$1,200 should be written off, and that the allowance for receivables should be increased to \$4,500.

- Depreciation is to be provided for the year as follows:
 - Equipment – 10% on cost
 - Motor vehicles – 20% on cost.
- Inventory at 30 June 2015 was valued at \$16,500.

Requirement

- Prepare Zonathon's income statement for the year ended 30 June 2015
- Prepare Zonathon's Statement of financial position as at 30 June 2015

Answer

Zonathon

Income statement for the year ended 30 June 2015

	\$	\$
Sales		428,000
Less Sales returns		<u>(2,000)</u>
		426,000
Opening inventory at 1 July 2014	15,000	
Purchases	<u>302,000</u>	
	317,000	
Less: Purchase returns	<u>(1,000)</u>	
	316,000	
Carriage inwards	<u>500</u>	
	316,500	
Less: Closing inventory at 30 June 2015	<u>(16,500)</u>	
Cost of sales		<u>(300,000)</u>
Gross profit		126,000
Wages and salaries	64,000	
Rent (14,000 – prepayment 700)	13,300	
Heating and lighting (5,000 + accrual 400)	5,400	
Depreciation - equipment (10% × \$102,000)	10,200	
Depreciation - motor vehicles (20% × \$44,000)	8,800	
Carriage outwards	900	
Irrecoverable debt (1,200 + (4,500 – 4,000))	1,700	

Sundry expenses	<u>8,500</u>	(112,800)
Net profit		<u>13,200</u>

Statement of financial position: workings

Accumulated depreciation = opening figure in the trial balance + depreciation charge for the year

- (1) Equipment: $\$(22,500 + 10,200) = \$32,700$
 (2) Motor vehicles: $\$(9,000 + 8,800) = \$17,800$

Zonathon			
Statement of financial position as at 30 June 2015			
	\$	\$	\$
Non-current assets			
Equipment			
- Cost	102,000		
- Accumulated depreciation	<u>32,700</u>		
		69,300	
Motor vehicles			
- Cost	44,000		
- Accumulated depreciation	<u>17,800</u>		
		<u>26,200</u>	
			95,500
Current assets			
Inventory		16,500	
Trade receivables (51,000 – 1,200)	49,800		
Less: Allowance for receivables	<u>(4,500)</u>		
		45,300	
Prepayment		700	
Cash		<u>500</u>	
			<u>63,000</u>
Total assets			<u>158,500</u>

Capital			
At 1 July 2014		121,600	
Net profit for the year		13,200	
		<u>134,800</u>	
Drawings		<u>(22,000)</u>	
At 30 June 2015			112,800
Current liabilities			
Bank overdraft		3,300	
Trade payables		42,000	
Accrual		<u>400</u>	
			<u>45,700</u>
Total capital and liabilities			<u>158,500</u>

1.3 Current and non-current items

In a statement of financial position, non-current assets are shown separately from current assets, and non-current liabilities are shown separately from current liabilities.

As a general rule, assets are current if they will be consumed or converted into cash within the next 12 months. Cash and cash equivalents are also current assets. (Cash equivalents are assets that can be converted into cash very quickly, such as money on deposit in a bank deposit account).

There are some exceptions to this general rule. For example inventory might be included in current assets if it is used in the normal course of business operations, and the average inventory turnover time exceeds 12 months. This means that work in progress or finished goods that might be held in excess of 12 months could be included in current assets.

Liabilities are current if they are payable within the next 12 months. It is therefore necessary to check the repayment dates on any bank loans or loan notes. Loans repayable within 12 months become current assets. For example if a company obtains a five-year bank loan, where none of the loan principal is repayable until the end of the loan period, the loan will be a non-current liability for the first four years and will then become a current liability when it is repayable within 12 months.

Prepayments and accrued income are current assets, although they might be included within the total for 'receivables' in the statement of financial position. Similarly accrued expenses (and deferred income) are current liabilities, although they are often included within the total for trade payables in the statement of financial position.

1.4 Working capital

The term 'working capital' means the amount of long-term capital that a business entity uses to finance its day-to-day business operations. There are several methods of calculating working capital, but for the purpose of financial reporting the normal definition is:

Working capital = Current assets minus Current liabilities

An understanding of working capital and how business transactions affect the total of working capital might be the subject of an examination question. In dealing with these questions, it is important to remember:

- the accounting equation (and the effect of each transaction on assets, liabilities and capital/profit), and
- the distinction between non-current and current items.

Example 1

A sole trader buys a machine costing \$15,000. What effect does this have on working capital?

Answer

There is either a fall in current assets (cash) or an increase in current liabilities (payables) and an increase in a non-current asset. Working capital will therefore fall by \$15,000.

Example 2

A sole trader receives payment of \$4,000 from a credit customer. What effect does this have on working capital?

Answer

There is an increase in cash and a reduction in receivables. The net result is no change in working capital.

Example 3

A sole trader sells inventory costing \$2,000 for \$2,800. What effect does this have on working capital?

Answer

There is an increase in cash or receivables (\$2,800) and a reduction of \$2,000 in inventory. There is also an increase in capital (profit) of \$800. The net effect is an increase of \$800 in current assets and working capital.

Example 4

A sole trader returns inventory costing \$1,200 to a supplier and receives a credit note. What effect does this have on working capital?

Answer

There is a reduction in inventory by \$1,200 and a reduction in trade payables by \$1,200. Both current assets and current liabilities are reduced by the same amount, so there is no change in working capital.

Example 5

A sole trader wrote off a debt of \$1,500 as irrecoverable? Subsequently the customer paid the money in full. What effect does this payment have on working capital?

Answer

There is an increase of \$1,500 in cash. When the debt was written off as irrecoverable, there was a charge against profit and the receivable was removed from current assets. When payment is subsequently received, this is treated as an addition to profit (and capital), reversing the previous loss. The effect of the payment is therefore to increase current assets and working capital by \$1,500.

1.5 Cut-off

It is important to understand that a statement of financial position represents the position of the business as at the end of the financial reporting period. In practice, a business entity will decide

on a 'cut-off': transactions before the cut off occur in the reporting period just ending and transactions after the cut-off occur in the next reporting period.

In order to establish a value for closing inventory, a business entity might carry out an inventory count at the end of the financial year. For practical reasons, the inventory count might not happen until a few days after the end of the financial year. If there have been purchases, sales or purchase returns between the end of the reporting period and the date of the inventory count, the value of inventory obtained from the inventory count should be adjusted in order to arrive at a value for inventory as at the end of the reporting period.

	\$
Value of inventory from the inventory count	X
Adjustments for transactions between the end of the reporting period and the inventory count:	
Deduct: Purchases during that time	(X)
Add back: The cost of goods sold during that time	X
Add back: Purchase returns during that time	<u>X</u>
Inventory as at the year end for inclusion in financial statements	<u>XX</u>

Example

The financial year of a business entity ends on 31 December 2014. The entity carries out an inventory count on 5 January 2015 and obtains a value for inventory as at that date of \$510,000.

The following transactions occurred between 31 December 2014 and 5 January 2015.

	\$
Purchase returns to a supplier	1,100
Sales of inventory (profit = 30% of sales)	20,000
New purchases	7,300

What value for inventory should be included in the statement of financial position as at 31 December 2014?

Answer

\$

Value of inventory from the inventory count	510,000
Adjustments for transactions between the end of the reporting period and the inventory count	
Deduct: Purchases during that time	(7,300)
Add back: The cost of goods sold during that time ($70\% \times \$20,000$)	14,000
Add back: Purchase returns during that time	<u>1,100</u>
Capital at the beginning of the year	<u>517,800</u>

2 Preparing a company's financial statements

2.1 Comparing the financial statements of a sole trader and a company

The same basic accounting concepts are applied to preparing the financial statements of companies as to the financial statements of sole traders. However, there are some major differences.

- For companies, equity capital is represented by share capital and reserves, not simply by 'capital'.
- For companies, tax on profit is an item in profit and loss. Tax is excluded from a sole trader's financial statements.
- Sole traders have no reason to comply fully with the requirements of international accounting standards. The financial statements of a sole trader are therefore usually limited to an income statement and a statement of financial position.
- Many companies do comply with the requirements of international accounting standards. As a consequence, they prepare more financial statements and disclose much more information to users of the statements.

IAS 1 *Presentation of financial statements* sets out rules for how financial statements should be presented and specifies basic requirements about what they should consist of and what they should contain. To comply with IAS 1 an entity must produce:

- A statement of comprehensive income or an income statement followed by a statement of comprehensive income
- A statement of financial position
- A statement of changes in equity
- A statement of cash flows

- Notes to the financial statements including the disclosure required by various international accounting standards.

2.2 Format of a statement of financial position for a company

IAS 1 provides a list of items that, **as a minimum**, must be shown on the face of the statement of financial position and on a line of its own in the statement.

A distinction is usually required:

- between non-current and current assets, and
- between non-current and current liabilities.

For a **single company**, the required 'line items' in the balance sheet include:

Non-current assets

- property, plant and equipment
- intangible assets
- long-term financial assets, such as long-term holdings of shares in other companies

Current assets

- inventories
- trade and other receivables
- cash and cash equivalents

Liabilities (non-current or current)

- trade payables and other payables
- liability for tax on profits
- financial liabilities (for example, bank loans)

Equity

- issued capital and reserves (in other words, the component elements of equity in the company).

Additional line items

Some of the above line items in the statement of financial position are sub-analysed into different categories, which should be shown either:

- as additional lines in the statement of financial position adding up to the total amount for the item as a whole, or
- in notes to the financial statements.

Examples of items that are sub-classified in the statement of financial position or in a note to the financial statements include:

- the different categories of tangible non-current assets, such as property, plant and machinery, motor vehicles, and so on
- inventories are sub-classified into merchandise (goods for re-sale), materials, work-in-progress and finished goods.

Although IAS 1 does not specify what the format of the statement of financial position should be, it presents an illustrative statement in an Appendix to the Standard.

An illustrative example is shown below, for a single trading company. Note the similarities as well as the differences between a statement of financial position for a sole trader and for a company.

Statement of financial position of Boxtton Company as at 31 December Year 2015.

	\$m	\$m
Assets		
Non-current assets		
Property, plant and equipment	76.2	
Intangible assets	5.0	
Investments	<u>3.0</u>	
		84.2
Current assets		
Inventories	16.4	
Trade and other receivables	19.0	
Cash	<u>1.2</u>	
		<u>36.6</u>
Total assets		<u>120.8</u>

Equity and liabilities		
Capital and reserves		
Issued capital	10.0	
Share premium	4.0	
Revaluation reserve	11.0	
Retained earnings	<u>42.8</u>	
		67.8
Non-current liabilities		
Long-term loans	20.0	
Long-term provisions	<u>10.0</u>	
		30.0
Current liabilities		
Trade and other payables	12.0	
Short-term borrowings (bank overdraft)	1.5	
Current tax payable	3.5	
Short-term provisions	<u>6.0</u>	
		<u>23.0</u>
Total equity and liabilities		<u>120.8</u>

Points to note

- In the statement of financial position itself, or in a note to the financial statements, the following disclosures should be made about share capital:
 - the number of shares authorised
 - the number of shares issued
 - the par value (nominal value) of each share.
- The shares included under the heading 'equity' must be classes of shares that are recognised as equity. This is a fairly complex area of accounting, because preference shares must often be treated as long-term debt and not as equity shares.
- IAS 1 states that a description should be given of the nature and purpose of reserves. This means that different types of reserves should be shown, with a description that gives an indication of its purpose: for example, there might be a share premium account, a revaluation reserve account, and so on.

- Proposed dividends are not included in the statement of financial position as a current liability, except in the very unusual circumstance where the final dividend has been proposed before the end of the financial year. Any proposed final dividend should normally be disclosed in a note to the financial statements as a non-adjusting event after the reporting period.

Reserves

The number of different reserves that a company might include in its statement of financial position is not specified by IAS 1. Particular reserves might be a requirement for companies under the terms of national company law. However:

- A share premium reserve must be used to record premiums on new share issues, although the reserve can be reduced if the company makes a bonus issue.
- A revaluation reserve is necessary whenever a company uses the revaluation model for any category of its non-current assets.
- A retained earnings reserve must be included, because this is a reserve for realised profits still retained within the business.

Other reserves do not represent realised profits. The share premium reserve represents capital invested in the company. The revaluation reserve represents unrealised profits on assets still held by the company. Retained earnings represent realised profits reported through profit and loss (the income statement) or by transfer from the revaluation reserve when a re-valued asset is disposed of. Realised profits can be distributed to shareholders in the form of dividends.

Each reserve is a component of equity and movements in reserves are reported in the statement of changes in equity.

2.3 Statement of comprehensive income

IAS 1 requires an entity to present all items of income and expense during a period in either:

- a single statement of comprehensive income, or
- in two statements, an income statement followed by a statement of comprehensive income: these two separate statements should include all the information that would otherwise be included in the single statement of comprehensive income.

For the purpose of explanation, it might be useful to think of the presentation of the information in two separate statements:

- An income statement shows the components of profit or loss. It begins with 'Revenue' and ends with 'Profit (or Loss)' for the period after tax. When an item is 'reported in profit and loss' we mean that it is included in the calculation of profit or loss within this part of the statement of comprehensive income.
- If the income statement is shown separately, the statement of comprehensive income shows 'other comprehensive income' during the period, including any related tax.

A single statement of comprehensive income simply combines these two statements into one.

Examples of other comprehensive income

There are several examples of 'other comprehensive income' but the most significant for the purpose of your examination is unrealised gains or losses on the revaluation of non-current assets (which add to other comprehensive income).

Definition of total comprehensive income

Total comprehensive income during a period is the sum of:

- the profit or loss for the period and
- other comprehensive income.

Information to be presented on the face of the statement of comprehensive income

As a **minimum**, IAS 1 requires that the statement of comprehensive income should include line items showing the following amounts for the financial period:

- revenue
- finance costs (for example, interest costs)
- tax expense (i.e. tax on profits for the year)
- profit or loss
- each component of 'other comprehensive income'
- total comprehensive income.

When an entity presents an income statement separately from the statement of comprehensive income, the **income statement** must include the following items:

- revenue

- finance costs (for example, interest costs)
- tax expense (i.e. tax on profits for the year)
- profit or loss

Additional line items should be presented on the face of the income statement or the statement of comprehensive income when it is relevant to an understanding of the entity's financial performance.

Recognition in profit or loss

With the introduction of a requirement to present a statement of comprehensive income, it is necessary to distinguish between:

- items that should be included in the section of the statement between 'revenue' and 'profit', and
- other comprehensive income.

A useful way of making this distinction is that if an item is included in the statement of comprehensive income, between 'revenue' and 'profit', the item is '**recognised within profit or loss**'. This term is now used in accounting standards.

Information to be shown on the face of the statement of comprehensive income (or the income statement, if separate) or in the notes.

