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P2 INT Study Text
Corporate Reporting

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Paper P2

Corporate Reporting (International)

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Syllabus and study guide

Aim

To apply knowledge, skills and exercise professional judgement in the application and evaluation of financial reporting principles and practices in a range of business contexts and situations.

Main capabilities

On successful completion of this paper, candidates should be able to:

A Discuss the professional and ethical duties of the accountant

B Evaluate the financial reporting framework

C Advise on and report the financial performance of entities

D Prepare the financial statements of groups of entities in accordance with relevant accounting standards

E Explain reporting issues relating to specialised entities

F Discuss the implications of changes in accounting regulation on financial reporting

G Appraise the financial performance and position of entities

H Evaluate current developments

Syllabus content

A The professional and ethical duty of the accountant

1. Professional behaviour and compliance with accounting standards
2. Ethical requirements of corporate reporting and the consequences of unethical behaviour
3. Social responsibility

B The financial reporting framework

1. The contribution and limitations of financial statements in meeting the needs of users and capital markets
2. The applications, strengths and weaknesses of an accounting framework
3. Critical evaluation of principles and practices

C Reporting the financial performance of entities

1. Performance reporting
2. Non-current assets
3. Financial instruments
4. Leases
5. Segment reporting
6. Employee benefits
7. Income taxes
8. Provisions, contingencies and events after the reporting date
9. Related parties
10. Share-based payment

D Financial statements of groups of entities

1. Group accounting including statements of cash flows
2. Continuing and discontinued interests
3. Changes in group structures
4. Foreign transactions and entities

E Specialised entities

1. Financial reporting in specialised, not-for-profit and public sector entities
2. Reporting requirements of small and medium- sized entities (SMEs)

F Implications of changes in accounting regulation on financial reporting

1. The effect of changes in accounting standards on accounting systems
2. Proposed changes to accounting standards

G The appraisal of financial performance and position of entities

1. The creation of suitable accounting policies
2. Analysis and interpretation of financial information and measurement of performance

H Current developments

1. Environmental and social reporting
2. Convergence between national and international reporting standards
3. Comparison of national reporting requirements
4. Current reporting issues

Approach to examining the syllabus

The syllabus is assessed by a three-hour paper-based examination. It examines professional competences within the corporate reporting environment.

Students will be examined on concepts, theories, and principles, and on their ability to question and comment on proposed accounting treatments.

Students should be capable of relating professional issues to relevant concepts and practical situations. The evaluation of alternative accounting practices and the identification and prioritisation of issues will be a key element of the paper. Professional and ethical judgement will need to be exercised, together with the integration of technical knowledge when addressing corporate reporting issues in a business context.

Global issues will be addressed via the current issues questions on the paper. Students will be required to adopt either a stakeholder or an external focus in answering questions and to demonstrate personal skills such as problem solving, dealing with information and decision making.

The paper also deals with specific professional knowledge appropriate to the preparation and presentation of consolidated and other financial statements from accounting data to conform with accounting standards.

The paper will comprise two sections.

Section A	Compulsory question	50 marks
Section B	2 from 3 questions of 25 marks each	50 marks
		100 marks

Section A will consist of one scenario-based question worth 50 marks. It will deal with the preparation of consolidated financial statements including group statements of cash flows and with issues in financial reporting.

Students will be required to answer two out of three questions in Section B, which will normally comprise two questions which will be scenario or case-study based and one question which will be an essay. Section B could deal with any aspects of the syllabus.

Study Guide

This study guide more detailed guidance on the syllabus. You should use this as the basis of your studies.

A THE PROFESSIONAL AND ETHICAL DUTIES OF THE ACCOUNTANT

1. Professional behaviour and compliance with accounting standards

a) Appraise and discuss the ethical and professional issues in advising on corporate reporting.

b) Assess the relevance and importance of ethical and professional issues in complying with accounting standards.

2. Ethical requirements of corporate reporting and the consequences of unethical behaviour

a) Appraise the potential ethical implications of professional and managerial decisions in the preparation of corporate reports.

b) Assess the consequences of not upholding ethical principles in the preparation of corporate reports.

3. Social Responsibility

a) Discuss the increased demand for transparency in corporate reports, and the emergence of non-financial reporting standards.

b) Discuss the progress towards a framework for environmental and sustainability reporting.

B THE FINANCIAL REPORTING FRAMEWORK

1. The contribution and limitations of financial statements in meeting users' and capital markets' needs

a) Evaluate the consistency and clarity of corporate reports.

b) Assess the insight into financial and operational risks provided by corporate reports.

c) Discuss the usefulness of corporate reports in making investment decisions.

2. The applications, strengths and weaknesses of an accounting framework

a) Evaluate the valuation models adopted by standard setters.

b) Discuss the use of an accounting framework in underpinning the production of accounting standards.

c) Assess the success of such a framework in introducing rigorous and consistent accounting standards.

3. Critical evaluation of principles and practices

a) Identify the relationship between accounting theory and practice.

b) Critically evaluate accounting principles and practices used in corporate reporting.

C REPORTING THE FINANCIAL PERFORMANCE OF ENTITIES

1. Performance reporting

a) Prepare reports relating to corporate performance for external stakeholders.

b) Discuss the issues relating to the recognition of revenue

c) Evaluate proposed changes to reporting financial performance.

2. Non-current assets

a) Apply and discuss the timing of the recognition of non-current assets and the determination of their carrying amounts including impairments and revaluations.

b) Apply and discuss the treatment of non-current assets held for sale.

c) Apply and discuss the accounting treatment of investment properties including classification, recognition and measurement issues.

d) Apply and discuss the accounting treatment of intangible assets including the criteria for recognition and measurement subsequent to acquisition and classification.

3. Financial instruments

a) Apply and discuss the recognition and de-recognition of financial assets and financial liabilities.

b) Apply and discuss the classification of financial assets and financial liabilities and their measurement.

c) Apply and discuss the treatment of gains and losses arising on financial assets and financial liabilities.

d) Apply and discuss the treatment of impairments of financial assets.

e) Account for derivative financial instruments, and simple embedded derivatives.

f) Outline the principles of hedge accounting and account for fair value hedges and cash flow hedges including hedge effectiveness.

4. Leases

a) Apply and discuss the classification of leases and accounting for leases by lessors and lessees.

b) Account for and discuss sale and leaseback transactions.

5. Segment reporting

a) Determine business and geographical segments, and reportable segments.

b) Specify and discuss the nature of segment information to be disclosed.

6. Employee benefits

a) Apply and discuss the accounting treatment of defined contribution and defined benefit plans.

b) Account for gains and losses on settlements and curtailments.

c) Account for the "Asset Ceiling" test and the reporting of actuarial gains and losses.

7. Income taxes

a) Apply and discuss the recognition and measurement of deferred tax liabilities and deferred tax assets including the exceptions to recognition.

b) Determine the recognition of tax expense or income and its inclusion in the financial statements.

8. Provisions, contingencies and events after the reporting date

a) Apply and discuss the recognition, derecognition and measurement of provisions, contingent liabilities and contingent assets including environmental provisions.

b) Calculate and discuss restructuring provisions.

c) Apply and discuss the accounting for events after the reporting date.

d) Determine and report going concern issues arising after the reporting date.

9. Related parties

a) Determine the parties considered to be related to an entity.

b) Identify the implications of related party relationships and the need for disclosure.

10. Share based payment

a) Apply and discuss the recognition and measurement criteria for share-based payment transactions.

b) Account for modifications, cancellations and settlements of share based payment transactions.