The following information may be shown either on the face of the statement of comprehensive income or in a note to the financial statements:

- **material items** of income and expense
- an **analysis of expenses**, providing either:
 - expenses analysed by their nature, or
 - expenses analysed by the function that has incurred them.

IAS 1 encourages entities to show this analysis of expenses on the face of the statement of comprehensive income (or income statement), rather than in a note to the accounts.

Material items that might be disclosed separately include:

- a write-down of inventories from cost to net realisable value, or a write-down of items of property, plant and equipment to recoverable amount
- the cost of a restructuring of activities
- disposals of items of property, plant and equipment
- litigation settlements
- a reversal of a provision.

2.4 Analysis of expenses

Expenses in the 'income statement' part of the statement of comprehensive income should be analysed. Either of two methods of analysis may be used:

- according to the **nature** of expenses
- according to the **function** of the expense.

Entities should choose the method that provides the more relevant or reliable information.

Analysis of expenses by their nature

When expenses are analysed according to their nature, the categories of expenses will vary according to the nature of the business.

In a manufacturing business, expenses would probably be classified as:

- raw materials and consumables used
- staff costs ('employee benefits costs')
- depreciation
- other expenses.

There will also be an adjustment for the increase or decrease in inventories of finished goods and work-in-progress during the period.

An example of an income statement, showing expenses by their nature, is shown below, with illustrative figures included.

	\$m	\$m
Revenue		7,200
Other income		<u>300</u>
		7,500

Changes in inventories of finished goods and work-in-progress (reduction = expense, increase = negative expense)	90	
Raw materials and consumables used	1,200	
Staff costs (employee benefits expense)	2,000	
Depreciation and amortisation expense	1,000	
Other expenses	2,300	
Finance costs (interest cost)	<u>60</u>	
		<u>6,650</u>
Profit before tax		850
Income tax expense		<u>250</u>
Profit for the period		<u>600</u>

Analysis of expenses by their function

When expenses are analysed according to their function, the functions are commonly 'cost of sales', 'distribution costs', 'administrative expenses' and 'other expenses'. This method of analysis is also called the 'cost of sales method'. In practice, most entities use this method.

An example of an income statement, showing expenses by function (cost of sales, distribution costs, administrative expenses) is as follows.

ABCD Entity

Income statement for the year ended 31 December 20XX

	\$m
Revenue	7,200
Cost of sales	<u>(2,700)</u>
Gross profit	4,500
Other income	300
Distribution costs	(2,100)
Administrative expenses	(1,400)
Other expenses	(390)
Finance costs	<u>(60)</u>
Profit before tax	850
Income tax expense	<u>(250)</u>
Profit for the period	<u>600</u>

This method of presentation has some disadvantages:

- The classification of expenses as cost of sales, distribution costs or administrative expenses is often based on the judgement of management. This is because management decide how to allocate costs to each function, and how to share joint costs between two or more functions.
- This method of analysis does not show the amount of some important expenses.

IAS 1 therefore requires that if the analysis by function method is used, additional information about expenses must be included in the notes to the accounts, showing:

- depreciation and amortisation expense, and
- employee benefits expense (staff costs).

Additional comments on the income statement format

- 'Other income' consists of income from sources other than sales revenue. An example of other income is dividend income (income from investments in shares of other companies).
- In the past, companies used to disclose some items of gain or loss as 'extraordinary items'. It is now not permitted to have any 'extraordinary items' in the income statement.
- However, **material** items of income or expense should be disclosed in the financial statements, either in the income statement itself or in a note to the financial statements.

2.5 IAS 8: Accounting policies, changes in accounting estimates and errors

IAS 1 and other international accounting standards together require extensive disclosures in the financial statements. Many of these disclosures are contained in notes to the financial statements, but IAS 1 also specifies items that must be shown on the face of the statement of financial position, statement of comprehensive income or statement of changes in equity.

Many of the disclosures you need to be aware of for your examination have already been mentioned. However you should also be aware of the need to disclose details of:

- the accounting policies used to prepare the financial statements
- any change in accounting policy.

Changes in accounting policy

IAS 8 states that a change in accounting policy should happen only rarely, and is only permissible if either:

- a new accounting standard requires a change in accounting policy, or
- a change in policy will result in the financial statements providing more relevant and reliable information for users.

When a change is made in accounting policy, the change should be applied retrospectively, which means that the figures for all previous financial years, to the extent practicable, must be changed to comply with the new policy.

When an accounting policy is changed voluntarily, a note to the financial statements must explain:

- the nature of the change in policy and the reasons for the change
- the effect of the change on the reported figures in the financial statements, in the current year and the previous year (comparative figures). (The effect of the change in policy should also be itemised in the statement of changes in equity.)

Changes in accounting estimates

Accounting estimates are items in the financial statements that rely on management judgement. Examples are the expected useful life of a non-current asset, the expected residual value of a non-current asset and the amount of a provision or allowance.

Accounting estimates might be changed. For example the expected useful life of a non-current asset might be revised. When an accounting estimate is changed, the change is applied to the current accounting period in which the change is made and to future periods where appropriate. The change is not applied retrospectively to previous financial years.

Prior period errors

A prior period error is an error that occurred in one accounting period but that is not discovered until a subsequent accounting period. Prior period errors must be corrected by making retrospective changes to amounts in financial statements for previous years (including figures for retained earnings brought forward). The effect of the error on the brought forward equity capital and reserves must be disclosed separately in the statement of changes in equity.

3 Taxation and dividends

3.1 Taxation on profits

A company is a legal person, and is liable to pay tax on the profits that it makes. This tax is called income tax in international accounting standards.

The income statement and statement of financial position of a sole trader or partnership is prepared without any concern for taxation on profits. The taxation of the income of sole traders and partners is not a concern of their businesses, and is not recorded in the financial accounts of the business.

Companies are different, because the company has a liability for taxation that is reported in its income statement and statement of financial position.

- The income statement reports the amount of taxation on the profit of the company for the year. This is deducted in reaching a figure for profit after taxation.
- The statement of financial position reports the amount of taxation that the company owes to the tax authorities as at the end of the reporting period.

3.2 Taxation in the income statement

The basic rule for taxation in the income statement of a company is that it is a charge against profits after interest. The profit after tax is added to the retained earnings reserve.

For example:

	\$
Profits from operations	460,000
Interest	<u>60,000</u>
Profit before tax	400,000
Tax	<u>100,000</u>
Profit after tax	<u>300,000</u>

Over-estimate or under-estimate of tax from the previous year

When the financial statements are prepared, the tax charge on the profits for the year is likely to be an estimate. The figure for tax on profits in the statement of comprehensive income/income statement is therefore not the amount of tax that will eventually be payable, because it is only an

estimate. The actual tax charge, agreed with the tax authorities some time later, is likely to be different.

In these circumstances, the tax charge for the year is adjusted for any under-estimate or over-estimate of tax in the previous year.

- An under-estimate of tax on the previous year's profits is added to the tax charge for the current year.
- An over-estimate of tax on the previous year's profits is deducted from the tax charge for the current year.

For example:

	\$	\$
Profit from operations		460,000
Interest		<u>60,000</u>
Profit before tax		400,000
Tax:		
Adjustment for under-estimate of tax in the previous year	3,000	
Tax on current year profits	<u>100,000</u>	
Tax charge for the year		<u>103,000</u>
Profit after tax		<u>297,000</u>

3.3 Taxation in the statement of financial position

The taxation charge for the year is the liability that the company expects to pay. The timing of tax payments on profits varies from one country to another, depending on the tax rules in each country. The actual amount of tax payable, and reported in the statement of financial position as a current liability (taxation payable), is calculated as follows:

	\$
Tax payable at the beginning of the year	X
Tax charge for the year	X
Tax payments made during the year	<u>(X)</u>
Tax payable at the end of the year	<u>XX</u>

Example

Fresh Company has a financial year ending on 31 December. At 31 December 2014 it had a liability for income tax of \$77,000. The tax on profits for the year to 31 December 2015 was \$114,000.

The tax charge for the year to 31 December 2014 was over-estimated by \$6,000.

During the year to 31 December 2015, the company made payments of \$123,000 in income tax.

Required

Calculate:

- the tax charge for the year to 31 December 2015, to include in the income statement
- the liability for income tax as at 31 December 2015, to include in the balance sheet

Answer

(a)

Tax:	\$
Adjustment for over-estimate of tax in the previous year	(6,000)
Tax on current year profits	<u>114,000</u>
Taxation charge for the year	<u>108,000</u>

(b)

	\$
Tax payable at the beginning of the year	77,000
Tax charge for the year	<u>108,000</u>
	185,000
Tax payments made during the year	<u>(123,000)</u>
Tax payable at the end of the year	<u>62,000</u>

The tax payable will appear as a current liability in the statement of financial position.

3.4 Accounting for dividends

The accounting rules for dividends can be summarised as follows:

- **Total dividends paid are not shown in the income statement**, as part of the income statement itself.

- The **proposed final dividend** for the accounting year is not shown in the statement of financial position, **unless** (in a very unusual circumstance) the final dividend is proposed before the end of the financial year.
- Total dividends actually paid during the year (the final dividend for the previous year and the interim dividend in the current year) are reported as deductions from equity (deductions from retained earnings) in another financial statement, the **statement of changes in equity**.
- The final proposed dividend for the year, if it is proposed after the end of the year (which is the normal practice), is disclosed in a note to the financial statements, as a non-adjusting post-balance sheet event.
- The figure for retained earnings in the statement of financial position is after deduction of equity dividends paid during the period.

Dividends are paid out of retained earnings. When a dividend is paid:

- Debit: Retained earnings
- Credit: Bank account.

Example

A company has 2,000,000 ordinary shares of \$0.50 each in issue. At the beginning of Year 2, its accumulated profits were \$450,000. Also at the beginning of Year 2, it owed \$50,000 in tax on profits to the tax authorities.

Its profit before taxation for Year 2 was \$300,000. Taxation on these profits is \$90,000. During the year, the company:

- made payments of tax on profits totalling \$85,000
- paid a final dividend for the previous financial year (Year 1) of 7 cents per share
- paid an interim dividend for the current financial year (Year 2) of 3 cents per share

Profit for the year

	\$
Profit before taxation	300,000
Taxation	90,000
Profit after taxation (credit retained earnings reserve)	210,000

Retained earnings

	\$	\$
Balance at the beginning of the year		450,000
Profit after taxation for Year 1		<u>210,000</u>
		660,000
Dividends		
Final dividend for Year 1 (2,000,000 x \$0.07)	140,000	
Interim dividend for Year 2 (2,000,000 x \$0.03)	<u>60,000</u>	
		<u>200,000</u>
Balance at the end of the year (statement of financial position)		460,000

Taxation: current liability

	\$
Liability for taxation at the beginning of the year	50,000
Taxation on profits for the year	90,000
	140,000
Taxation paid during the year	(85,000)
Liability for taxation at the year-end (balance sheet)	55,000

4 Events after the reporting period

4.1 Definition

An event after the reporting period is an item of information that is obtained or an event that occurs:

- after the end of a financial period (after the reporting period) and
- before the financial statements are authorised for issue, and
- this item of information or event is **material and relevant** to the financial position of the business.

An event can be either favourable for the business or adverse (unfavourable).

4.2 The accounting problem with events after the reporting period

When an event occurs after the reporting period, the problem is to decide:

- whether to alter the financial statements for the period that has just ended, to include the effect of the event, and
- if the financial statements are not altered, whether to report the event in some way in the financial statements that will soon be issued.

The rules for the accounting treatment of events after the reporting period are contained in IAS 10 **Events after the reporting period**.

4.3 Adjusting and non-adjusting events

A distinction is made between adjusting events after the reporting period and non-adjusting events.

- An **adjusting event** is an event or information that provides evidence about conditions that already existed at the end of the reporting period.
- A **non-adjusting event** is an event that occurs after the reporting period and does not relate to conditions that existed at the end of the reporting period. However, the event is of sufficient importance (it is sufficiently material) that a failure to disclose its existence to the users of the financial statements would be misleading and inappropriate.

4.4 Events after the reporting period: the accounting rules (IAS 10)

The accounting rules for events after the reporting period are as follows:

Adjusting events

Alter the financial statements for the accounting period that has just ended, to include the effects of the event.

Examples

- The bankruptcy of a customer who owed money at the end of the reporting period. A bad debt is now expected. Account for this as a bad debt in the income statement and reduce total receivables in the statement of financial position as at the end of the reporting period.
- An insurance company has agreed to pay an insurance claim that was still being negotiated at the end of the reporting period. Account for this as 'other income' and include in the statement of financial position as a receivable.

- An item of inventory held at the end of the reporting period, is sold after the reporting period for less than its cost, due to its poor condition. This provides evidence that the inventory should be valued at its net realisable value, not cost, in the statement of financial position. The difference between cost and net realisable value will be treated as an expense for the year that has just ended.
- The discovery of a fraud after the reporting period that affects the accounting figures for the reporting period.

Non-adjusting events

Do not alter the financial statements for the accounting period that has just ended, to include the effects of the event. However, provide details of the event in a note to the financial statements.

Examples

- An issue of new share capital after the end of the reporting period.
- A fall in the market value of investments after the end of the reporting period.
- A major new loan obtained after the end of the reporting period.
- The acquisition of another business, or the disposal of a part of the existing business after the reporting period.
- A physical disaster such as a fire or flooding after the reporting period, that has material financial consequences for the business.

4.5 Proposed dividends

A company might propose a final dividend to its shareholders, or declare a dividend, after the reporting period but before the financial statements are authorised for issue.

In virtually all cases, proposed dividends are a non-adjusting event after the reporting period.

Practice Questions

MCQ 1

A company has made a material change to an accounting policy in preparing its financial statements for the year. The change was not prompted by a new international financial reporting standard.

Which of the following disclosures must be made about the change in accounting policy?

1. The nature of and reasons for the change of accounting policy
 2. The amount of the adjustments to the financial statement in the current financial period as a consequence of the change in policy
 3. The amount of the adjustments to the financial statement in the previous financial period as a consequence of the change in policy
 4. The expected amount of the adjustments to the financial statements in the next three years as a consequence of the change in policy
- A. 1 only
- B. 1 and 2 only
- C. 1, 2 and 3 only
- D. 1, 2, 3 and 4

MCQ 2

A company has the following transactions.

1. The company paid its credit suppliers \$2,000.
2. Goods held in inventory that cost \$2,000 were sold for \$3,000.
3. A credit customer whose debt of \$1,000 had been written off now pays the money owed in full.

What is the combined effect of these transactions on the company's total working capital (current assets minus current liabilities)?

- A. Increase of \$1,000
- B. Increase of \$2,000
- C. Increase of \$3,000
- D. Increase of \$4,000 (2 marks)

MCQ 3

At 31 December Year 3 the following items require inclusion in a company's financial statements.

1. The company has paid insurance \$18,000 in Year 3 covering the period to 31 October Year 4.

2. On 1 January Year 3 the company made a one-year loan of \$20,000 to an employee at an interest rate of 3% per year. The employee repaid the loan in full on 1 January Year 4 together with all the interest accrued to that date.
3. In January Year 4 the company received rent on sub-let office premises \$8,000 covering the three-month period to 31 December Year 3.

For these three items, what amounts should be included in the statement of financial position as at 31 December Year 3 as current assets and current liabilities?

	Current assets	Current liabilities
	\$	\$
A.	23,000	20,600
B.	35,600	15,000
C.	43,600	Nil
D.	15,600	8,000

MCQ 4

Which of the following statements are correct, according to IAS 10 Events after the reporting period?

1. Events after the reporting period are those that occur after the reporting period has ended and before the financial statements are authorised for issue.
 2. If inventory is sold after the reporting period at a material loss, the loss should be reflected in the financial statements as an adjusting item.
 3. Details of all adjusting events must be disclosed in notes to the financial statements.
 4. If the market value of investments held by an entity falls significantly after the reporting period, the details must be disclosed in a note to the financial statements.
- A. 2 and 3 only
 B. 1, 3 and 4 only
 C. 2 and 4 only
 D. 1, 2 and 4 only

MCQ 5

In the draft statement of financial position of Company Z at 31 June Year 2, the inventory value was based on an inventory count on 4 July Year 2, which gave a total inventory value of \$363,800.

Between 30 June and 4 July Year 2 the following transactions occurred.

	\$
Purchase of goods	12,500
Sale of goods (profit margin 40% on sales)	14,000
Purchase returns by Z	600

What adjusted figure for inventories should be included in the statement of financial position of Z as at 30 June Year 2?

- A. \$360,300
- B. \$359,100
- C. \$361,900
- D. \$368,600

MCQ 6

Which of the following material events after the reporting period are adjusting events?

1. Discovery of a fraud relating to the past two years
 2. The insolvency of a credit customer who still owed money as at the end of the reporting period
 3. The sale of a property at a large profit.
 4. A property valuation providing evidence of impairment in value at the end of the reporting period
- A. 1, 2 and 4 only
 - B. 2, 3 and 4 only
 - C. 1 and 2 only
 - D. 1, 2 and 3 only

MCQ 7

Which of the following items should be treated as adjusting events after the reporting period?

Item 1: A building owned by the company has been valued after the end of the reporting period. The valuation indicates evidence of impairment in its value as at the end of the reporting period.

Item 2: Fraud has been discovered since the end of the reporting period, affecting the financial statements.

- A. 1 only
- B. 2 only
- C. 1 and 2
- D. Neither of them

Chapter 13: Preparing simple consolidated financial statements

1 Group accounts

There are many reasons for businesses to operate as groups; for the goodwill associated with the names of the subsidiaries, for tax or legal purposes and so forth. In many countries, company law requires that the results of a group should be presented as a whole. In traditional accounting terminology, a group of companies consists of a parent company and one or more subsidiary companies which are controlled by the parent company.

We will be looking at following accounting standards:

- IAS 27 (revised) Separate financial statements
- IFRS 10 Consolidated financial statements
- IFRS 3 Business combinations
- IAS 28 Investments in associates
- IFRS 12 Disclosure of interests in other entities

Definitions

Control. An investor controls and investee when the investor is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through power over the investee.

(IFRS 10)

Power. Existing rights that give the current ability to direct the relevant activities of the investee.

(IFRS 10)

Subsidiary. An entity that is controlled by another entity.

(IFRS 10)

Parent. An entity that controls one or more subsidiaries.

(IFRS 10)

Group. A parent and all its subsidiaries.

(IFRS 10)

Associate. An entity over which an investor has significant influence and which is neither a subsidiary nor an interest in a joint venture.

(IFRS 10)

Significant influence is the power to participate in the financial and operating policy decisions of an investee but is not control or joint control over those policies.

(IAS 28)

We can summarise the different types of investment and the required accounting for them as follows:

Investment	Criteria	Required treatment in group accounts
Subsidiary	Control	Full consolidation
Associate	Significant influence	Equity accounting
Investment which is none of the above	Asset held for accretion of wealth	As for single company accounts per IFRS 9

Investments in subsidiaries

The important point here is control. In most cases, this will involve the holding company or parent owning a majority of the ordinary shares in the subsidiary (to which normal voting rights are attached). There are circumstances, however, when the parent may own only a minority of the voting power in the subsidiary, but the parent still has control.

An investor controls an investee if, and only if, it has all of the following:

- (a) Power over the investee
- (b) Exposure to, or rights to, variable returns from its involvement with the investee; and
- (c) The ability to use its power over the investee to affect the amount of the investor's returns

If there are changes to one or more of these three elements of control, then an investor should reassess whether it controls an investee.

Power (as defined above) can be obtained directly from ownership of the majority of voting rights or can be derived from other rights, such as:

- Rights to appoint, reassign or remove key management personnel who can direct the relevant activities
- Rights to appoint or remove another entity that directs the relevant activities
- Rights to direct the investee to enter into, or veto changes to, transactions for the benefit of the investor
- Other rights, such as those specified in a management contract

IFRS 10 requires a parent to present consolidated financial statements, in which the accounts of the parent and subsidiary (or subsidiaries) are combined and presented as a single entity.

Investments in associates

This type of investment is something less than a subsidiary, but more than a simple investment. The key criterion here is significant influence. This is defined as the 'power to participate', but not to 'control' (which would make the investment a subsidiary).

Significant influence can be determined by the holding of voting rights (usually attached to shares) in the entity. IAS 28 states that if an investor holds 20% or more of the voting power of the investee, it can be presumed that the investor has significant influence over the investee, unless it can be clearly shown that this is not the case.

Significant influence can be presumed not to exist if the investor holds less than 20% of the voting power of the investee, unless it can be demonstrated otherwise. The existence of significant influence is evidenced in one or more of the following ways.

- (a) Representation on the board of directors (or equivalent) of the investee
- (b) Participation in the policy making process
- (c) Material transactions between investor and investee
- (d) Interchange of management personnel
- (e) Provision of essential technical information

2 Consolidated and separate financial statements

Consolidated financial statements. The financial statements of a group in which the assets, liabilities, equity, income, expenses and cash flows of the parent and its subsidiaries are presented as those of a single economic entity.

(IFRS 10)

When a parent issues consolidated financial statements, it should consolidate all subsidiaries, both foreign and domestic.

Exemption from preparing group accounts

A parent need not present consolidated financial statements if and only if all of the following hold:

- (a) The parent is itself a wholly-owned subsidiary or it is a partially owned subsidiary of another entity and its other owners, including those not otherwise entitled to vote, have been informed about, and do not object to, the parent not presenting consolidated financial statements
- (b) Its securities are not publicly traded
- (c) It is not in the process of issuing securities in public securities markets; and
- (d) The ultimate or intermediate parent publishes consolidated financial statements that comply with International Financial Reporting Standards

A parent that does not present consolidated financial statements must comply with the IAS 27 rules on separate financial statements (discussed later in this section). Potential voting rights

Potential voting rights

An entity may own share warrants, share call options, or other similar instruments that are convertible into ordinary shares in another entity. If these are exercised or converted they may give the entity voting power or reduce another party's voting power over the financial and operating policies of the other entity (potential voting rights). The existence and effect of potential voting rights, including potential voting rights held by another entity, should be

considered when assessing whether an entity has control over another entity (and therefore has a subsidiary).

Exclusion of a subsidiary from consolidation

The rules on exclusion of subsidiaries from consolidation are necessarily strict, because this is a common method used by entities to manipulate their results. If a subsidiary which carries a large amount of debt can be excluded, then the gearing of the group as a whole will be improved. In other words, this is a way of taking debt out of the statement of financial position.

IAS 27 did originally allow a subsidiary to be excluded from consolidation where control is intended to be temporary. This exclusion was then removed by IFRS 5. Subsidiaries held for sale are accounted for in accordance with IFRS 5 Non-current assets held for sale and discontinued operations.

It has been argued in the past that subsidiaries should be excluded from consolidation on the grounds of dissimilar activities, i.e. the activities of the subsidiary are so different to the activities of the other companies within the group that to include its results in the consolidation would be misleading. IAS 27 and IFRS 10 both reject this argument: exclusion on these grounds is not justified because better (relevant) information can be provided about such subsidiaries by consolidating their results and then giving additional information about the different business activities of the subsidiary.

The previous version of IAS 27 permitted exclusion where the subsidiary operates under severe long-term restrictions and these significantly impair its ability to transfer funds to the parent. This exclusion has now been removed. Control must actually be lost for exclusion to occur.

Different reporting dates

In most cases, all group companies will prepare accounts to the same reporting date. One or more subsidiaries may, however, prepare accounts to a different reporting date from the parent and the bulk of other subsidiaries in the group.

In such cases the subsidiary may prepare additional statements to the reporting date of the rest of the group, for consolidation purposes. If this is not possible, the subsidiary's accounts may still be used for the consolidation, provided that the gap between the reporting dates is three months or less.

Where a subsidiary's accounts are drawn up to a different accounting date, adjustments should be made for the effects of significant transactions or other events that occur between that date and the parent's reporting date.

Uniform accounting policies

Consolidated financial statements should be prepared using the same accounting policies for like transactions and other events in similar circumstances.

Adjustments must be made where members of a group use different accounting policies, so that their financial statements are suitable for consolidation.

Date of inclusion/exclusion

The results of subsidiary undertakings are included in the consolidated financial statements from:

- (a) the date of 'acquisition', i.e. the date control passes to the parent, to
- (b) the date of 'disposal', i.e. the date control passes from the parent.

Once an investment is no longer a subsidiary, it should be treated as an associate under IAS 28 (if applicable) or as an investment under IFRS 9.

Accounting for subsidiaries and associates in the parent's separate financial statements

A parent company will usually produce its own single company financial statements. In these statements, investments in subsidiaries and associates included in the consolidated financial statements should be either:

- (a) Accounted for at cost, or
- (b) In accordance with IFRS 9

Where subsidiaries are classified as held for sale in accordance with IFRS 5 they should be accounted for in accordance with IFRS 5.

3 Content of group accounts and group structure

In simple terms a set of consolidated accounts is prepared by adding together the assets and liabilities of the parent company and each subsidiary. The whole of the assets and liabilities of each company are included, even though some subsidiaries may be only partly owned. The

'equity and liabilities' section of the statement of financial position will indicate how much of the net assets are attributable to the group and how much to outside investors in partly owned subsidiaries. These outside investors are known as the non-controlling interest.

Non-controlling interest. The equity in a subsidiary not attributable, directly or indirectly, to a parent.

(IFRS 3, IFRS 10)

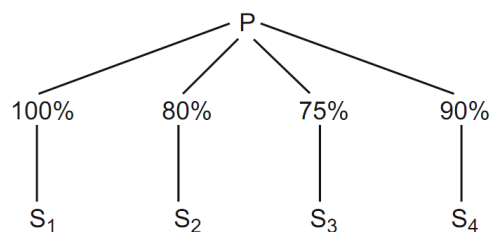
Non-controlling interest should be presented in the consolidated statement of financial position within equity, separately from the parent shareholders' equity. Most parent companies present their own individual accounts and their group accounts in a single package. The package typically comprises the following:

- Parent company financial statements, which will include 'investments in subsidiary undertakings' as an asset in the statement of financial position, and income from subsidiaries (dividends) in the statement of profit or loss and other comprehensive income
- Consolidated statement of financial position
- Consolidated statement of profit or loss and other comprehensive income
- Consolidated statement of cash flows

It may not be necessary to publish all of the parent company's financial statements, depending on local or national regulations.

Group structure

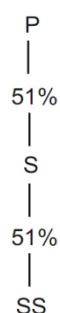
With the difficulties of definition and disclosure dealt with, let us now look at group structures. The simplest are those in which a parent company has only a direct interest in the shares of its subsidiary companies. For example:



S1 Co is a wholly owned subsidiary of P Co. S2 Co, S3 Co and S4 Co are partly owned subsidiaries; a proportion of the shares in these companies is held by outside investors.

Often a parent will have indirect holdings in its subsidiary companies. This can lead to more complex group structures.

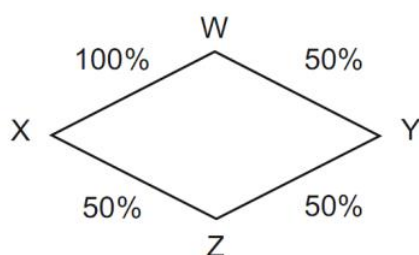
(a)



P Co owns 51% of the equity shares in S Co, which is therefore its subsidiary. S Co in its turn owns 51% of the equity shares in SS Co. SS Co is therefore a subsidiary of S Co and consequently a subsidiary of P Co. SS Co would describe S Co as its parent (or holding) company and P Co as its ultimate parent company.

Note that although P Co can control the assets and business of SS Co by virtue of the chain of control, its interest in the assets of SS Co is only 26%. This can be seen by considering a dividend of \$100 paid by SS Co: as a 51% shareholder, S Co would receive \$51; P Co would have an interest in 51% of this \$51 = \$26.01.

(b)



W Co owns 100% of the equity of X Co and 50% of the equity of Y Co. X Co and Y Co each own 50% of the equity of Z Co. Assume that:

- (i) W Co does not control the composition of Y Co.'s board, nor can it cast a majority of votes on the board
- (ii) W Co does not hold or control more than 50% of the voting rights in Y Co, either directly or by agreement with other investors
- (iii) W Co does not have the power to govern the financial or operating policies of Y Co by virtue of statute or an agreement
- (iv) None of the above apply to either X Co.'s or Y Co.'s holdings in Z Co

In other words, because W Co is not in cooperation with the holder(s) of the other 50% of the shares in Y Co, neither Y nor Z can be considered subsidiaries.

In that case:

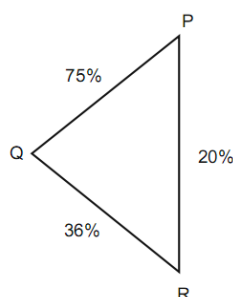
- (i) X Co is a subsidiary of W Co
- (ii) Y Co is not a subsidiary of W Co
- (iii) Z Co is not a subsidiary of either X Co or Y Co. Consequently, it is not a subsidiary of W Co

If Z Co pays a dividend of \$100, X Co and Y Co will each receive \$50. The interest of W Co in this dividend is as follows.

	\$
Through X Co ($100\% \times \$50$)	50
Through Y Co ($50\% \times \$50$)	<u>25</u>
	<u>75</u>

Although W Co has an interest in 75% of Z Co.'s assets, Z Co is not a subsidiary of W Co.