D FINANCIAL STATEMENTS OF GROUPS OF ENTITIES

1. Group accounting including statements of cash flows

a) Apply the method of accounting for business combinations including complex group structures.

b) Apply the principles in determining the cost of a business combination.

c) Apply the recognition and measurement criteria for identifiable acquired assets and liabilities and goodwill including step acquisitions.

d) Apply and discuss the criteria used to identify a subsidiary and an associate.

e) Determine and apply appropriate procedures to be used in preparing group financial statements.

f) Apply the equity method of accounting for associates.

g) Outline and apply the key definitions and accounting methods which relate to interests in joint ventures.

h) Prepare and discuss group statements of cash flows.

2. Continuing and discontinued interests

a) Prepare group financial statements where activities have been discontinued, or have been acquired or disposed of in the period.

b) Apply and discuss the treatment of a subsidiary which has been acquired exclusively with a view to subsequent disposal.

3. Changes in group structures

a) Discuss the reasons behind a group reorganisation.

b) Evaluate and assess the principal terms of a proposed group reorganisation.

4. Foreign transactions and entities

a) Outline and apply the translation of foreign currency amounts and transactions into the functional currency and the presentational currency.

b) Account for the consolidation of foreign operations and their disposal.

c) Describe the principal objectives of establishing a standard for enterprises reporting in the currency of a hyper inflationary economy.

E SPECIALISED ENTITIES

1. Financial reporting in specialised, not-for-profit and public sector entities

a) Apply knowledge from the syllabus to straightforward transactions and events arising in specialised, not-for-profit, and public sector entities.

2. Reporting requirements of small and medium entities (SMEs)

a) Outline the principal considerations in developing a set of accounting standards for SMEs.

b) Discuss solutions to the problem of differential financial reporting.

F IMPLICATIONS OF CHANGES IN ACCOUNTING REGULATION ON FINANCIAL REPORTING

1. The effect of changes in accounting standards on accounting systems

a) Apply and discuss the accounting implications of the first time adoption of a body of new accounting standards.

b) Outline the issues in implementing a change to new accounting standards including organisational, behavioural, and procedural changes within the entity.

2. Proposed changes to accounting standards

a) Identify issues and deficiencies which have led to a proposed change to an accounting standard.

b) Apply and discuss the implications of a proposed change to an accounting standard on the performance and statement of financial position of an entity.

G THE APPRAISAL OF FINANCIAL PERFORMANCE AND POSITION OF ENTITIES

1. The creation of suitable accounting policies

a) Develop accounting policies for an entity which meet the entity's reporting requirements.

b) Identify accounting treatments adopted in financial statements and assess their suitability and acceptability.

2. Analysis and interpretation of financial information and measurement of performance

a) Select and calculate relevant indicators of financial and non-financial performance.

b) Identify and evaluate significant features and issues in financial statements.

c) Highlight inconsistencies in financial information through analysis and application of knowledge.

d) Make inferences from the analysis of information taking into account the limitation of the information, the analytical methods used and the business environment in which the entity operates.

H CURRENT DEVELOPMENTS

1. Environmental and social reporting

a) Appraise the impact of environmental, social, and ethical factors on performance measurement.

b) Evaluate current reporting requirements in the area.

c) Discuss why entities might include disclosures relating to the environment and society.

2. Convergence between national and international reporting standards

a) Evaluate the implications, nationally and globally, of convergence with International Financial Reporting Standards.

b) Discuss the implementation issues arising from the convergence process.

3. Comparison of national reporting requirements

a) Identify the reasons for major differences in accounting practices, including culture.

b) Discuss the influence of national regulators on international financial reporting.

4. Current reporting issues

a) Discuss current issues in corporate reporting.

CHAPTER 1

The financial reporting framework

Contents

The regulatory framework

- Introduction
- The need for regulation
- Sources of regulation
- Principles and rules

1 The regulatory framework

1.1 Introduction

Much of the content of this chapter will already be familiar to you. The regulatory framework has already been examined in your previous studies. This subject is still examinable, but the focus is slightly different. The Examiner expects higher level skills, expecting you to be able to assess an accounting scenario or case study and give advice on dealing with problems that are evident in the scenario.

For example you may be given a situation where an entity is not following the guidance of an accounting standard, and you may be asked to provide advice. These questions will require that you have a good understanding of the relevant accounting standards as well as the Framework, which provides the underpinning for accounting standards.

Note on terminology

You need to be aware of the changes in terminology that have been introduced into accounting standards and financial reporting, as well as the changes in the nature and content of some financial statements.

- The 'balance sheet' has now been re-named the 'statement of financial position', on the grounds that this explains better what it actually is.
- As a result, 'events after the balance sheet date' are now called 'events after the reporting period' and the 'balance sheet date' is the 'end of the reporting period'.
- In consolidated accounts, 'minority interests' are now called 'non-controlling interests' or NCI.
- The previous requirement for entities to provide an income statement as part of their financial statements has been replaced by a requirement for a statement of comprehensive income. The nature of comprehensive income and the reason for reporting comprehensive income are explained in detail in a later chapter. (For convenience, this text will often use 'income statement' to mean the part of the statement of comprehensive income that reports profit or loss for the period.)

It might be worth noting that these changes are the result of regulation – a revised accounting standard IAS 1 (2007).

1.2 The need for regulation

There are several reasons why financial reporting practice should be regulated. The most obvious one is that without it, an entity would be free to adopt any accounting treatment that it chose. There are other reasons.

- Persons external to the business are normally dependent on the published financial statements for information about an entity's activities. Regulation ensures that external users of financial statements are provided with information that is relevant to their decisions and reliable.
- Accounting standards and other forms of regulation help to ensure that entities adopt similar accounting treatments for similar items and account for similar transactions in the same way over time. This makes it possible to compare the financial statements of different entities and to compare an entity's performance for the current year with its performance in previous years.
- Without regulation, management would adopt whichever accounting treatment presented its results and position in the best possible light. Sometimes management might deliberately mislead users of the financial statements.

1.3 Sources of regulation

The main sources of regulation are:

- accounting standards
- company law
- for listed companies, the listing rules of the relevant Stock Exchange.

Accounting standards are authoritative statements of how particular types of transactions and events are reflected in the financial statements. In some countries (for example in the UK) they have legal authority, but in most countries they do not have the force of law.

Company law varies from country to country, but typically it sets out rules for determining profits available for distribution, issuing and redeeming share capital, the reserves that a company must have and the uses to which they can be put. These matters are not covered in accounting standards.

Listing rules set out the information which entities must supply when their shares are traded on a major stock market. They must comply with these rules in order to maintain their listing. These rules include requirements relating to information, including financial reports, that entities must prepare and provide to the stock market while they are listed.

1.4 Principles and rules

Company law consists of detailed rules. Accounting standards may be rules-based or principles-based. IASs and IFRSs are mainly principles based, though some would argue that in practice they are a mixture of rules and principles.

It is possible for rules and principles to complement each other. Many countries (including the UK, Canada and Australia) have a regulatory system in which

company law deals only with a few specific matters. Detailed financial reporting practice is developed by the accounting profession through accounting standards. Accounting standards are generally (though not always) principles-based. This allows reporting practice to develop over time in response to the needs of users and changes in the business environment. Accounting standards usually allow preparers to exercise judgement in developing accounting policies that are appropriate to the circumstances of a particular entity.