(c)



Q Co is a subsidiary of P Co. P Co therefore has indirect control over 36% of R Co.'s equity. P Co also has direct control over 20% of R Co.'s equity. R Co is therefore a subsidiary of P Co, although P Co.'s interest in R Co.'s assets is only $20\% + (75\% \times 36\%) = 47\%$.

Examples (b) and (c) illustrate an important point: in deciding whether a company A holds more than 50% of the equity (or equivalent) of an entity B it is necessary to aggregate:

- Shares (or equivalent) in B held directly by A
- Shares (or equivalent) in B held by entities which are subsidiaries of A

4 Group accounts: the related parties issue

IAS 24 draws attention to the significance of related party relationships and transactions – that transactions between the parties may not be 'at arm's length' and that users of the accounts must be made aware of this, as it may affect their view of the financial statements.

Individual company financial statements

The relationship between a parent and a subsidiary is the most obvious example of a related party relationship and it offers a number of opportunities for manipulating results. Some of these may be aimed at improving the parent's individual financial statements.

Any of the following could take place:

- The subsidiary sells goods to the parent company at an artificially low price. This increases parent company profit while reducing profit in the subsidiary, thus increasing profit available for distribution to parent company shareholders at the expense of the non-controlling interest.
- The parent sells goods to the subsidiary at an artificially high price. This has the same result as above.

- The subsidiary makes a loan to the parent at an artificially low rate of interest or the parent makes a loan to the subsidiary at an artificially high rate of interest. The loans will be cancelled on consolidation but the interest payments will transfer profits from the subsidiary to the parent.
- The parent can sell an asset to the subsidiary at an amount in excess of its carrying amount. This again serves to transfer profit (and cash) to the parent.

Consolidated financial statements

The transactions above seek to improve the individual parent company accounts at the expense of the individual subsidiary accounts. Dividends are paid to shareholders on the basis of these individual company financial statements, not the consolidated financial statements.

The tightening up of the opportunities for excluding a subsidiary from consolidation under IFRS have reduced the opportunities for improving the appearance of the consolidated financial statements. Prior to this, a number of possibilities could be exploited:

- A group could obtain loans via a subsidiary, which was not then consolidated. The loan would not appear in the consolidated statement of financial position and group gearing (% of capital provided by loans) would appear lower than it actually was.
- Sale and leaseback transactions could be carried out in which assets were sold to a non-consolidated subsidiary and leased back under an operating lease. This enabled the asset and its associated borrowings to be removed from the statement of financial position.

Disposal of subsidiaries

While the situations above are all concerned with improving the appearance of the parent company or group financial statements at the expense of those of the subsidiary, there may be occasions where the opposite is the intention.

For instance, when a parent company has decided to dispose of its shares in a poorly-performing subsidiary, it may seek to enhance the results of that subsidiary for the purpose of selling at a profit. In this case, transactions such as those above may be undertaken in the other direction – to transfer profit from the parent to the subsidiary.

Effect on trading

Even where no related party transactions have taken place, the parent/subsidiary relationship can still affect how the parties do business. For instance if, prior to acquisition by the parent, the subsidiary had a major customer or supplier who was a competitor of the parent, that trading arrangement can be expected to cease. The subsidiary may itself have been a competitor of the parent, in which case it may now have had to withdraw from certain markets in favour of the parent.

5 Disclosure

The objective of IFRS 12 is to require the disclosure of information that enables users of the financial statements of an entity to evaluate:

- the nature of, and risks associated with, its interests in other entities
- the effect of those interests on its financial position, financial performance and cash flows

The standard requires disclosure of:

- the significant judgements and assumptions made in determining the nature of an interest in another entity
- information about interests in subsidiaries and associates

Disclosures regarding subsidiaries

In respect of subsidiaries an entity should disclose information regarding:

- (a) the interest held by non-controlling interests in the groups relevant activities and cash flows
- (b) the nature and extent of any significant restrictions on the investor's ability to use group assets and liabilities
- (c) the consequences of any change in ownership in a subsidiary (whether or not control is lost)

Disclosures regarding associates and joint arrangements

In respect of associates an entity should disclose information regarding:

- (a) the nature, extent and financial effects of the entity's interests in associates, including the nature and effects of its contractual relationship with other investors having significant influence over associates
- (b) the nature of, and changes in, the risks associated with its interests in associates

Separate financial statements – IAS 27

Where a parent chooses to take advantage of the exemptions from preparing consolidated financial statements under IAS 27 the separate financial statements must disclose:

- (a) The fact that the financial statements are separate financial statements; that the exemption from consolidation has been used; the name and country of incorporation of the entity whose consolidated financial statements that comply with IFRSs have been published; and the address where those consolidated financial statements are obtainable
- (b) A list of significant investments in subsidiaries, jointly controlled entities and associates, including the name, country of incorporation, proportion of ownership interest and, if different, proportion of voting power held
- (c) A description of the method used to account for the investments listed under (b) 274

When a parent prepares separate financial statements in addition to consolidated financial statements, the separate financial statements must disclose:

- (a) The fact that the statements are separate financial statements and the reasons why they have been prepared if not required by law
- (b) Information about investments and the method used to account for them, as above.

6 IFRS 10: Summary of consolidation procedures

The financial statements of a parent and its subsidiaries are combined on a line-by-line basis by adding together like items of assets, liabilities, equity, income and expenses.

The following steps are then taken, in order that the consolidated financial statements should show financial information about the group as if it was a single entity.

- (a) The carrying amount of the parent's investment in each subsidiary and the parent's portion of equity of each subsidiary are eliminated or cancelled
- (b) Non-controlling interests in the net income of consolidated subsidiaries are adjusted against group income, to arrive at the net income attributable to the owners of the parent
- (c) Non-controlling interests in the net assets of consolidated subsidiaries should be presented separately in the consolidated statement of financial position

Other matters to be dealt with include the following:

- (a) Goodwill on consolidation should be dealt with according to IFRS 3
- (b) Dividends paid by a subsidiary must be accounted for

IFRS 10 states that all intra group balances and transactions, and the resulting unrealised profits, should be eliminated in full. Unrealised losses resulting from intragroup transactions should also be eliminated unless cost can be recovered.

Cancellation and part cancellation

The preparation of a consolidated statement of financial position, in a very simple form, consists of two procedures.

- (a) Take the individual accounts of the parent company and each subsidiary and cancel out items which appear as an asset in one company and a liability in another.
- (b) Add together all the uncanceled assets and liabilities throughout the group.

Items requiring cancellation may include the following.

- (a) The asset 'shares in subsidiary companies' which appears in the parent company's accounts will be matched with the liability 'share capital' in the subsidiaries' accounts.
- (b) There may be intra group trading within the group. For example, S Co may sell goods on credit to P Co. P Co would then be a receivable in the accounts of S Co, while S Co would be a payable in the accounts of P Co.

Part cancellation

An item may appear in the statements of financial position of a parent company and its subsidiary, but not at the same amounts.

- (a) The parent company may have acquired shares in the subsidiary at a price greater or less than their par value. The asset will appear in the parent company's accounts at cost, while the liability will appear in the subsidiary's accounts at par value.
- (b) Even if the parent company acquired shares at par value, it may not have acquired all the shares of the subsidiary (so the subsidiary may be only partly owned). This raises the issue of non-controlling interests, which are also dealt with later in this chapter.
- (c) The intercompany trading balances may be out of step because of goods or cash in transit.

- (d) One company may have issued loan stock of which a proportion only is taken up by the other company.

The procedure for items (c) and (d) is to cancel as far as possible. The remaining uncanceled amounts will appear in the consolidated statement of financial position.

- (a) Uncanceled loan stock will appear as a liability of the group.
- (b) Uncanceled balances on intra group accounts represent goods or cash in transit, which will appear in the consolidated statement of financial position.

7 Non-controlling interests – IFRS 3

It was mentioned earlier that the total assets and liabilities of subsidiary companies are included in the consolidated statement of financial position, even in the case of subsidiaries which are only partly owned. A proportion of the net assets of such subsidiaries in fact belongs to investors from outside the group (non-controlling interests).

IFRS 3 allows two alternative ways of calculating non-controlling interest in the group statement of financial position. Non-controlling interest can be valued at:

- (a) Its proportionate share of the fair value of the subsidiary's net assets; or
- (b) Full (or fair) value (usually based on the market value of the shares held by the non-controlling interest).

The following example shows non-controlling interest calculated at its proportionate share of the subsidiary's net assets.

8 Dividends paid by a subsidiary

When a subsidiary company pays a dividend during the year the accounting treatment is not difficult. Suppose S Co, a 60% subsidiary of P Co, pays a dividend of \$1,000 on the last day of its accounting period. Its total reserves before paying the dividend stood at \$5,000.

- (a) \$400 of the dividend is paid to non-controlling shareholders. The cash leaves the group and will not appear anywhere in the consolidated statement of financial position.
- (b) The parent company receives \$600 of the dividend, debiting cash and crediting profit or loss. This will be cancelled on consolidation.

- (c) The remaining balance of retained earnings in S Co.'s statement of financial position (\$4,000) will be consolidated in the normal way. The group's share ($60\% \times \$4,000 = \$2,400$) will be included in group retained earnings in the statement of financial position; the non-controlling interest share ($40\% \times \$4,000 = \$1,600$) is credited to the non-controlling interest account in the statement of financial position.

9 Goodwill arising on consolidation

When a company P Co wishes to purchase shares in a company S Co it must pay the previous owners of those shares. The most obvious form of payment would be in cash.

However, the previous shareholders might be prepared to accept some other form of consideration. For example, they might accept an agreed number of shares in P Co. P Co would then issue new shares in the agreed number and allot them to the former shareholders of S Co. This kind of deal might be attractive to P Co since it avoids the need for a heavy cash outlay. The former shareholders of S Co would retain an indirect interest in that company's profitability via their new holding in its parent company.

Suppose P Co. wishes to purchase all of the \$40,000 shares in S Co. The shareholders of S Co agreed to accept one \$1 ordinary share in P Co for every two \$1 ordinary shares in S Co. P Co would then need to issue and allot 20,000 new \$1 shares. How would this transaction be recorded in the books of P Co?

The 40,000 \$1 shares acquired in S Co are thought to have a value of \$60,000. The former shareholders of S Co have presumably agreed to accept 20,000 shares in P Co because they consider each of those shares to have a value of \$3. The transaction is recorded as follows:

DEBIT	Investment in S Co	\$60,000
CREDIT	Share capital	\$20,000
	Share premium account	\$40,000

The amount which P Co records in its books as the cost of its investment in S Co may be more or less than the book value of the assets it acquires. Suppose that S Co in the previous example has nil reserves and nil liabilities, so that its share capital of \$40,000 is balanced by tangible assets with a book value of \$40,000. For simplicity, assume that the book value of S Co.'s assets is the same as their market or fair value.

Now when the directors of P Co agree to pay \$60,000 for a 100% investment in S Co they must believe that, in addition to its tangible assets of \$40,000, S Co must also have intangible assets worth \$20,000. This amount of \$20,000 paid over and above the value of the tangible assets acquired is goodwill arising on consolidation.

Following the normal cancellation procedure the \$40,000 share capital in S Co.'s statement of financial position could be cancelled against \$40,000 of the 'investment in S Co' in the statement of financial position of P Co. This would leave a \$20,000 debit uncanceled in the parent company's accounts and this \$20,000 would appear in the consolidated statement of financial position under the caption 'Intangible non-current assets: goodwill arising on consolidation'.

Goodwill and pre acquisition profits

Up to now we have assumed that S Co had nil retained earnings when its shares were purchased by P Co. Assuming instead that S Co had earned profits of \$8,000 in the period before acquisition, its statement of financial position just before the purchase would look as follows.

	\$
Total assets	<u>48,000</u>
Share capital	40,000
Retained earnings	<u>8,000</u>
	<u>48,000</u>

If P Co now purchases all the shares in S Co it will acquire total assets worth \$48,000 at a cost of \$60,000. Clearly in this case S Co.'s intangible assets (goodwill) are being valued at \$12,000. It should be apparent that any earnings retained by the subsidiary prior to its acquisition by the parent company must be incorporated in the cancellation process so as to arrive at a figure for goodwill arising on consolidation. In other words, not only S Co.'s share capital, but also its pre-acquisition retained earnings, must be cancelled against the asset 'investment in S Co' in the accounts of the parent company. The uncanceled balance of \$12,000 appears in the consolidated statement of financial position.

The consequence of this is that any pre acquisition retained earnings of a subsidiary company are not aggregated with the parent company's retained earnings in the consolidated statement of financial position. The figure of consolidated retained earnings comprises the retained earnings of the parent company plus the post-acquisition retained earnings only of subsidiary companies. The post-acquisition retained earnings are simply retained earnings now less retained earnings at acquisition.

Goodwill and non-controlling interest

Not let us look at what would happen if P Co had obtained less than 100% of the shares of S Co.

If P Co had paid \$80,000 for 40,000 shares in S Co, the goodwill working would be as follows:

	\$
Consideration transferred	80,000
Non-controlling interest (60,000 × 20%)	12,000
Net assets acquired	<u>(60,000)</u>
Goodwill	<u><u>32,000</u></u>

The goodwill has been increased by the non-controlling interest – P Co has paid the same amount but acquired a smaller shareholding.

Non-controlling interest at fair value

IFRS 3 (revised) gives entities the option of valuing non-controlling interest at fair value. The thinking behind this is that the non-controlling interest, in purchasing their shares, also purchased goodwill in the subsidiary, and that the traditional method of consolidation does not show this goodwill.

IFRS 3 revised suggests that the closest approximation to fair value will be the market price of the shares held by non-controlling shareholders just before acquisition by the parent.

Continuing our example above, we will assume that the market price of the shares was \$1.25. The goodwill calculation will then be as follows:

	\$
Consideration transferred	80,000
Non-controlling interest (10,000 × \$1.25)	12,500
Net assets at acquisition	<u>(60,000)</u>
Goodwill	<u><u>32,500</u></u>

Goodwill is \$500 higher than goodwill calculated measuring non-controlling interest at its share of the net assets of the subsidiary. This \$500 represents the goodwill attributable to the non-controlling interest.

Non-controlling interest at year end

Where the option is used to value non-controlling interest at fair value, this applies only to non-controlling interest at acquisition. At the year end, the non-controlling interest is measured at its share of the subsidiary's year end net assets, subject to adjustments for intra-group trading which we will cover later. However, where the fair value option has been used, goodwill at the yearend will include the additional goodwill attributable to the non-controlling interest, in the example above \$500. The other side of the entry is to add the goodwill onto the non-controlling interest at the year end.

Example: non-controlling interest at fair value

P acquired 75% of the shares in S on 1 January 2007 when S had retained earnings of \$15,000. The market price of S's shares just before the date of acquisition was \$1.60. P values non-controlling interest at fair value. Goodwill is not impaired.

The statements of financial position of P and S at 31 December 20X7 were as follows:

	P	S
	\$	\$
Property, plant and equipment	60,000	50,000
Shares in S	<u>68,000</u>	<u>—</u>
Current assets	128,000	50,000
	<u><u>52,000</u></u>	<u><u>35,000</u></u>

	<u>180,000</u>	<u>85,000</u>
Share capital – \$1 shares	100,000	50,000
Retained earnings	<u>70,000</u>	<u>25,000</u>
	170,000	75,000
Current liabilities	<u>10,000</u>	<u>10,000</u>
	<u>180,000</u>	<u>85,000</u>

Now we will prepare the consolidated statement of financial position of the P Group.

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

	\$
Assets	
Non-current assets	
Property plant and equipment (60,000 + 50,000)	110,000
Goodwill (W1)	23,000
Current assets (52,000 + 35,000)	87,000
Total assets	220,000
Equity and liabilities	
Equity attributable to the owners of P	
Share capital	100,000
Retained earnings (W2)	77,500
	177,500
Non-controlling interest (W3)	22,500
Total equity	200,000
Current liabilities (10,000 + 10,000)	20,000
Total equity and liabilities	220,000

Workings

1. Goodwill

	\$
Consideration transferred	68,000
Non-controlling interest at acquisition (12,500 shares @ \$1.60)	20,000
Net assets of S at acquisition (50,000 + 15,000)	<u>(65,000)</u>
Goodwill (parent and non-controlling interest)	<u>23,000</u>
Non-controlling interest at fair value (as above)	20,000
Non-controlling share of net assets at acquisition (65,000 × 25%)	<u>(16,250)</u>
Goodwill attributable to non-controlling interest	<u>3,750</u>

2. Retained earnings

	P	S
	\$	\$
Per statement of financial position	70,000	25,000
Less pre- acquisition		<u>(15,000)</u>
		<u>10,000</u>
Group share of S (10,000 × 75%)	<u>7,500</u>	
Group retained earnings	<u>77,500</u>	

3. Non-controlling interest at year end

	\$
Share of net assets of S (75,000 × 25%)	18,750
Goodwill (W1)	<u>3,750</u>

22,500

Note that non-controlling interest at the yearend can also be calculated as follows:

	\$
Non-controlling interest at acquisition	20,000
Share of post-acquisition retained earnings (10,000 × 25%)	<u>2,500</u>
	<u>22,500</u>

Effect of non-controlling interest at fair value

You can see from the above example that the use of the fair value option increases goodwill and non-controlling interest by the same amount. That amount represents goodwill attributable to the shares held by non-controlling shareholders. It is not necessarily proportionate to the goodwill attributed to the parent. The parent may have paid more to acquire a controlling interest.

Impairment of goodwill

Goodwill arising on consolidation is subjected to an annual impairment review and impairment may be expressed as an amount or as a percentage. However, when non-controlling interest is valued at fair value the goodwill in the statement of financial position includes goodwill attributable to the non-controlling interest. In this case the double entry will reflect the non-controlling interest proportion based on their shareholding.

In our solution above the non-controlling interest holds 25%. If the goodwill of \$23,000 was impaired by 20% the double entry for this would be:

		\$
DEBIT	Retained earnings	3,450
DEBIT	Non-controlling interest	1,150
CREDIT	Goodwill	4,600

Non-controlling interest at the yearend would then be \$21,350.

Gain on a bargain purchase

Goodwill arising on consolidation is one form of purchased goodwill, and is governed by IFRS 3. IFRS 3 requires that goodwill arising on consolidation should be capitalised in the consolidated statement of financial position and reviewed for impairment every year.

Goodwill arising on consolidation is the difference between the cost of an acquisition and the value of the subsidiary's net assets acquired. This difference can be negative: the aggregate of the fair values of the separable net assets acquired may exceed what the parent company paid for them. IFRS 3 refers to this as a 'bargain purchase'. In this situation:

- (a) An entity should first re-assess the amounts at which it has measured both the cost of the combination and the acquiree's identifiable net assets. This exercise should identify any errors.
- (b) Any excess remaining should be recognised immediately in profit or loss.

Forms of consideration

The consideration paid by the parent for the shares in the subsidiary can take different forms and this will affect the calculation of goodwill. Here are some examples:

Contingent consideration

The parent acquired 60% of the subsidiary's \$100m share capital on 1 January 20X6 for a cash payment of \$150m and a further payment of \$50m on 31 March 20X7 if the subsidiary's post acquisition profits have exceeded an agreed figure by that date.

In the financial statements for the year to 31 December 20X6 \$50m will be added to the cost of the combination, discounted as appropriate.

IFRS 3 requires the acquisition-date fair value of contingent consideration to be recognised as part of the consideration for the acquiree. The acquirer may be required to pay contingent consideration in the form of equity or of a debt instrument or cash. A debt instrument should be presented as under IAS 32. Contingent consideration can also be an asset, if the consideration has already been transferred and the acquirer has the right to return of some of it, if certain considerations are met.

Note: The previous version of IFRS 3 only required contingent consideration to be recognised if it was probable that it would become payable. IFRS 3 revised dispenses with this requirement – all contingent consideration is now recognised.

Deferred consideration

The parent acquired 75% of the subsidiary's 80m \$1 shares on 1 January 20X6. It paid \$3.50 per share and agreed to pay a further \$108m on 1 January 20X7.

The parent company's cost of capital is 8%.

At the acquisition date the cost of the combination will be as follows:

	\$m
80m shares x 75% x \$3.50	210
Deferred consideration:	
\$108m x 1/1.08	<u>100</u>
Total consideration	<u>310</u>

At 31 December 20X6, the cost of the combination will be unchanged but \$8m will be charged to finance costs, being the unwinding of the discount on the deferred consideration.

Share exchange

The parent has acquired 12,000 \$1 shares in the subsidiary by issuing 5 of its own \$1 shares for every 4 shares in the subsidiary. The market value of the parent company's shares is \$6.

Cost of the combination:

	\$m
12,000 x 5/4 x \$6	90,000

Note that this is credited to the share capital and share premium of the parent company as follows:

	DR	CR
Investment in subsidiary	90,000	

Share capital ($\$12,000 \times 5/4$)	15,000
Share premium ($\$12,000 \times 5/4 \times 5$)	75,000

Expenses and issue costs

Expenses of the combination, such as lawyers and accountants fees are written off as incurred. However, IFRS 3 requires that the costs of issuing equity are treated as a deduction from the proceeds of the equity issue. Share issue costs will therefore be debited to the share premium account. Issue costs of financial instruments are deducted from the proceeds of the financial instrument.

10 Intra-group trading

Unrealised profit

Any receivable/payable balances outstanding between the companies are cancelled on consolidation. No further problem arises if all such intra group transactions are undertaken at cost, without any mark up for profit.

However, each company in a group is a separate trading entity and may wish to treat other group companies in the same way as any other customer. In this case, a company (say A Co) may buy goods at one price and sell them at a higher price to another group company (B Co). The accounts of A Co will quite properly include the profit earned on sales to B Co; and similarly B Co.'s statement of financial position will include inventories at their cost to B Co, i.e. at the amount at which they were purchased from A Co.

This gives rise to two problems.

- Although A Co makes a profit as soon as it sells goods to B Co, the group does not make a sale or achieve a profit until an outside customer buys the goods from B Co.
- Any purchases from A Co which remain unsold by B Co at the yearend will be included in B Co.'s inventory. Their value in the statement of financial position will be their cost to B Co, which is not the same as their cost to the group.

The objective of consolidated accounts is to present the financial position of several connected companies as that of a single entity, the group. This means that in a consolidated statement of financial position the only profits recognised should be those earned by the group in providing

goods or services to outsiders; and similarly, inventory in the consolidated statement of financial position should be valued at cost to the group.

Suppose that a holding company P Co buys goods for \$1,600 and sells them to a wholly owned subsidiary S Co for \$2,000. The goods are in S Co.'s inventory at the year end and appear in S Co.'s statement of financial position at \$2,000. In this case, P Co will record a profit of \$400 in its individual accounts, but from the group's point of view the figures are:

Cost	\$1,600
External sales	nil
Closing inventory at cost	\$1,600
Profit/loss	nil

If we add together the figures for retained earnings and inventory in the individual statements of financial position of P Co and S Co the resulting figures for consolidated retained earnings and consolidated inventory each will be overstated by \$400. A consolidation adjustment is therefore necessary as follows.

DEBIT	Group retained earnings
CREDIT	Group inventory (statement of financial position) with the amount of profit unrealised by the group.

Non-controlling interests in unrealised intra-group profits

A further problem occurs where a subsidiary company which is not wholly owned is involved in intra-group trading within the group. If a subsidiary S Co is 75% owned and sells goods to the parent company for \$16,000 cost plus \$4,000 profit, i.e. for \$20,000 and if these items are unsold by P Co at the end of the reporting period, the 'unrealised' profit of \$4,000 earned by S Co and charged to P Co will be partly owned by the non-controlling interest of S Co. As far as the non-controlling interest of S Co is concerned, their share (25% of \$4,000) amounting to \$1,000 of profit on the sale of goods would appear to have been fully realised. It is only the group that has not yet made a profit on the sale.

However, best practice is to debit the non-controlling interest with its share, so the entries are:

DEBIT	Group retained earnings
DEBIT	Non-controlling interest
CREDIT	Group inventory (statement of financial position)

11 Intra group sales of non-current assets

Accounting treatment

In their individual accounts the companies concerned will treat the transfer just like a sale between unconnected parties: the selling company will record a profit or loss on sale, while the purchasing company will record the asset at the amount paid to acquire it, and will use that amount as the basis for calculating depreciation.

On consolidation, the usual 'group entity' principle applies. The consolidated statement of financial position must show assets at their cost to the group, and any depreciation charged must be based on that cost. Two consolidation adjustments will usually be needed to achieve this.

- (a) An adjustment to alter retained earnings and non-current assets cost so as to remove any element of unrealised profit or loss. This is similar to the adjustment required in respect of unrealised profit in inventory.
- (b) An adjustment to alter retained earnings and accumulated depreciation is made so that consolidated depreciation is based on the asset's cost to the group.

In practice, these steps are combined so that the retained earnings of the entity making the unrealised profit are debited with the unrealised profit less the additional depreciation.

The double entry is as follows.

- (a) Sale by parent

DEBIT	Group retained earnings
CREDIT	Non-current assets with the profit on disposal, less the additional depreciation.

- (b) Sale by subsidiary

DEBIT	Group retained earnings (P's share of S)
-------	--

DEBIT Non-controlling interest (NCI's share of S)

CREDIT Non-current assets with the profit on disposal, less additional depreciation

Example: intra group sale of non-current assets

P Co owns 60% of S Co and on 1 January 20X1 S Co sells plant costing \$10,000 to P Co for \$12,500. The companies make up accounts to 31 December 20X1 and the balances on their retained earnings at that date are:

P Co	after charging depreciation of 10% on plant	\$27,000
S Co	including profit on sale of plant	\$18,000

The working for consolidated retained earnings will be as follows:

	P Co	S Co
	\$	\$
	27,000	18,000
Disposal of plant:		
Profit		(2,500)
Depreciation: 10% x \$2,500		<u>250</u>
		<u>15,750</u>
Share of S Ltd: \$15,750 x 60%	<u>9,450</u>	
Group retained earnings	<u>36,450</u>	

12 Acquisition of a subsidiary during its accounting period

The subsidiary company's accounts to be consolidated will show the subsidiary's profit or loss for the whole year. For consolidation purposes, however, it will be necessary to distinguish between:

- (a) Profits earned before acquisition
- (b) Profits earned after acquisition

In practice, a subsidiary company's profit may not accrue evenly over the year. Nevertheless, the assumption can be made that profits accrue evenly whenever it is impracticable to arrive at an accurate split of pre and post-acquisition profits. Once the amount of pre-acquisition profit has been established the appropriate consolidation workings (goodwill, retained earnings) can be produced.

Bear in mind that in calculating non-controlling interests at the year end, the distinction between pre and post-acquisition profits is irrelevant. The non-controlling shareholders are simply credited with their share of the subsidiary's total net assets at the end of the reporting period.

It is worthwhile to summarise what happens on consolidation to the retained earnings figures extracted from a subsidiary's statement of financial position. Suppose the accounts of S Co, a 60% subsidiary of P Co, show retained earnings of \$20,000 at the end of the reporting period, of which \$14,000 were earned prior to acquisition. The figure of \$20,000 will appear in the consolidated statement of financial position as follows. 290

	\$
Non-controlling interests working: their share of total retained earnings at the end of the reporting period ($40\% \times \$20,000$)	8,000
Goodwill working: group share of pre-acquisition retained earnings ($60\% \times \$14,000$)	8,400
Consolidated retained earnings working: group share of post-acquisition retained earnings ($60\% \times \$6,000$)	<u>3,600</u>
	<u>20,000</u>

Example: pre acquisition losses of a subsidiary

As an illustration of the entries arising when a subsidiary has pre acquisition losses, suppose P Co acquired all 50,000 \$1 ordinary shares in S Co for \$20,000 on 1 January 20X1 when there was a debit balance of \$35,000 on S Co's retained earnings. In the years 20X1 to 20X4 S Co makes profits of \$40,000 in total, leaving a credit balance of \$5,000 on retained earnings at 31 December 20X4. P Co's retained earnings at the same date are \$70,000.

The consolidation workings would appear as follows:

1. Goodwill

	\$	\$
Consideration transferred		20,000
Net assets acquired as represented by		
Ordinary share capital	50,000	
Retained earnings	<u>(35,000)</u>	

		<u>(15,000)</u>
Goodwill		<u>5,000</u>
2. Retained earnings		
	P Co	S Co
	\$	\$
At the end of the reporting period	70,000	5,000
Pre-acquisition loss		<u>35,000</u>
		<u>40,000</u>
S Co – share of post-acquisition retained earnings		
(40,000 x 100%)	<u>40,000</u>	
	<u>110,000</u>	

13 Fair values in acquisition accounting

To understand the importance of fair values in the acquisition of a subsidiary consider again what we mean by goodwill.

Goodwill. Any excess of the consideration transferred over the acquirer's interest in the fair value of the identifiable assets and liabilities acquired as at the date of the exchange transaction.

(IFRS 3)

The statement of financial position of a subsidiary company at the date it is acquired may not be a guide to the fair value of its net assets. For example, the market value of a freehold building may have risen greatly since it was acquired, but it may appear in the statement of financial position at historical cost less accumulated depreciation.

Fair value is defined as follows by IFRS 13 – it is an important definition.

Fair value. The price that would be received to sell an asset, or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

(IFRS 13)

Fair value adjustment calculations

Until now we have calculated goodwill as the difference between the consideration transferred and the carrying value of net assets acquired by the group. If this calculation is to comply with the definition above we must ensure that the carrying value of the subsidiary's net assets is the same as their fair value.