In other countries (including most European countries, the USA and Japan), the content of financial statements and accounting practice are prescribed in great detail by company law. There is very little scope for individual judgement. Until fairly recently, accounting standards were almost non-existent. Because the existing framework is based on detailed rules, users of the financial statements tend to view principles-based accounting as insufficiently rigorous.

Constitution and objectives of the IASC Foundation and the IASB

- The IASC Foundation
- Structure of the IASC Foundation
- The International Accounting Standards Board (IASB)
- The International Financial Reporting Interpretations Committee (IFRIC)
- Standards Advisory Council (SAC)
- The influence of IOSCO
- IFRSs and IASs
- National standard setters and the IASB

2 Constitution and objectives of the IASC Foundation and IASB

2.1 The IASC Foundation

The original International Accounting Standards Committee (IASC) was established in 1973 to develop international accounting standards. The aim of international standards is to harmonise accounting procedures throughout the world. The first International Accounting Standards (IASs) were issued in 1975.

However, international accounting standards cannot be applied in any country without the approval of the national regulators in that country. Many countries, including the US and the UK, have continued to develop their own national accounting standards.

In 2001, the constitution of the IASC was altered, and the Trustees formed the International Accounting Standards Committee Foundation or **IASC Foundation**.

The 19 Trustees of the IASC Foundation are responsible for:

- governance of the Foundation and the bodies within it
- fund-raising.

The **International Accounting Standards Board (IASB)** is the standard-setting body of the IASC Foundation.

The chairman of the IASB is also the Chief Executive of the IASC Foundation, and is accountable to the Trustees.

The objectives of the IASC Foundation

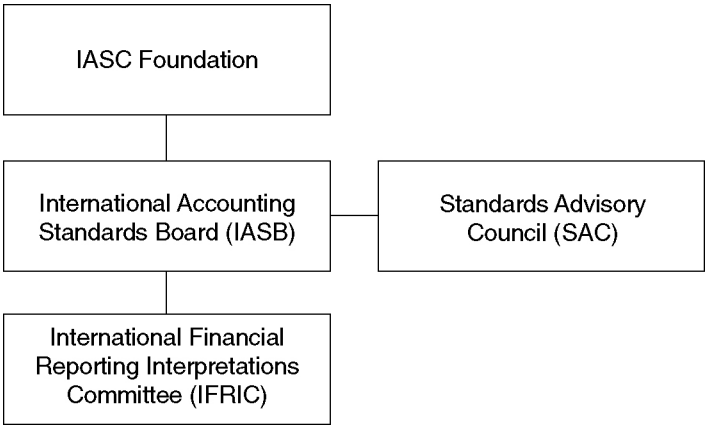
The objectives of the IASC Foundation are to:

- develop, in the public interest, a single set of high-quality global accounting standards

- promote the use and rigorous application of those standards
- to take account of the special needs of small and medium sized entities and emerging economies
- to bring about the convergence of national accounting standards and the international accounting standards.

2.2 Structure of the IASC Foundation

The current structure of the IASC Foundation is as follows:



2.3 The International Accounting Standards Board (IASB)

The IASB is responsible for developing international accounting standards.

The IASB consists of 14 members, all with technical expertise in accounting, who are appointed by the Trustees. Each IASB member is appointed for a five-year term, which might be renewed once for a further five years.

Each IASB member has one vote, and approval of eight members is required for the publication of:

- an exposure draft
- a revised International Accounting Standard (IAS)
- an International Financial Reporting Standard (IFRS)
- a final Interpretation of the International Financial Reporting Interpretations Committee (IFRIC).

The IASB has full responsibility for all IASB technical matters, including the issue of IFRSs and revised IASs, and has full discretion over the technical agenda of the IASB.

2.4 The International Financial Reporting Interpretations Committee (IFRIC)

The role of IFRIC is to issue rapid guidance where there are differing possible interpretations of an international accounting standard. Its role is therefore to:

- interpret international accounting standards (IASs and IFRSs)
- issue timely guidance on issues not covered by an IAS or IFRS, within the context of the IASB Framework
- publish draft Interpretations for public comment. After studying responses to the draft Interpretation, it will obtain IASB approval for a final (published) Interpretation.

2.5 Standards Advisory Council (SAC)

The Standards Advisory Council (SAC) provides a forum through which the IASB is able to gather opinions and advice from different countries and industries. The SAC consists of experts from different countries and different business sectors, who offer advice to the IASB.

2.6 The influence of IOSCO

IOSCO is the International Organisation of Securities Commissions. Securities Commissions are the regulators of the stock markets in their country. The US Securities and Exchange Commission (SEC) is a key IOSCO member. (The Securities Commission in the UK is the Financial Services Authority.)

Within each country, the Securities Commission is responsible for the listing rules that companies must follow if they wish to obtain a listing for their shares. (A listing is needed before the shares can be traded on a major stock market.) An aim of IOSCO is to develop international investment, and a view of IOSCO is that international investment will be encouraged if all major companies use the same accounting standards for reporting their financial position and performance.

IOSCO has therefore been an influential supporter of the development of international accounting standards. An IOSCO representative is a non-voting observer at meetings of the IASB.

In 1995 the IASC agreed with IOSCO to develop a set of core standards. IOSCO also agreed that if it approved these core standards, it would endorse them as an acceptable basis of accounting for companies seeking to raise capital and list their shares in all global stock markets (including the US).

The IASC completed its core standards with the issue of IAS 39 in December 1998. They were endorsed by IOSCO in 2000. IOSCO has now recommended that its members (including the SEC) should permit multinational issuers of shares to use financial statements based on IASs and IFRSs for cross-border share offerings and listings. (The SEC is one of the few authorities that still does not accept IFRS financial statements for listing purposes. However, the US Financial Accounting Standards Board and the IASB are now engaged in a convergence project to create a single set of accounting standards.)

In 2004, the European Union (EU) agreed that all listed European companies should prepare their group financial statements in accordance with IASs and IFRSs, for periods beginning on or after 1st January 2005.

Companies listed on any stock exchange in the EU must therefore publish accounts that comply with international accounting standards.

2.7 IFRSs and IASs

When the new Constitution of the IASC Foundation was set up in 2001, the IASB became the body responsible for:

- developing and publishing accounting standards as IFRSs and
- approving and publishing Interpretations of IFRSs.

Before the new Constitution was established, standards had been published as International Accounting Standards (IASs) and Interpretations were published as SIC Interpretations.

The IASB decided that all IASs and SICs that had been issued previously would continue to be applicable, unless they are subsequently amended or withdrawn. This means that IASs still in issue have the same status as IFRSs. It is convenient to refer to IASs and IFRSs as 'international accounting standards'.

2.8 National standard setters and the IASB

The IASB has no power to enforce its standards. Without the support of at least the major national standard setters, IFRSs are unlikely to be adopted.

However, there are strong arguments for international convergence. (International convergence means that the accounting standards of different countries move towards each other, so that they are increasingly similar.) Most national standard setters are committed to the principle of international convergence. Over 100 countries have now adopted IFRSs, at least for major companies.

All the major national standard setting bodies are represented on the IASB, so that they can influence the development of new standards and their views are taken into account.

All the major national standard setters issue Discussion Papers and Exposure Drafts in their own countries so that preparers and users in each country can comment on them. Several national standard setters (including the UK ASB) allow entities to adopt IFRSs rather than local standards if they choose. Many standard setters are carrying out short term convergence projects in which domestic standards are moved closer to IFRSs and IASs.

In addition, the IASB has been working with national standard setters on specific projects. For example:

- the IASB and the UK ASB worked together to develop IAS 36 *Impairment of assets* and IAS 37 *Provisions, contingent liabilities and contingent assets* (and the equivalent UK standards)
- some other recent standards have been developed by a group of national standard setters and the IASB working together
- the IASB Framework was originally based on work carried out by the US FASB; the Framework has in turn influenced the UK ASB in developing its own conceptual framework
- national standard setters sometimes carry out the research for IASB projects. For example, the Canadian ASB has carried out work on measurement objectives and have issued a discussion paper on this topic.

The role of the FASB: the USA and IFRSs

The US Financial Accounting Standards Board (FASB) has a special role in developing new international standards.

The IASB and the FASB are currently working together in the following ways:

- A short-term convergence project aims to reduce differences between certain IASs and IFRSs and certain US standards. The IASB has issued IFRS 5 *Non-current assets held for sale and discontinued operations* as a result of this project.
- Several joint projects are in progress to develop new standards on business combinations, revenue recognition and performance reporting.
- The two standard setters are jointly developing a new conceptual framework. This will eventually replace the current IASB Framework.

Even so, US GAAP is much more rules-based than IFRSs, and it has taken time for US companies to accept a principles-based regulatory system. Many preparers and users of financial statements outside the USA are concerned about the influence of the FASB. Their main concern is that future international standards will be suitable for large listed companies only and will be too rigid and detailed for small and medium sized entities and those in developing countries.

In August 2008, the Securities and Exchange Commission (the regulator of the US stock markets) announced a provisional 'road map' for the switch by US companies from US reporting standards to international financial reporting standards. This is expected to occur in 2014, possibly earlier for some US companies, provided that certain conditions are met by 2011.

A conceptual framework for financial reporting

- The meaning of GAAP
- The meaning of a conceptual framework
- The purpose of a conceptual framework
- The alternative to a conceptual framework

3 A conceptual framework for financial reporting

3.1 The meaning of GAAP

The preparation and presentation of financial statements is based on a large number of concepts, principles and detailed rules. Some of these are contained in law, and others are in financial reporting standards. Many of the most fundamental concepts are not contained in any law or regulation or standard, but are simply accepted accounting principles and conventions.

All the concepts, principles, conventions, laws, rules and regulations that are used to prepare and present financial statements are known as Generally Accepted Accounting Principles or GAAP.

'Generally accepted accounting principles' vary from country to country, because each country has its own legal and regulatory system. The way in which businesses operate also differs from country to country. For example, there is US GAAP and UK GAAP.

Many countries have now adopted International Financial Reporting Standards or IFRSs, sometimes called international accounting standards. Although there are no international laws on financial reporting it is now fairly common to refer to 'international GAAP'. International GAAP includes the IASB's conceptual framework, plus all the international accounting standards, and all the associated interpretations and guidelines.

3.2 The meaning of a conceptual framework

A conceptual framework is a system of concepts and principles that underpin the preparation of financial statements. These concepts and principles should be consistent with one another.

More recently, the term 'conceptual framework' has come to mean not only the principles themselves, but a document or statement that sets out and explains the concepts and principles that support the preparation of financial statements. A conceptual framework is developed for a particular regulatory system or a particular set of 'generally accepted accounting principles' or GAAP.

The International Accounting Standards Board (IASB) has developed a conceptual framework document called the *Framework for the Preparation and Presentation of Financial Statements*.

The IASB *Framework* covers the following topics:

- The objective of financial statements
- Underlying assumptions of financial statements
- Qualitative characteristics of financial statements
- The elements of financial statements
- Recognition of the elements of financial statements
- Measurement of the elements of financial statements
- Concepts of capital and capital maintenance.

3.3 The purpose of a conceptual framework

Most preparers and users of financial statements recognise that there is a need for a formal conceptual framework and that this can be useful in a number of ways.

Where there is a formal conceptual framework for accounting, accounting practice and accounting standards are based on this framework.

Lack of a formal framework often means that standards are developed randomly or only to deal with particular problems. The result is that standards are inconsistent with each other or with legislation.

Lack of a conceptual framework may also mean that accounting standards fail to address important issues. For example, until the IASB developed its **Framework**, there was no proper definition of terms such as 'asset', 'liability', 'income' and 'expenses'.

The business environment is becoming increasingly complex. It is unlikely that accounting standards can cover all possible transactions. Where an entity enters into an unusual transaction and there is no relevant accounting standard, it can refer to the **Framework** and apply the principles in it.

It can also be argued that a conceptual framework strengthens the credibility of financial reporting and the accounting profession in general.

3.4 The alternative to a conceptual framework

The alternative to a system based on a conceptual framework is a system based on detailed rules.

Accounting standards based on detailed rules are open to abuse. 'Creative accounting' is the name given to techniques which enable management to give a biased impression (usually favourable) of the company's performance while still complying with accounting standards and other regulations. During the 1980s there were a number of scandals in which investors were misled by the financial statements of apparently healthy companies which then collapsed. This was one of

the original reasons why the IASB and other standard setters developed their conceptual frameworks. Principles are normally much harder to evade than rules.

Another disadvantage of a rule-based system is that standard setters are more likely to be influenced by 'vested interests' such as large companies or a particular business sector. The existence of a conceptual framework is an important safeguard against this kind of political pressure.

Despite these problems, some preparers and regulators still appear to favour rule based standards. Standards based on principles may require management to use its judgement (and to risk making a mistake), while rules simply need to be followed. This can be important where management can face legal action if an investor makes a poor decision based on the financial statements.

The use of a conceptual framework can lead to standards that are theoretical and complex. They may give the 'right answer' but be very difficult for the ordinary preparer to understand and apply. However, a system of extremely detailed rules can also be very difficult to apply.

The IASB Framework

- Introduction
- Users and their information needs
- Objectives of financial statements
- Predictive and confirmatory roles of financial information
- Underlying assumptions in the Framework

4 The IASB Framework

4.1 Introduction

The IASB has stated that the purpose of its *Framework for the Preparation and Presentation of Financial Statements* is to:

- assist the IASB with the development of new international accounting standards
- assist national standard-setting bodies to develop accounting standards for their own country
- provide guidance for the preparation of financial statements, both in applying accounting standards and in dealing with items that are not the subject of any accounting standard
- help auditors to form an opinion on whether a set of financial statements complies with international accounting standards
- assist users in understanding financial statements that have been prepared in accordance with international accounting standards
- provide those who are interested in the work of the IASB with information about its approach to creating accounting standards.

The Framework should already be familiar to you from previous studies. This chapter contains revision material about the Framework, but you should think about the concepts and principles in the Framework, and be prepared to discuss any of them in your exam..

4.2 Users and their information needs

The users of financial statements include present and future investors, employees, lenders, suppliers, customers, government and government agencies and the general public.

- **Investors** and their advisers need information to help them determine whether they should buy, hold or sell investments. They are interested in the risk attaching to their investments and the return provided by them, including the ability of the entity to pay dividends.

- **Employees** need information which helps them to assess the ability of their employers to provide remuneration, retirement benefits and employment opportunities. They are also interested in information about the stability and profitability of their employers.
- **Lenders** need information that enables them to determine whether their loans and the related interest will be paid when due.
- **Suppliers and other trade creditors** need information that enables them to determine whether amounts owing to them will be paid when due.
- **Customers** are interested in information about the ability of an entity to continue to trade especially when their own business depends on trade with the entity.
- **Governments and their agencies** are need information that helps them to regulate the activities of entities, to allocate resources and to determine taxation policies.
- **Members of the public** may be interested in an entity for a number of reasons. An entity may be a major employer in the locality or a major customer of local suppliers. Financial statements may provide information about the entity's activities and recent developments in its prosperity.