There are two possible ways of achieving this.

- (a) The subsidiary company might incorporate any necessary revaluations in its own books of account. In this case, we can proceed directly to the consolidation, taking asset values and reserves figures straight from the subsidiary company's statement of financial position.
- (b) The revaluations may be made as a consolidation adjustment without being incorporated in the subsidiary company's books. In this case, we must make the necessary adjustments to the subsidiary's statement of financial position as a working. Only then can we proceed to the consolidation.

Note. Remember that when depreciating assets are revalued there may be a corresponding alteration in the amount of depreciation charged and accumulated.

IFRS 3 and IFRS 13

IFRS 3 sets out general principles for arriving at the fair values of a subsidiary's assets and liabilities. The acquirer should recognise the acquiree's identifiable assets, liabilities and contingent liabilities at the acquisition date only if they satisfy the following criteria.

- (a) In the case of an asset other than an intangible asset, it is probable that any associated future economic benefits will flow to the acquirer, and its fair value can be measured reliably.
- (b) In the case of a liability other than a contingent liability, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation, and its fair value can be measured reliably.
- (c) In the case of an intangible asset or a contingent liability, its fair value can be measured reliably.

The acquiree's identifiable assets and liabilities might include assets and liabilities not previously recognised in the acquiree's financial statements. For example, a tax benefit arising from the acquiree's tax losses that was not recognised by the acquiree may be recognised by the group if the acquirer has future taxable profits against which the unrecognised tax benefit can be applied.

IFRS 13 Fair value measurement provides extensive guidance on how the fair value of assets and liabilities should be established.

This standard requires that the following are considered in determining fair value:

- (a) The asset or liability being measured
- (b) The principal market (i.e. that where the most activity takes place) or where there is no principal market, the most advantageous market (i.e. that in which the best price could be achieved) in which an orderly transaction would take place for the asset or liability.
- (c) The highest and best use of the asset or liability and whether it is used on a standalone basis or in conjunction with other assets or liabilities
- (d) Assumptions that market participants would use when pricing the asset or liability.

Having considered these factors, IFRS 13 provides a hierarchy of inputs for arriving at fair value. It requires that level 1 inputs are used where possible:

Level 1 Quoted prices in active markets for identical assets that the entity can access at the measurement date.

Level 2 Inputs other than quoted prices that are directly or indirectly observable for the asset.

Level 3 Unobservable inputs for the asset.

Examples of fair value and business combinations

For non-financial assets, fair value is decided based on the highest and best use of the asset as determined by a market participant. The following example, adapted from the illustrative examples to IFRS 13, demonstrates what is meant by this.

Example: Land

A Co has acquired land in a business combination. The land is currently developed for industrial use as a site for a factory. The current use of land is presumed to be its highest and best use unless market or other factors suggest a different use. Nearby sites have recently been developed for residential use as sites for high-rise apartment buildings. On the basis of that development and recent zoning and other changes to facilitate that development, A Co determines that the land currently used as a site for a factory could be developed as a site for residential use (i.e. for

high-rise apartment buildings) because market participants would take into account the potential to develop the site for residential use when pricing the land.

How would the highest and best use of the land be determined?

The highest and best use of the land would be determined by comparing both of the following:

- (a) The value of the land as currently developed for industrial use (i.e. the land would be used in combination with other assets, such as the factory, or with other assets and liabilities).
- (b) The value of the land as a vacant site for residential use, taking into account the costs of demolishing the factory and other costs (including the uncertainty about whether the entity would be able to convert the asset to the alternative use) necessary to convert the land to a vacant site (i.e. the land is to be used by market participants on a stand-alone basis).

The highest and best use of the land would be determined on the basis of the higher of those values.

Restructuring and future losses

An acquirer should not recognise liabilities for future losses or other costs expected to be incurred as a result of the business combination.

IFRS 3 explains that a plan to restructure a subsidiary following an acquisition is not a present obligation of the acquiree at the acquisition date. Neither does it meet the definition of a contingent liability. Therefore an acquirer should not recognise a liability for such a restructuring plan as part of allocating the cost of the combination unless the subsidiary was already committed to the plan before the acquisition.

This prevents creative accounting. An acquirer cannot set up a provision for restructuring or future losses of a subsidiary and then release this to profit or loss in subsequent periods in order to reduce losses or smooth profits.

Intangible assets

The acquiree may have intangible assets, such as development expenditure. These can be recognised separately from goodwill only if they are identifiable. An intangible asset is identifiable only if it:

- (a) Is separable, i.e. capable of being separated or divided from the entity and sold, transferred, or exchanged, either individually or together with a related contract, asset or liability, or
- (b) Arises from contractual or other legal rights

Contingent liabilities

Contingent liabilities of the acquirer are recognised if their fair value can be measured reliably. This is a departure from the normal rules in IAS 37; contingent liabilities are not normally recognised, but only disclosed.

After their initial recognition, the acquirer should measure contingent liabilities that are recognised separately at the higher of:

- (a) The amount that would be recognised in accordance with IAS 37
- (b) The amount initially recognised

Cost of a business combination

The general principle is that the acquirer should measure the cost of a business combination as the total of the fair values, at the date of exchange, of assets given, liabilities incurred or assumed, and equity instruments issued by the acquirer, in exchange for control of the acquiree.

Sometimes all or part of the cost of an acquisition is deferred (i.e., does not become payable immediately). The fair value of any deferred consideration is determined by discounting the amounts payable to their present value at the date of exchange.

Where equity instruments (e.g., ordinary shares) of a quoted entity form part of the cost of a combination, the published price at the date of exchange normally provides the best evidence of the instrument's fair value and except in rare circumstances this should be used.

Future losses or other costs expected to be incurred as a result of a combination should not be included in the cost of the combination.

Costs attributable to the combination, for example professional fees and administrative costs, should not be included: they are recognised as an expense when incurred. Costs of issuing debt instruments and equity shares are covered by IAS 32 Financial instruments: presentation, which states that such costs should reduce the proceeds from the debt issue or the equity issue.

14 The consolidated statement of profit or loss

The consolidated statement of profit or loss and other comprehensive income is the consolidated statement of profit or loss with the addition of 'other comprehensive income' attributable to either the parent or one or more subsidiaries. The consolidation work is done in the statement of profit or loss, so that is where we begin.

Simple example: consolidated statement of profit or loss

P Co acquired 75% of the ordinary shares of S Co on that company's incorporation in 20X3. The summarised statements of profit or loss and movement on retained earnings of the two companies for the year ending 31 December 20X9 are set out below.

	P Co	S Co
	\$	\$
Sales revenue	75,000	38,000
Cost of sales	<u>(30,000)</u>	<u>(20,000)</u>
Gross profit	45,000	18,000
Administrative expenses	<u>(14,000)</u>	<u>(8,000)</u>
Profit before tax	31,000	10,000
Income tax expense	<u>(10,000)</u>	<u>(2,000)</u>
Profit for the year	<u><u>21,000</u></u>	<u><u>8,000</u></u>

Note: Movement on retained earnings

Retained earnings brought forward	87,000	17,000
Profit for the year	<u>21,000</u>	<u>8,000</u>
Retained earnings carried forward	<u><u>108,000</u></u>	<u><u>25,000</u></u>

We will prepare the consolidated statement of profit or loss and extract from the statement of changes in equity showing retained earnings and non-controlling interest.

P CO CONSOLIDATED STATEMENT OF PROFIT OR LOSS FOR THE YEAR ENDED 31 DECEMBER 20X9

	\$
Sales revenue (75 + 38)	113,000
Cost of sales (30 + 20)	<u>50,000</u>
Gross profit	63,000
Administrative expenses (14 + 8)	<u>22,000</u>
Profit before tax	41,000
Income tax expense	<u>12,000</u>
Profit for the year	<u>29,000</u>
Profit attributable to:	
Owners of the parent	27,000
Non-controlling interest (\$8,000 x 25%)	<u>2,000</u>
	<u>29,000</u>

STATEMENT OF CHANGES IN EQUITY (EXTRACT)

	Retained Total	Non-controlling Interest	Equity
	Earnings	Interest	Equity
	\$	\$	\$
Balance b/f	99,750	4,250	104,000
Profit for the year	<u>27,000</u>	<u>2,000</u>	<u>29,000</u>
	<u>126,750</u>	<u>6,250</u>	<u>133,000</u>

Notice how the non-controlling interest is dealt with.

- (a) Down to the line 'profit for the year' the whole of S Co.'s results is included without reference to group share or non-controlling share. A one-line adjustment is then inserted to deduct the non-controlling share of S Co.'s profit.
- (b) The non-controlling share (\$4,250) of S Co.'s retained earnings brought forward ($17,000 \times 25\%$) is excluded from group retained earnings. This means that the carried forward figure of \$126,750 is the figure which would appear in the statement of financial position for group retained earnings.

Intra-group trading

Like the consolidated statement of financial position, the consolidated statement of profit or loss should deal with the results of the group as those of a single entity. When one company in a group sells goods to another an identical amount is added to the sales revenue of the first company and to the cost of sales of the second. Yet as far as the entity's dealings with outsiders are concerned no sale has taken place.

The consolidated figures for sales revenue and cost of sales should represent sales to, and purchases from, outsiders. An adjustment is therefore necessary to reduce the sales revenue and cost of sales figures by the value of intra-group sales during the year.

Any unrealised profits on intra group trading should be excluded from the figure for group profits. This will occur whenever goods sold at a profit within the group remain in the inventory of the purchasing company at the year end. The best way to deal with this is to calculate the unrealised profit on unsold inventories at the year end and add this amount back to cost of sales, thereby reducing gross profit.

Example: intra-group trading

Suppose in our earlier example that S Co had recorded sales of \$5,000 to P Co during 20X9. S Co had purchased these goods from outside suppliers at a cost of \$3,000. One half of the goods remained in P Co.'s inventory at 31 December 20X9.

The consolidated statement of profit or loss for the year ended 31 December 20X9 would now be as follows.

\$

Sales revenue (75 + 38 – 5)	108,000
Cost of sales (30 + 20 – 5 + 1*)	<u>(46,000)</u>
Gross profit	62,000
Administrative expenses	<u>(22,000)</u>
Profit before taxation	40,000
Income tax expense	<u>(12,000)</u>
Profit for the year	<u>28,000</u>
Profit attributable to:	
Owners of the parent	26,250
Non-controlling interest	<u>1,750</u>
	<u>28,000</u>

Note:

Retained earnings brought forward	99,750
Profit for the year	<u>26,250</u>
Retained earnings carried forward	<u>126,000</u>

* Unrealised profit: $\frac{1}{2} \times (\$5,000 - \$3,000)$

An adjustment will be made for the unrealised profit against the inventory figure in the consolidated statement of financial position.

Intra-group dividends

In our example so far we have assumed that S Co retains all of its after tax profit. It may be, however, that S Co distributes some of its profits as dividends. As before, the non-controlling interest in the subsidiary's profit should be calculated immediately after the figure of after tax profit. For this purpose, no account need be taken of how much of profit due to the non-controlling interest is to be distributed by S Co as dividend. Note that group retained earnings are only adjusted for dividends paid to the parent company shareholders. Dividends paid by the subsidiary to the parent are cancelled on consolidation and dividends paid to the non-controlling

interest are replaced by the allocation to the non-controlling interest of their share of the profit for the year of the subsidiary.

Pre-acquisition profits

As explained above, the figure for retained earnings carried forward must be the same as the figure for retained earnings in the consolidated statement of financial position. We have seen in previous chapters that retained earnings in the consolidated statement of financial position comprise:

- (a) The whole of the parent company's retained earnings
- (b) A proportion of the subsidiary company's retained earnings. The proportion is the group's share of post-acquisition retained earnings in the subsidiary. From the total retained earnings of the subsidiary we must therefore exclude both the non-controlling share of total retained earnings and the group's share of pre-acquisition retained earnings.

A similar procedure is necessary in the consolidated profit or loss if it is to link up with the consolidated statement of financial position. Previous examples have shown how the non-controlling share of profits is excluded in the statement of profit or loss. Their share of profits for the year is deducted from profit after tax, while the figure for profits brought forward in the consolidation schedule includes only the group's proportion of the subsidiary's profits.

In the same way, when considering examples which include pre acquisition profits in a subsidiary, the figure for profits brought forward should include only the group's share of the post-acquisition retained profits. If the subsidiary is acquired during the accounting year, it is therefore necessary to apportion its profit for the year between pre acquisition and post-acquisition elements. The part-year method is used.

With the part-year method, the entire statement of profit or loss of the subsidiary is split between pre acquisition and post-acquisition proportions. Only the post-acquisition figures are included in the consolidated statement of profit or loss.

15 The consolidated statement of profit or loss and other comprehensive income

A consolidated statement of profit or loss and other comprehensive income is simple to produce once the statement of profit or loss has been prepared. Any item of 'other comprehensive

income' is attributable to either the parent or a subsidiary. If it is attributable to a subsidiary, part of it is allocated to the non-controlling interest.

Here is an example where an 80% subsidiary has 'other comprehensive income'.

CONSOLIDATED STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME FOR
THE YEAR TO 30 APRIL 20X7

	\$'000
Sales revenue	1,600
Cost of sales	(930)
Gross profit	<u>670</u>
Administrative expenses	(255)
Profit before tax	<u>415</u>
Income tax expense	(75)
Profit for the year	<u>340</u>
Other comprehensive income:	
Gain on property revaluation	<u>200</u>
Total comprehensive income for the year	<u>540</u>
Profit attributable to:	
Owners of the parent	332
Non-controlling interest	<u>8</u>
	<u>340</u>
Total comprehensive income attributable to:	
Owners of the parent (332 + (200 × 80%))	492
Non-controlling interest (8 + (200 × 20%))	<u>48</u>
	<u>540</u>

Consolidated statement of changes in equity

These amounts would appear in the consolidated statement of changes in equity as follows:

	Retained earnings \$'000	Revaluation surplus \$'000	Total \$'000	Non-controlling interest \$'000	Total \$'000
Total comprehensive income for the year	332	160	492	48	540

16 The consolidated statement of cash flows

The method of preparing the group statement of cash flows is the same as for the individual entity statement. The aim is to show the cash flows of the group with third parties. As the statement is based on the consolidated financial statements, any intra-group transactions will already have been eliminated.

However there are a number of additional issues to be considered.

Non-controlling interest

The non-controlling interest is not part of the group, so dividends paid to the non-controlling interest should be shown as a cash outflow under 'financing activities'.

Associates

We will be dealing with associates in the next chapter. For the statement of cash flows, it is important just to remember that an associate is also not part of the group. Group 'profit before tax' in the consolidated statement of profit or loss and other comprehensive income will include 'share of profit of associate'. This must be removed as part of the reconciliation to arrive at 'cash generated from operations'. Dividends received from the associate are disclosed as a separate cash flow under 'cash flows from investing activities'.