The Framework states that: 'While all of the information needs of these users cannot be met by financial statements, there are needs which are common to all users. 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'.

Investors and potential investors are assumed to be the most important users of the financial statements and therefore accounting standards are developed to meet their information needs.

4.3 Objectives of financial statements

The IASB Framework states that the objectives of financial statements are to provide users with information about:

- the financial position of the entity
- the financial performance of the entity
- changes in its financial position.

Users need this information to evaluate the ability of the entity to generate cash, and the timing and certainty of this cash generation. This ability to generate cash determines whether the entity will be able, for example, to pay its employees and suppliers, pay interest and repay loans and pay dividends to its shareholders.

Financial reporting is a means by which the directors are made accountable to the shareholders for:

- the way they have managed the company, and
- the financial results they have achieved.

Financial statements show the results of the **stewardship** of the assets and resources of the entity.

Clearly, it is therefore essential that financial statements should be meaningful and accurate, so that the shareholders can make a proper assessment.

Financial position

The financial position of an entity is affected by:

- the economic resources that it owns or controls
- its financial structure
- its liquidity and solvency.

Information about the economic resources an entity controls, and its ability in the past to modify these resources, is useful in predicting the ability of the entity to generate cash in the future.

Information about financial structure (the 'mix' of debt and equity capital) is useful for predicting the future borrowing needs of an entity, and the way in which its future income will be distributed between lenders and shareholders.

Information about liquidity and solvency is useful in predicting the ability of an entity to meet all its financial commitments in the future when they fall due for payment.

Financial performance

Information about financial performance, and in particular profitability, is useful for:

- assessing future profitability
- assessing potential changes in the resources that an entity might have ('control') in the future
- making a judgement about how effectively an entity would make use of any additional resources that it obtains.

Changes in financial position

Information about changes in financial position is useful for assessing:

- the investing, financing and operating activities of an entity during the reporting period
- its ability to generate cash and
- its need for cash.

Objectives of financial statements: summary

The objectives of financial statements are met by:

- the main financial statements (statement of financial position, statement of comprehensive income (or income statement and statement of comprehensive income), statement of cash flows, and statement of changes in equity), and
- supporting notes to the accounts, which provide additional details.

4.4 Predictive and confirmatory roles of financial information

Financial information can serve two different roles for its users.

- A **predictive role**. Financial information can be used to predict what might happen in the future, based on what has happened in the past.
- A **confirmatory role**. Financial information can be used to confirm whether past predictions made by the user were correct.

It is expected that when an entity adopts a particular accounting policy in respect of an item, that policy is applied consistently. If this is the case then financial information should be comparable with prior periods as the accounts have been prepared on the same basis.

Investors use financial information from the annual report in making investment decisions, such as whether to buy or sell shares in an operating entity. Financial information is not the only information used. Up to date share price and company information can be found on the internet. Additional information provided in the annual report such as the chairman's report and management commentary is very useful as a commentary on the current results and a review of the objectives of the entity going forward. By the time the financial statements are published they are already out of date so financial information in the accounts can be criticised for being too 'backward looking.'

Overall, a combination of financial and additional information should improve the use of the annual report in attempting to explain and evaluate the entity's financial and operational risks.

4.5 Underlying assumptions in the Framework

There are two underlying assumptions on which the IASB Framework is based:

- accruals basis
- going concern basis.

Financial statements are prepared on the accruals basis of accounting. This means that the effect of transactions and other events are recognised in the financial statements in the period when they occur and not in the period when the cash flows relating to those transactions occur.

The accruals basis of accounting should be familiar to you from your earlier studies. Accruals, prepayments and depreciation charges are all examples of the application of the accruals concept.

The going concern basis of accounting is the assumption in preparing the financial statements that the entity will continue to operate for the foreseeable future, and does not intend to go into liquidation and will not be forced into liquidation. The going concern assumption is particularly relevant for the valuation of assets.

Qualitative characteristics of financial statements

- Understandability
- Relevance
- Reliability
- Comparability
- Constraints on relevant and reliable information

5 Qualitative characteristics of financial statements

The IASB Framework states that qualitative characteristics of information in the financial statements are the attributes that make the information useful to users. There are four main qualitative characteristics of financial information:

- understandability
- relevance
- reliability
- comparability.

5.1 Understandability

Information in financial statements must be readily understandable to users.

Users are assumed to have a reasonable knowledge of business activities and accounting. It is also assumed that they are willing to study information with 'reasonable diligence'.

Relevant information should not be excluded from the financial statements simply because it is too complex or may be too difficult for some users to understand.

5.2 Relevance

Information must be relevant to the decision-making needs of users. Information is relevant if it can be used for predictive or confirmatory purposes.

- It has **predictive value** if it helps users to predict what might happen in the future.
- It has **confirmatory value** if it helps users to confirm the assessments and predictions they have made in the past.

The relevance of information is affected by:

- its nature and
- its materiality.

Materiality provides a threshold or cut-off point, and information is not relevant if it is immaterial (not material). Information for financial statements is material if its omission or misstatement could influence the economic decisions of users of the financial statements.

5.3 Reliability

Information must be reliable. Information is reliable when:

- it is free from material error or bias, and
- the information provides a **faithful** representation of what it is supposed to represent.

To be reliable, information must have the following qualities:

- faithful representation
- substance over form
- neutrality
- prudence
- completeness.

Faithful representation

Information should represent faithfully the transactions and other events that it is intended to represent. The IASB Framework identifies internal goodwill as an item that is difficult to identify or measure reliably. Internal goodwill is goodwill that a business entity has created from its own efforts and activities. Internal goodwill has a value. However with any estimated valuation of internal goodwill, there would be a strong risk that the estimate would not be a faithful representation of its true value.

This is why internal goodwill is excluded from the statement of financial position. In other cases, it may be relevant to recognise an item in the financial statements, but with a note provided to explain the risk of error in its recognition or measurement.

Substance over form

To provide a faithful representation, financial information must account for transactions and other events in a way that reflects their substance and economic reality (in other words, their true commercial impact) rather than their legal form.
If there is a difference between economic substance and legal form, the financial information should represent the economic substance. An example of presenting substance over form is the method used to account for finance leases, described in a later chapter.

Neutrality

To be reliable, financial information should be neutral. Neutral means 'free from bias'.

Prudence

Prudence is the inclusion of a degree of caution in exercising judgements in conditions of uncertainty. In other words, prudence means using caution when

putting a value to an asset, liability or an item of income or expense. The purpose of prudence is to:

- avoid overstating the value of assets or the amount of income, or
- avoid under-stating the amount of a liability or the amount of an expense.

Exercising prudence does not mean that the entity should create 'hidden reserves' by **deliberately** under-stating asset values or income.

An example of exercising prudence is making a reasonable allowance for bad or irrecoverable debts when giving a valuation to trade receivables in the statement of financial position.

Completeness

To be reliable, financial information should also be complete. However, there are some limitations on the need for completeness.

- Materiality – There is no need to obtain complete information if the missing information is immaterial.
- Cost – Information should not be 100% complete if the extra cost of making it complete exceeds the benefits obtained by having it complete. In other words, the benefits from having complete information should not exceed the costs of obtaining it.

5.4 Comparability

Financial information must be comparable. It should be comparable over time, so that the information in the financial statements for one year can be compared with previous years. The financial information for one business entity should also be comparable with the information in the financial statements of other business entities.

- Users must be able to compare the financial statements of an entity over time in order to identify **trends** in its financial position or financial performance.
- Users must be able to compare the financial statements of different business entities, in order to assess their relative financial position and financial performance.

Consistency

To be comparable, financial statements should be prepared in a consistent way from one year to the next.

Financial statements for any year should also show **corresponding figures for the previous financial year**, to help users in making comparisons. This is a specific requirement of IAS 1.

5.5 Constraints on relevant and reliable information

The IASB Framework identifies two constraints on the provision of relevant and reliable information.

- **Timeliness**. If there is undue delay in reporting financial information, it might lose its relevance. However, information produced quickly might be inaccurate and so unreliable. There has to be a balance between timeliness (in order to provide relevant information) and the need for reliability.
- **Cost and benefits**. The benefits obtained from financial information should exceed the cost of obtaining and providing it. Information should not be provided if the cost is not worth the benefit.

Since it is difficult to measure the benefits of financial information, the setters of accounting standards must use their judgement in deciding whether certain items of information should be provided in the financial statements (and if so, in how much detail).

The elements of financial statements

- Assets
- Liabilities
- Equity
- Income
- Expenses

6 The elements of financial statements

The IASB Framework discusses the five elements of financial statements:

- for reporting financial position: assets, liabilities and equity
- for reporting financial performance: income and expenses.

6.1 Assets

An asset is defined as:

- a resource controlled by the entity
- as a result of past events, and
- from which future economic benefits are expected to flow to the entity.

Resource controlled by the entity

Control is the ability to obtain economic benefits from the asset, and to restrict the ability of others to obtain the same benefits from the same item.

An entity usually uses assets to produce goods or services to meet the needs of its customers, and because customers are willing to pay for the goods and services, this contributes to the cash flow of the entity. Cash itself is an asset because of its command over other resources.

Many assets have a physical form, but this is not an essential requirement for the existence of an asset.

The result of past events

Assets result from past transactions or other past events. An asset is not created by any transaction that is expected to occur in the future but has not yet happened. For example, an **intention** to buy inventory does not create an asset.

Expected future economic benefits

An asset should be expected to provide future economic benefits to the entity. Providing future economic benefits can be defined as contributing, directly or indirectly, to the flow of cash (and cash equivalents) into the entity.

6.2 Liabilities

A liability is defined as:

- a present obligation of an entity
- arising from past events
- the settlement of which is expected to result in an outflow of resources that embody economic benefits.

Present obligation

A liability is an obligation that already exists. An obligation may be legally enforceable as a result of a binding contract or a statutory requirement, such as a legal obligation to pay a supplier for goods purchased.

Obligations may also arise from normal business practice, or a desire to maintain good customer relations or the desire to act in a fair way. For example, an entity might undertake to rectify faulty goods for customers, even if these are now outside their warranty period. This undertaking creates an obligation, even though it is not legally enforceable by the customers of the entity.

Past transactions or events

A liability arises out of a past transaction or event. For example, a trade payable arises out of the past purchase of goods or services, and an obligation to repay a bank loan arises out of past borrowing.

Future outflow of economic resources

The settlement of a liability should result in an outflow of resources that embody economic benefits. This usually involves the payment of cash or transfer of other assets. A liability is measured by the value of these resources that will be paid or transferred.

Some liabilities can be measured only with a substantial amount of **estimation**. These may be called **provisions**.

6.3 Equity

Equity is the residual interest in an entity after the value of all its liabilities has been deducted from the value of all its assets. It is a 'balance sheet value' of the entity's net assets. It does not represent in any way the market value of the equity.

Equity may be sub-classified in the statement of financial position, into share capital, retained profits and other reserves that represent capital maintenance adjustments.

6.4 Income

Financial performance is measured by profit or loss. Profit is measured as income less expenses. Income includes both revenue and gains.

- **Revenue** is income arising in the course of the ordinary activities of the entity. It includes sales revenue, fee income, royalties income, rental income and income from investments (interest and dividends).
- **Gains** include gains on the disposal of non-current assets. Realised gains are often reported in the financial statements net of related expenses. They might arise in the normal course of business activities. Gains might also be unrealised. Unrealised gains occur whenever an asset is revalued upwards, but is not disposed of. For example, an unrealised gain occurs when marketable securities owned by the entity are revalued upwards.

6.5 Expenses

Expenses include:

- **Expenses** arising in the normal course of activities, such as the cost of sales and other operating costs, including depreciation of non-current assets. Expenses result in the outflow of assets (such as cash or finished goods inventory) or the depletion of assets (for example, the depreciation of non-current assets).
- **Losses** include for example, the loss on disposal of a non-current asset, and losses arising from damage due to fire or flooding. Losses are usually reported as net of related income.

Recognition in the financial statements

- Probability of future economic benefit flowing in or out
- Reliability of measurement
- Recognition of assets, liabilities, income and expenses
- Measurements of elements of financial statements
- Assessment of the Framework

7 Recognition in the financial statements

The IASB Framework states that an element (asset, liability, equity, income or expense) should be recognised in the statement of financial position or in profit and loss (the income statement) when it:

- meets the definition of an element, and also
- satisfies certain criteria for recognition.

Items that fail to meet the criteria for recognition should not be included in the financial statements. However, some if these items may have to be disclosed as additional details in a **note** to the financial statements.

The criteria for recognition are as follows:

- It must be **probable** that the future economic benefit associated with the item will flow either into or out of the entity.
- The item should have a cost or value that can be measured reliably.

7.1 Probability of future economic benefit flowing in or out

The concept of probability relates to the degree of certainty or uncertainty that the future economic benefit associated with the item will flow into or out of the entity.

The degree of certainty or uncertainty should be assessed on the basis of the evidence available at the time the financial statements are prepared.

For example, if it is considered fairly certain that a trade receivable will be paid at a future date, it is appropriate to recognise the receivable as an asset in the statement of financial position. However, there is probably a reasonable degree of certainty that some trade receivables will become 'bad debts' and the economic benefit will not flow into the entity. It would then be appropriate to recognise an 'expense' for the expected reduction in economic benefits (as an allowance for irrecoverable debts).

7.2 Reliability of measurement

An item should be recognised in the financial statements only if it has a cost or value that can be measured with reliability.

In many cases, the value of an item has to be estimated because its value is not known with certainty. Using reasonable estimates is an essential part of preparing financial statements, and provided that the estimates are reasonable, it is appropriate to recognise items in the financial statements.

However, if it is not possible to make a reasonable estimate, the item should be excluded from the statement of financial position and statement of comprehensive income.

An item that cannot be estimated with reliability at one point in time might be estimated with greater certainty at a later time, when it would then be appropriate to include it in the financial statements.

7.3 Recognition of assets, liabilities, income and expenses

Recognition of assets

An asset is recognised in the statement of financial position when there is an increase in future economic benefits relating to an increase in an asset (or a reduction in a liability) which can be measured reliably.

An asset should not be recognised when expenses have been incurred but it is unlikely that any future economic benefits will flow to the entity. Instead, the item should be treated as an expense, and the cost of the asset should be 'written off'.

Recognition of liabilities

A liability is recognised when it is **probable** that an outflow of resources that embody economic benefits will result from the settlement of a present obligation, and the amount of the obligation can be measured reliably.