Acquisition of a subsidiary

If a subsidiary is acquired during the reporting period, the net cash effect of the acquisition is shown separately under 'cash flows from investing activities'. The net cash flow will be the cash amount paid less any cash and cash equivalents acquired.

Example:

P Co acquires 65% of S Co by issuing 200,000 \$1 shares at \$1.60 and paying \$500,000.

S Co.'s statement of financial position at acquisition shows cash and cash equivalents of \$75,000.

In the statement of cash flows this will appear as follows:

	\$'000
Cash flows from investing activities	
Acquisition of S Co, net of cash acquired (500 – 75)	(425)

Note:

Because the cash balance of the acquired subsidiary has been taken into account as a one-line entry, the assets and liabilities of the subsidiary should be excluded when calculating movement on PPE, inventories, receivables etc. Otherwise the cash effect of the acquisition would be double-counted.

Disposal of a subsidiary

The same principle applies when a subsidiary is disposed of during the year. If P Co disposes of its interest in S Co a few years later for \$700,000 when S Co has an overdraft of \$30,000, the statement of cash flows will show:

	\$'000
Cash flows from investing activities	
Disposal of S Co, net of cash disposed of (700 + 30)	730

Again, the assets and liabilities of S Co will be added back in for the purposes of calculating movements over the year, as the effect of the disposal has already been taken into account.

Where dividend paid to the NCI has to be calculated as a balancing figure using the equity balances and the attributable profit, these equity balances must also be adjusted for acquisitions and disposals, before the calculation is done. The NCI added on acquisition of a subsidiary acquired during the year should be deducted and the NCI deducted on disposal of a subsidiary should be added back. The correct amount of dividend paid will then be the balancing figure.

In a reporting period where both an acquisition and a disposal took place, the working would be as follows:

NON-CONTROLLING INTEREST			
	\$m		\$m
NCI deducted on disposal	4	NCI b/f (consolidated SFP)	15
Dividend paid to NCI (bal figure)	3	NCI added on acquisition	5
NCI c/f (consolidated SFP)	<u>20</u>	Profit attributable to NCI	<u>7</u>
	<u>27</u>		<u>27</u>

17 IAS 28: Investments in associates

Here are the main definitions relating to associates:

Associate. An entity, including an unincorporated entity such as a partnership, over which an investor has significant influence and which is neither a subsidiary nor a joint venture of the investor.

Significant influence is the power to participate in the financial and operating policy decisions of the investee but is not control or joint control over those policies.

Equity method. A method of accounting whereby the investment is initially recorded at cost and adjusted thereafter for the post-acquisition change in the investor's share of net assets of the investee. The profit or loss of the investor includes the investor's share of the profit or loss of the investee.

IAS 28 requires all investments in associates to be accounted for in the consolidated accounts using the equity method, unless the investment is classified as 'held for sale' in accordance with IFRS 5 in which case it should be accounted for under IFRS 5 or the exemption below applies.

An investor is exempt from applying the equity method if:

- (a) It is a parent exempt from preparing consolidated financial statements under IAS 27, or
- (b) All of the following apply:
 - I. The investor is a wholly-owned subsidiary or it is a partially owned subsidiary of another entity and its other owners, including those not otherwise entitled to vote, have been informed about, and do not object to, the investor not applying the equity method;
 - II. The investor's securities are not publicly traded
 - III. It is not in the process of issuing securities in public securities markets; and
 - IV. The ultimate or intermediate parent publishes consolidated financial statements that comply with IFRS.

The revised version of IAS 28 no longer allows an investment in an associate to be excluded from equity accounting when an investee operates under severe long-term restrictions that significantly impair its ability to transfer funds to the investor. Significant influence must be lost before the equity method ceases to be applicable.

The use of the equity method should be discontinued from the date that the investor ceases to have significant influence.

From that date, the investor shall account for the investment in accordance with IFRS 9 Financial instruments. The carrying amount of the investment at the date that it ceases to be an associate shall be regarded as its cost on initial measurement as a financial asset under IFRS 9.

Separate financial statements of the investor

If an investor issues consolidated financial statements (because it has subsidiaries), an investment in an associate should be either:

- (a) Accounted for at cost, or
- (b) In accordance with IFRS 9 in its separate financial statements.

If an investor that does not issue consolidated financial statements (i.e. it has no subsidiaries) has an investment in an associate this should similarly be included in the financial statements of the investor either at cost, or in accordance with IFRS 9.

18 The equity method

Many of the procedures required to apply the equity method are the same as are required for full consolidation. In particular, intra-group unrealised profits must be excluded.

Consolidated statement of profit or loss and other comprehensive income

The basic principle is that the investing company (X Co) should take account of its share of the earnings of the associate, Y Co, whether or not Y Co distributes the earnings as dividends. X Co achieves this by adding to consolidated profit the group's share of Y Co.'s profit after tax.

Notice the difference between this treatment and the consolidation of a subsidiary company's results. If Y Co were a subsidiary X Co would take credit for the whole of its sales revenue, cost of sales etc. and would then make a one line adjustment to remove any non-controlling share.

Under equity accounting, the associate's sales revenue, cost of sales and so on are not amalgamated with those of the group. Instead the group share only of the associate's profit after tax and other comprehensive income for the year is included in the relevant sections of the consolidated statement of profit or loss and other comprehensive income.

Consolidated statement of financial position

A figure for investment in associates is shown which at the time of the acquisition must be stated at cost. This amount will increase (decrease) each year by the amount of the group's share of the associated company's profit (loss) for the year.

Example: associate

P Co, a company with subsidiaries, acquires 25,000 of the 100,000 \$1 ordinary shares in A Co for \$60,000 on 1 January 20X8. In the year to 31 December 20X8, A Co earns profits after tax of \$24,000, from which it pays a dividend of \$6,000.

How will A Co.'s results be accounted for in the individual and consolidated accounts of P Co for the year ended 31 December 20X8?

In the individual accounts of P Co, the investment will be recorded on 1 January 20X8 at cost. Unless there is an impairment in the value of the investment (see below), this amount will remain in the individual statement of financial position of P Co permanently. The only entry in P Co.'s individual statement of profit or loss will be to record dividends received. For the year ended 31 December 20X8, P Co will:

DEBIT	Cash	\$1,500
CREDIT	Income from shares in associates	\$1,500

In the consolidated accounts of P Co equity accounting principles will be used to account for the investment in A Co. Consolidated profit after tax will include the group's share of A Co.'s profit after tax ($25\% \times \$24,000 = \$6,000$). To the extent that this has been distributed as dividend, it is already included in P Co.'s individual accounts and will automatically be brought into the consolidated results.

That part of the group's share of profit in the associate which has not been distributed as dividend (\$4,500) will be brought into consolidation by the following adjustment.

DEBIT	Investment in associates	\$4,500
CREDIT	Income from associates	\$4,500

The asset 'Investment in associates' is then stated at \$64,500, being cost plus the group share of post-acquisition retained profits.

19 Presentation of associates

Consolidated statement of profit or loss

The following is a suggested layout for the consolidated statement of profit or loss for a company having subsidiaries as well as associated companies.

	\$'000
Revenue	1,400
Cost of sales	<u>(770)</u>
Gross profit	630
Other income: interest receivable	<u>30</u>
Administrative expenses	(290)
Finance costs	(20)
Share of profit of associate (30 – 13)*	<u>17</u>
Profit before taxation	367
Income tax expense	<u>(145)</u>
Profit for the year	<u><u>222</u></u>
Profit attributable to:	
Owners of the parent	200
Non-controlling interest	<u>22</u>
	<u><u>222</u></u>

* Profit for the year less tax

Consolidated statement of financial position

The consolidated statement of financial position will contain an asset 'Investment in associates'. The amount at which this asset is stated will be its original cost plus the group's share of any profits earned since acquisition which have not been distributed as dividends.

Example: consolidated statement of financial position

On 1 January 20X6 the net tangible assets of A Co amount to \$220,000, financed by 100,000 \$1 ordinary shares and revenue reserves of \$120,000. P Co, a company with subsidiaries, acquires 30,000 of the shares in A Co for \$75,000. During the year ended 31 December 20X6 A Co.'s profit after tax is \$30,000, from which dividends of \$12,000 are paid.

How will P Co.'s investment in A Co would appear in the consolidated statement of financial position at 31 December 20X6?

CONSOLIDATED STATEMENT OF FINANCIAL POSITION AS AT 31 DECEMBER 20X6 (extract)

	\$
Non-current assets	
Investment in associate	
Cost	75,000
Group share of post-acquisition retained profits	
(30% x \$18,000)	<u>5,400</u>
	<u>80,400</u>

The following points are also relevant and are similar to a parent-subsidary consolidation situation.

- (a) Use financial statements drawn up to the same reporting date.
- (b) If this is impracticable, adjust the financial statements for significant transactions/ events in the intervening period. The difference between the reporting date of the associate and that of the investor must be no more than three months.
- (c) Use uniform accounting policies for like transactions and events in similar circumstances, adjusting the associate's statements to reflect group policies if necessary.

'Upstream' and 'downstream' transactions

'Upstream' transactions are, for example, sales from an associate to the investor. 'Downstream' transactions are, for example, sales from the investor to an associate.

Unrealised profits resulting from 'upstream' and 'downstream' transactions between an investor (including its consolidated subsidiaries) and an associate are eliminated to the extent of the investor's interest in the associate. This is very similar to the procedure for eliminating unrealised profit between a parent and a subsidiary. The important thing to remember is that only the group's share is eliminated.

Example: downstream transaction

A Co, a parent with subsidiaries, holds 25% of the equity shares in B Co. During the year, A Co makes sales of \$1,000,000 to B Co at cost plus a 25% mark-up. At the year-end, B Co has all these goods still in inventories.

A Co has made an unrealised profit of \$200,000 ($1,000,000 \times 25/125$) on its sales to the associate. The group's share (25%) of this must be eliminated:

DEBIT	Cost of sales (consolidated profit or loss)	\$50,000
CREDIT	Investment in associate (consolidated statement of financial position)	\$50,000

Because the sale was made to the associate, the group's share of the unsold inventory forms part of the investment in the associate at the year-end. If the associate had made the sale to the parent, the adjustment would have been:

DEBIT	Cost of sales (consolidated profit or loss)	\$50,000
CREDIT	Inventories (consolidated statement of financial position)	\$50,000

Associate's losses

When the equity method is being used and the investor's share of losses of the associate equals or exceeds its interest in the associate, the investor should discontinue including its share of further losses. The investment is reported at nil value. The interest in the associate is normally the carrying amount of the investment in the associate, but it also includes any other long-term interests, for example, long term receivables or loans.

After the investor's interest is reduced to nil, additional losses should only be recognised where the investor has incurred obligations or made payments on behalf of the associate (for example, if it has guaranteed amounts owed to third parties by the associate).

Impairment losses

IAS 39 sets out a list of indications that a financial asset (including an associate) may have become impaired. Any impairment loss is recognised in accordance with IAS 36 Impairment of assets for each associate individually.

In the case of an associate, any impairment loss will be deducted from the carrying amount in the statement of financial position.

The working would be as follows:

	\$
Cost of investment	X
Share of post-acquisition retained earnings	<u>X</u>
	X
Impairment loss	<u>(X)</u>
Interest in associate	<u>X</u>

Chapter 14: Interpretation of financial statements

An accounting ratio is a measure of the two figures which exist between two figures shown in a set of financial statements. For example, the gross profit margin (see below) measure the relationship between gross profit and sales.

Financial analysis tools can be useful in analysing a company's performance and trends in that performance.

- How successfully has the company performed relative to its own past and relative to competitors (comparing one entity with another)?
- How is the company likely to perform in the future comparing with the previous years (comparing one entity with another)?

Sources of information:

The Annual report is a primary source of information for investors.

But this is supplemented by a number of other important information sources

- Face to face meetings with company management
- Results Presentation Press Release/Slides
- Economic Reports
- Industry Reports
- Equity and Credit investors differ in their main focus of analysis

The objectives of the financial analysis process:

- What is the purpose of the analysis? What questions will this analysis answer?
- What level of detail will be needed to accomplish this purpose?
- What data are available for the analysis?
- What are the factors that will influence the analysis?
- What are the analytical limitations and will these limitations potentially impair the analysis?

Types of accounting ratio

- **Profitability ratios:** The profitability ratios are used to assess whether the business has succeed in making an acceptable level of profit.
- **Liquidity ratios:** The liquidity ratios are a measure of the ability of the business to pay its debts as they fall due.

- **Efficiency ratios:** The efficiency ratios provide some indication of the extent to which the assets of the business have been efficiently used and managed.
- **Investment ratios:** The investment ratios are mainly of interest to investors or potential investors may help these users to decide whether or not a business represents a worthwhile investment. However, some of the investment ratios may be of interest to other user groups.

Profitability ratios: The main profitability ratios are:

- Return on capital employed
- Return on equity
- Gross profit margin
- Net profit margin

Return on capital employed (ROCE):

$$\text{Return on capital employed} = \frac{PBIT}{\text{Total capital employed}} \times 100$$

$$\text{Return on capital employed} = \frac{PBIT}{\text{Sales}} \times \frac{\text{Sales}}{\text{Total capital employed}}$$

$$\text{Return on capital employed} = \text{Profit margin} \times \text{Asset turnover}$$

$$\text{Total capital employed} = \text{Total equity} + \text{Total longterm liability}$$

$$\text{Profit Margin} = \frac{PBIT}{\text{Sales}}$$

$$\text{Asset turnover} = \frac{\text{Sales}}{\text{Total capital employed}}$$

It shows (as a percentage) the net profit made for each \$100 capital employed. The higher the ratio the more profitable the business is.

Example:

	Company A	Company B
	\$000	\$000
Sales	14,400	13,800
PBIT	720	690
Share capital & reserves	3,100	2,475
Non- current liabilities	500	400

Solution:

$$\text{ROCE} = \text{Profit margin} \quad \text{Asset turnover}$$

$$= \frac{\text{PBIT}}{\text{Sales}} \times \frac{\text{Sales}}{\text{Total capital employed}}$$

$$\begin{aligned} \text{Company A} &= \frac{720}{14,400} \times \frac{14,400}{3,600} \\ &= 0.05 \quad \times \quad 4.00 \\ &= 0.20 \\ &= 20\% \end{aligned}$$

$$\begin{aligned} \text{Company B} &= \frac{690}{13,800} \times \frac{13,800}{2,875} \\ &= 0.05 \quad \times \quad 4.80 \\ &= 0.24 \\ &= 24\% \end{aligned}$$

Again,

$$\text{ROCE} = \frac{\text{PBIT}}{\text{Total capital employed}}$$

$$\begin{aligned} \text{Company A} &= \frac{720}{3,600} \times 100 \\ &= 20\% \end{aligned}$$

$$\begin{aligned} \text{Company B} &= \frac{690}{2,875} \times 100 \\ &= 24\% \end{aligned}$$

These calculations show that company b has the same profit margin as company A but has a better ROCE because of its better asset turnover.