Recognition of income

Income is recognised in the income statement or statement of comprehensive income when an increase in future economic benefits arises from an increase in an asset (or a reduction in a liability) and this can be measured reliably.

Recognition of expenses

Expenses are recognised in the income statement when a decrease in future economic benefits arises from a decrease in an asset or an increase in a liability, which can be measured reliably.

Note that an expense is recognised at the same time as an increase in a liability (for example, trade payables) or a reduction in an asset (for example, cash).

Expenses are recognised in the **income statement** by means of a direct association between items of income and the expenses incurred in creating that income.

- **Matching of costs and income** involves the simultaneous recognition of revenues and related expenses.
- When economic benefits arise over several accounting periods, and the association with income can only be decided in broad terms, expenses should be recognised in profit and loss (the income statement) of each accounting period on the basis of **'systematic and rational allocation procedures'**. For example, depreciation charges for a non-current asset are allocated between accounting periods on a systematic and rational basis, by means of an appropriate depreciation policy and depreciation method.
- When an item of expenditure is not expected to provide any future economic benefits, it should be recognised immediately as an expense in the income statement. When the future economic benefits associated with an asset are no longer expected to arise, the value of the asset is written off, and the write-off is treated as an expense.
- An expense may also be recognised when a liability arises without the recognition of any matching asset. For example, a liability might arise when an entity recognises that it will have to make a payment to settle a legal dispute. The cost of the future liability is treated as an expense in the period when the liability is recognised.

7.4 Measurements of elements of financial statements

The IASB Framework states that several measurement bases are used for the elements in financial statements. These include:

- **Historical cost**. Assets are measured at the amount of cash paid, or at the fair value of the consideration given to acquire them. Liabilities are measured at:
  - the amount of proceeds received in exchange for the obligation (for example, bank loan or a bank overdraft), or
  - the amount of cash that will be paid to satisfy the liability.
- **Current cost or current value** is the basis used in current value accounting/current cost accounting. Assets are measured at the amount that would be paid to purchase the same or a similar asset currently. Liabilities are measured at the amount that would be required to settle the obligation currently.
- **Realisable value** (or **settlement value**). This method of measurement is relevant when an entity is not a going concern, and is faced with liquidation (and a forced sale of its assets). Assets are measured at the amount that could be obtained by selling them. Liabilities are measured at the amount that would be required to settle them currently.
- **Present value**. Assets might be measured at the value of the future net cash inflows that the item is expected to generate, discounted to a present value. Similarly, a liability might be measured at the discounted present value of the expected cash outflows that will be made to settle the liability.

Historical cost is the most commonly-used measurement basis. However, the other bases of measurement are often used to modify historical cost. For example, inventories are measured at the lower of cost and net realisable value. Deferred income is measured at present value. Some non-current assets may be valued at current value.

The Framework does not favour one measurement base over the others.

7.5 Assessment of the Framework

In theory, IASs and IFRSs are based on the IASB Framework. In practice, the standards are a mixture of principles and rules.

Many standards (for example, the main standards dealing with non-current assets) reflect the fundamental principles in the Framework and are consistent with each other. This improves the quality of financial reporting as there are fewer options available and the standards are based on the definitions in the Framework.

However, some of the more recent standards (for example, the standards on financial instruments) have been heavily influenced by US accounting practice. These standards are complex and tend to contain many detailed rules and definitions.

It can be argued that the success of the IASB's Framework is that recent accounting standards have been successful in providing consistent accounting rules. The application of the definitions in the Framework and the recognition and measurement criteria should mean that any accounting issue not covered by a standard can be dealt with.

Accounting policies

- Definition
- The selection and application of accounting policies
- Consistency of accounting policies
- Changes in accounting policies

8 Accounting policies

8.1 Definition

Accounting policies are defined in IAS 8 as the 'specific principles, bases, conventions, rules and practices applied by an entity in preparing and presenting financial statements'.

8.2 The selection and application of accounting policies

The selection and application of accounting policies is covered by IAS 8 *Accounting policies, changes in accounting estimates and errors*. IAS 8 includes requirements for the selection and application of accounting policies:

- When an item (for example, a transaction) is covered by an accounting standard, or by an Interpretation of a standard, the accounting policy applied to the item should comply with the requirements of the Standard or Interpretation.
- When an item is not covered by an accounting standard, or by an Interpretation of a Standard, management should use judgement in selecting the accounting policy to apply.

The IASB Framework is not itself an accounting standard. If there is a conflict between an accounting standard (or an Interpretation) and the Framework, management must follow the standard.

When judgement is used to select an accounting policy, the financial information resulting from the application of the accounting policy must be:

- relevant to the economic decision-making needs of the users of the financial statements, and
- reliable.

In making a judgement about the selection of an accounting policy, management should refer to the following, in descending order of priority, and consider whether they are applicable:

- the requirements of accounting standards or guidance from Interpretations that deal with similar and related issues
- definitions, recognition criteria and measurement concepts for assets, liabilities, income and expenses in the IASB Framework.

8.3 Consistency of accounting policies

An entity should select and apply its accounting policies consistently for similar transactions, events or conditions, unless an accounting standard requires or permits:

- some items to be categorised separately, and
- a different accounting policy to be applied to this category.

8.4 Changes in accounting policies

A change in accounting policy is permitted **only** under either of two circumstances (IAS 8):

- if a change in policy is required by an accounting standard or Interpretation, or
- if a change in accounting policy will result in reliable and more relevant financial information.

A change in an accounting policy is dealt with retrospectively, that is the accounts of all previous years presented are amended to show the financial information as if the entity had always followed the new policy.

Accounting policies and comparability

In order to be able to compare the financial statements of different entities and the financial statements of the same entity over time, users need information about the accounting policies used by an entity. They also need information about any changes to accounting policies and the effects of those changes.

Frequent changes of accounting policies do not improve the information provided to users (and are effectively prohibited by IAS 8). However, an entity should not continue to use the same accounting policy for the sake of comparability if there is an alternative that would produce more relevant or more reliable information.

Accounting concepts

- Consistency of presentation
- Materiality and aggregation
- Offsetting

9 Accounting concepts

In addition to the accounting concepts in the IASB Framework, some other accounting concepts are used in financial reporting. These concepts, together with the underlying assumptions of going concern and accruals, are explained in IAS 1 *Presentation of financial statements*.

9.1 Consistency of presentation

Consistency of presentation is needed if financial information is to be comparable. IAS 1 states that there should be consistency in the presentation and classification of items in the financial statements from one year to the next. There are just two exceptions to the requirement for consistency:

- Consistency is not required when it is apparent, following a significant change in the entity's operations or a review of its financial statements, that a different presentation or classification would be more appropriate.
- Consistency is not appropriate if a new accounting standard (or the interpretation of a Standard by IFRIC) requires a change in the presentation of information.

9.2 Materiality and aggregation

IAS 1 also states that each **material** class of similar items should be presented separately in the financial statements.

In addition, items of a dissimilar nature should not be aggregated together in the financial statements (combined as a single item and in a single total), unless their value is immaterial.

9.3 Offsetting

IAS 1 states that:

- Assets and liabilities should not be offset against each other.
- Similarly incomes and expenses should not be offset against each other.

Instead they should be reported separately.

The **exceptions to this rule** are when:

- offsetting is required or permitted by an accounting standard or the Interpretation of a standard
- offsetting reflects the economic substance of a transaction. An example specified in IAS 1 is reporting of a gain or loss on disposal of a non-current asset at sale value minus the carrying value of the asset and the related selling expenses.