Return on equity (ROE):

$$ROE = \frac{\text{Profit after tax and preference dividend}}{\text{Ordinary share capital and reserve}} \times 100$$

This profitability ratio concentrates on the company's owners (ordinary shareholders) only and compares their capital with the amount of profit which has been earned on their behalf.

Gross profit margin:

$$\text{Gross profit margin} = \frac{\text{Gross profit}}{\text{Sales}} \times 100$$

This is the amount of gross profit for every \$100 of sales and it is known as the gross profit margin. If the answer turns out to be 15% this would mean that for every \$100 of sales \$15 gross profit is made before any expenses are paid.

High gross profit margin may mean effective purchasing strategy; and/or concentration on low volume-high margin sales.

Low gross profit margin may be an indication of selling products cheaply (i.e. at discount) in order to generate high volume of sales.

Net profit margin:

$$\text{Net profit margin} = \frac{\text{Net profit}}{\text{Sales}} \times 100$$

This calculation will show how much net profit has been made for every \$100 of sales.

A higher percentage than last year or industry average indicates costs are being controlled better; sales prices were high compared to costs.

Company can sell at a discount to retain market share during economic downturn (and/or because of intense competition). If costs remain at same level this will result a lower Net Profit Margin. Companies trading cheap products can gain during economic downturn when customers generally stop buying luxury products and turn to cheap ones.

In large companies, where higher level of economies of scale can be achieved (i.e. lower level of per unit cost) the net profit margin can be higher as a result.

Multinational companies can gain or loss from favourable or adverse exchange rate movements.

Liquidity ratios:

- Current ratio
- Quick ratio (or acid test ratio)

Current ratio:

$$\text{Current ratio} = \frac{\text{Current asset}}{\text{Current liability}}$$

Current ratio is mainly used to give an idea of the company's ability to pay back its short-term liabilities (debt and payables) with its short-term assets (cash, inventory, receivables).

- The higher the current ratio, the more capable the company is of paying its obligations.
- A current ratio of 1.5:1 to 2:1 can mean sufficient current asset to cover current liabilities.
- A current ratio of above 2:1 may mean over investment in working capital (i.e. current asset). Surplus asset can be reinvested to expand the business operation or to increase capacity or to repay debt or can be distributed to shareholders.
- A current ratio under 1 suggests that the company would be unable to pay off its obligations if they came due at that point. Current ratio can be improved by selling of unused non-current assets, by taking long-term loan, by speeding up the receivables collection, and/or by slowing payables payment
- A weak current ratio shows that the company is not in good financial health, but it does not necessarily mean that it will go bankrupt as there are many ways to access financing; but it is definitely not a good sign.
- Companies that have trouble getting paid on their receivables or have long inventory turnover can run into liquidity problems.

Quick ratio:

$$\text{Quick ratio} = \frac{\text{Current asset} - \text{inventory}}{\text{Current liability}}$$

The quick ratio measures a company's ability to meet its short-term obligations with its most liquid assets (as it excludes inventory).

- Inventory is excluded because some companies have difficulty turning their inventory into cash.
- The higher the quick ratio, the better the position of the company.
- A quick ratio of 1:1 is normally most appropriate. For manufacturing businesses, where high level of inventory is held, a lower quick ratio may be appropriate.
- If quick ratio is too low than the current ratio; this could mean that high amount of working capital is tied up in inventory. High amount of inventory means high inventory holding costs.

Efficiency ratios

- Asset turnover
- Inventory holding period
- Receivables collection period
- Payables payment period

Asset turnover:

$$\text{Asset turnover} = \frac{\text{Sales}}{\text{Capital employed}}$$

Inventory holding period:

$$\text{Inventory holding period} = \frac{\text{Average inventory}}{\text{Cost of sales}} \times 365$$

This ratio is an estimate of the average time that inventory is held before it is used or sold. If average inventory period is 30 days. This means that the inventory is 'turned over' (i.e. used) on average 12.16 times (= 365/30) in a year.

- A low turnover implies poor sales and, therefore, excess inventory.
- A high ratio implies either strong sales or ineffective buying.
- High inventory levels are unhealthy because they represent an investment with a rate of return of zero. It may also put company at a great loss if prices start to decline (think about technological products)

Receivables collection period:

$$\text{Receivables collection period} = \frac{\text{Average trade receivables}}{\text{Credit sales}} \times 365$$

An approximate measure of the length of time customers take to pay what they owe.

- Average Receivables Collection Period similar as Average Payables Payment Period may be an indication of better credit control policy
- Collection Period of less than 30 days may seem normal. Significantly in excess of 30 days might be representative of poor management of funds of a business. However, some companies such as exporting companies must allow generous credit terms (may be 60 days) to win customers; whereas retailer may sell only or mainly on cash (may be collection period of not more than 10 days).
- A high or increasing collection period may mean poorly managed credit control function, and increased risk of bad debts. This also may mean over investment in receivables.
- However, increase in collection period might be a deliberate policy to increase sales by offering better credit terms than competitors.
- Decreasing or low collection period may mean tighten credit control policy; which may cause declining customer numbers (i.e. reduction of sales)

Payables payment period:

$$\text{Payables payment period} = \frac{\text{Average trade payables}}{\text{Credit purchase}} \times 365$$

Increasing or long payment period may indicate liquidity problem; and also may mean losing of prompt payment discounts.

- A longer payment period may also mean company has succeeded in obtaining very favourable credit terms from its suppliers; contradictorily, this may also mean unethical business practice.
- Declining or short payment period may indicate business has sufficient cash to meet payables. A short payment period may put company's credit ratings in higher position.
- If collection period is higher than payment period then it can cause cash flow difficulties

Working capital cycle:

Working capital cycle (in days)

= Inventory holding period

+ Receivables collection period – Payables payment period

- working capital cycle sometime also referred as cash operating cycle
- This cycle is the length of time between cash payment to suppliers and cash received from customers. This measures how long a firm will be deprived of cash.
- A company could even achieve a negative cycle by collecting from customers before paying suppliers. This policy of strict collections and delay payments is not always sustainable or appreciable by customers and suppliers.

Investment ratios

- Earnings per share
- Price earnings (P/E) ratio
- Dividend cover
- Dividend yield
- Capital gearing ratio
- Interest cover

Earnings per share:

$$\text{Earnings per share} = \frac{\text{Profit attributable to ordinary shareholders}}{\text{No. of ordinary shares}}$$

EPS is generally considered to be the single most important variable in determining a share's price. This is a key measure of company performance from ordinary shareholders' point of view.

- EPS shows the amount of profit attributable to each ordinary share. But, it does not represent actual income of the ordinary shareholders.
- Increase in EPS generally indicates success; whereas a decrease is not welcomed by shareholders.
- A constant growth in EPS may result in favourable movements (i.e. increase) in share price.
- Both right issue and bonus issue of shares result in a fall of EPS. So, care must be taken while interpreting.
- EPS often ignores the capital required to generate the earnings. Two companies could generate the same EPS, but one could do so with less investment; this could mean that this company was efficient at using its capital to generate income.

Price earnings (P/E) ratio:

$$\text{Price earnings } \left(\frac{P}{E}\right) \text{ ratio} = \frac{\text{Market price per ordinary shares}}{\text{Earnings per share}}$$

P/E ratio is a basic measure of company performance from the market's point of view.

- P/E ratio shows how much money investors are willing to pay for per dollar of earnings. It gives an indication of the confidence that investors have in the future prosperity (i.e. earnings) of the business.
- A P/E ratio of 1 shows very little confidence on the company's future prosperity; whereas, a P/E ratio of 20 expresses a great deal of optimism about the future of a company. Market can over-value or under-value company share depending of information available.
- In a very basic term, a P/E ratio of 20 may mean investors are paying equivalent of 20 years' earnings (at current EPS level) to own a share in the company.

Dividend cover:

$$\text{Dividend cover} = \frac{\text{Earnings per share}}{\text{Dividend per share}}$$

Dividend cover represents how many times dividend could have paid from the profit attributable to ordinary shareholders.

- Dividend cover is a measure of the ability of a company to maintain the level of dividend paid out. The higher the cover, the better the ability to maintain dividend pay-out if profits drop.
- Typically, a ratio of 2 or higher is considered safe in the sense that the company can well afford the dividend; but dividend cover below 1.5 may seem risky.
- If the dividend cover is below 1 then the company using its retained earnings from previous years to pay current year's dividend
- A low level of dividend cover might be acceptable in a company with very stable profits, but the same level of cover at company with volatile profits would indicate that dividends are at risk.

Dividend yield:

$$\text{Dividend yield} = \frac{\text{Dividend per share}}{\text{Market price per share}}$$

Dividend Yield is a financial ratio that shows how much a company pays out in dividends each year relative to its share price.

- In the absence of any capital gains, the Dividend Yield is the return on investment for a stock.
- Investors can secure a minimum stream of cash flow from their investment portfolio by investing in shares which is paying relatively high and stable dividend yields.
- Mature and well-established companies tend to have higher dividend yields; while young and growth oriented companies tend to have lower yield. Many fast growing companies do not have a dividend yield at all because they do not pay-out dividends at all.

Capital gearing ratio:

$$\text{Capital gearing ratio} = \frac{\text{Debt}}{\text{Debt} + \text{Equity}}$$

A gearing level of more than 50% (where Debt Capital to Total Capital used) or more than 100% (where Debt Capital to Equity Capital used) means company is high geared.

- Risk is high for investors in a high geared company because of obligation to pay the interest and repaying capital on time.
- The standard level of gearing depends on industry; and some companies can be zero geared (i.e. 100% equity financed).
Sometimes lender (i.e. bank) can put a covenant on highest level of gearing (i.e. debt).
- A relatively higher gearing may mean company adopted an aggressive strategy to expand its operation. This has to be justified with sales and profit growth. A higher gearing may also mean company is having financial difficulties; so may be a going concern.
- A low or declining gearing may mean company is getting stronger financially and confident on future earnings.
- Where gearing is high, a high EPS may not be appreciated by the investors because of high risk; their required rate of return will increase.

Interest cover:

$$\text{Interest cover} = \frac{\text{PBIT}}{\text{Interest charge}}$$

Interest cover is a measure of the adequacy of a company's profit relative to interest payment on its debt.

- A high interest cover ratio means that the business is easily able to meet its interest obligations from profits. Similarly, a low level of interest cover ratio means that the business is potentially in danger of not being able to meet its interest obligations.
- Interest Cover of more than 2 is normally considered reasonably safe. But, companies with very volatile earnings may require an even higher level of Interest Cover.
- Interest Cover of less than 1 means the company did not earn sufficient earning (i.e. profit) to meet its interest charge; and this may trigger going concern.

Limitations of ratio analysis:

Lack of standard definitions

- The heterogeneity or homogeneity of a company's operating activities.
- Figures taken from the statement of financial position may be unrepresentative
- Accounting policies may differ
- Misinterpretation is possible

Example 1

The following data has been extracted from a company's statements of comprehensive income for the year to 31 July 2014 and 2015.

	31 July 2015	31 July 2014
	\$000	\$000
Sales	9,170	8,350
Cos	<u>(6,220)</u>	<u>(5,670)</u>
Gross profit	2,950	2,680
Operating expenses	(1,280)	(1,230)
Interest payable	<u>Nil</u>	<u>Nil</u>
PBT	1,670	1,450

Calculate the gross profit margin and net profit margin for each year.

Solution:

2015

2014

Gross profit margin	$\frac{2,950}{9,170} \times 100$ = 32.2%	$\frac{2,680}{8,350} \times 100$ = 32.1%
Net profit margin	$\frac{1,670}{9,170} \times 100$ = 18.2%	$\frac{1,450}{8,350} \times 100$ = 17.4%

Example 2

The following information has been extracted from the financial statements of company S and Company M for the year to 31 December 2014. Company S is a supermarket chain and Company M is a manufacturer.

	<i>Company S</i> \$m	<i>Company M</i> \$m
Current assets:		
Inventories	970	1,750
Trade receivables	40	1,880
Cash and bank balances	<u>570</u>	<u>290</u>
	1580	3920
Current liabilities	2,470	2,120

Calculate the current ratio and quick ratio for each company.

Solution:

	Company S	Company M
Gross profit margin	$\frac{1,580}{2,470}$ = 0.64	$\frac{3,920}{2,120}$ = 1.85
Net profit margin	$\frac{610}{2,470}$ = 0.25	$\frac{2,170}{2,120}$ = 1.02

Example 3

Company X and Company Y each have a PBIT of \$500,000 for the year to 30 June 2015. Extracts from the companies statements of financial position as at 30 June 2015 are as follows:

X Y

	\$000	\$000
Ordinary share capital	800	800
Reserves	2,700	200
Non-current liabilities:		
10% long-term loan	500	3,000

There are no preference shares. Tax rate is 20%.

- (a) Calculate the capital gearing ratio for each company.
- (b) Calculate the amount of the profit for the year to 30 June 2015 which is available for distribution to the ordinary shareholders.
- (c) Re-work part (b) of this example, now assuming that each company's PBIT for the year to 30 June 2015 is:
 - (i) decreased by 20% to \$400,000
 - (ii) increased by the 20% to \$600,000.
- (d) Comment on the result of these calculations.

Solution:

- (a) The capital gearing ratio of Company X is $500/4,000 = 12.5\%$

The capital gearing ratio of company Y is $3,000/4,000 = 75\%$

- (b)

	X	Y
PBIT	500	500
Interest payable	<u>(50)</u>	<u>(300)</u>
PBT	450	200
Tax 20%	<u>(90)</u>	<u>(40)</u>
PAT	360	160

The amount of profit available to ordinary shareholders is \$360,000 in the case of company X and \$160,000 in the case of company Y.

- (c)

*(i) PBIT decreased by 20% to
\$400,000*

*(ii) PBIT increased by 20% to
\$600,000*

	X	Y	X	Y
PBIT	400	400	600	600
Interest payable	<u>(50)</u>	<u>(300)</u>	<u>(50)</u>	<u>(300)</u>
PBT	350	100	550	300
Tax 20%	<u>(70)</u>	<u>(20)</u>	<u>(110)</u>	<u>(60)</u>
PAT	280	80	440	240

A 20% increase or decrease in PBIT increase/decrease the profit available to ordinary shareholder of company X (low geared) by 22% (approx.) but the increase or decrease for the shareholder of company Y (high-geared) is 50%.

This demonstrates that, for a high geared company, any increase or decrease in PBIT will cause a disproportionate increase or decrease in the profit available to the ordinary shareholders. This suggests that the ordinary shareholders of high geared company are subject to an increased level of risk.