Fair presentation

- What is meant by fair presentation (or a true and fair view)
- Fair presentation and compliance with IFRSs
- Where fair presentation conflicts with an accounting standard

10 Fair presentation

10.1 What is meant by fair presentation (or a true and fair view)

Financial statements are often described as showing a 'true and fair view' or 'presenting fairly' the financial position and performance of an entity, and changes in its financial position. In some countries (for example, the UK) this is the central requirement of financial reporting.

Under 'international GAAP' (specifically IAS 1) financial statements are required to present fairly the financial position, financial performance and cash flows of the entity.

The Framework does not deal directly with this issue. However, it does state that if an entity complies with international accounting standards, and if its financial information has the desirable qualitative characteristics of information, then its financial statements 'should convey what is generally understood as a true and fair view of such information'.

IAS 1 states that: 'Fair presentation requires the faithful representation of the effects of transactions, other events and conditions in accordance with the definitions and recognition criteria for assets, liabilities, income and expenses set out in the IASB Framework.

The use of the term faithful representation means more than that the amounts in the financial statements should be materially correct. It implies that information should present clearly the transactions and other events that it is intended to represent. To provide a faithful representation, financial information must account for transactions and other events in a way that reflects their substance and economic reality (in other words, their true commercial impact) rather than their legal form. If there is a difference between economic substance and legal form, the financial information should represent the economic substance.

Faithful representation also implies that the amounts in the financial statements should be classified and presented, and disclosures made in such a way that important information is not obscured and users are not misled.

10.2 Fair presentation and compliance with IFRSs

The application of IFRSs, with additional disclosure when necessary, is presumed to result in financial statements that achieve a fair presentation.' IAS 1 states that:

- When the financial statements of an entity comply fully with International Financial Reporting Standards, this fact should be disclosed.
- An entity should not claim to comply with IFRSs unless it complies with **all** the requirements of **every** applicable Standard.

IAS 1 appears to equate fair presentation with compliance with accounting standards.

In some situations fair presentation may require more than this. It is important to apply the spirit (or general intention) behind an accounting standard as well as the strict letter (what the standard actually says).

The requirement to 'present fairly' also applies to transactions which are not covered by any specific accounting standard. It is worth noting that there is no IFRS that covers complex transactions and arrangements which have been deliberately structured so that their economic substance is different from their legal form.

IAS 1 states that a fair presentation requires an entity:

- to select and apply accounting policies in accordance with IAS 8 *Accounting policies, changes in accounting estimates and errors.* IAS 8 explains how an entity should develop an appropriate accounting policy where there is no standard.
- to present information in a manner that provides relevant, reliable, comparable and understandable information
- to provide additional disclosures where these are necessary to enable users to understand the impact of particular transactions and other events on the entity's financial performance and financial position (even where these are not required by IFRSs).

10.3 Where fair presentation conflicts with an accounting standard

IAS 1 acknowledges that in **extremely rare** circumstances, compliance with a standard or an Interpretation may produce financial statements that are so misleading that they do not provide useful information and no longer give a fair presentation.

An entity can then depart from the requirements of the standard or Interpretation. It must disclose:

- that management has concluded that the financial statements present fairly the entity's financial position, financial performance and cash flows;
- that it has complied with applicable standards and Interpretations, except that it has departed from a particular requirement to achieve a fair presentation;
- the title of the standard or Interpretation from which the entity has departed, the nature of the departure, including the treatment that the standard or

Interpretation would require, the reason why that treatment would be misleading, and the treatment adopted; and

- for each period presented, the financial impact of the departure on each item in the financial statements that would have been reported in complying with the requirement.

IFRSs and measurement

- Cost bases
- Fair value

11 IFRSs and measurement

11.1 Cost bases

There used to be an international accounting standard IAS 15 *Information reflecting the effects of changing prices*. This was withdrawn with effect from 1 January 2005.
Inflation accounting requires the use of a system such as current cost accounting (CCA) or current purchasing power accounting (CPP). Attempts to introduce full inflation accounting have been unpopular. Each system has some advantages but neither is ideal and neither has been widely accepted. It is extremely unlikely that the IASB or any other major standard setter will require either of CCA or CPP in the foreseeable future.

However, most people accept that information based on historical cost is not particularly relevant to users. Many entities attempt to overcome this problem by using **modified historical cost accounting**. Some or all non-current assets are measured at a valuation, instead of at historical cost. For example, properties are often included in the statement of financial position at market value.

The issue here is how assets and liabilities should be measured. This is the subject of an important debate within the accounting profession. Some, including the UK Accounting Standards Board favour **current value** (that is **value to the business** or **deprival value**). This has the advantage that it reflects economic reality and the intentions of management. For example, a business will not sell an asset if it can obtain a greater inflow of cash by continuing to use it and vice versa. However, current value can be complex to apply in practice and may not be easily understood by users.

Others, including the US Financial Accounting Standards Board favour **fair value**. The IASB is also moving towards greater use of fair value.

11.2 Fair value

Fair value is a possible basis for the valuation of assets in the financial statements. Although it is not described in the IASB Framework, many IASs and IFRSs require it to be used instead of historical cost or as an alternative to historical cost. For example, IAS 39 requires many types of investment to be measured at fair value.

Fair value is defined as 'the amount for which an asset could be exchanged between knowledgeable, willing parties in an arm's length transaction' (IAS 16).

Fair value is normally open market value. If an item does not have a reliable market value (for example, because it is unusual or specialised), it may be possible to estimate its fair value in other ways.

Fair value may be used in financial statements in the following circumstances:

- After its initial recognition at acquisition, a non-current asset may be re-valued to its fair value.
- Inventory is measured in the statement of financial position at the lower of cost or net realisable value. Net realisable value (NRV) is the selling price of the inventory item in the ordinary course of business, less the estimated further costs to completion and the expected selling costs. NRV may or may not be the same as fair value.
- Revenue should be measured in the income statement at the fair value of the consideration received or receivable (IAS 18).

Fair value is often approximately the same as current value, but sometimes fair value and current value can be very different.

Examples

An entity has a portfolio of investments that are traded in an active market. The fair value of these investments is their market value. The value to the business (current value) of the investments is their replacement cost or their net realisable value. In this case both are the same amount: open market value. (Economic value is not relevant because the investments are held to be sold at a profit, not to be used in the business).

Here, fair value and current value are the same.

An entity has a machine. The machine has been specially adapted for use in this entity's particular business. The fair value of the machine is its open market value: $20,000. This is quite low, because few other businesses could make use of the machine without having to spend a considerable amount of money adapting it and renovating it. The economic value of the machine is $30,000 and its depreciated replacement cost is $25,000 (the amount that the entity would have to pay to acquire an equivalent machine which has been used for the same length of time). Therefore the current value of the machine is $25,000 (lower of replacement cost and recoverable amount).

Here, fair value and current value are different.

Problems with the use of fair value

Fair value is easy to understand and less complicated to apply than value to the business/current value. Arguably, it is also more reliable than value to the business, because market value is more easily verified than (for example) economic value. However, it has some serious disadvantages:

- There may not be an active market for some kinds of asset. Where there is no active market, estimates have to be used and these may not be reliable.

- It anticipates sales and profits which may never happen (the entity may have no plans to sell the asset).
- Market values can move up and down quite rapidly. This may distort trends in the financial statements and make it difficult for users to assess an entity's performance over time.

A notable example of this problem occurred during 2007 and 2008 with the collapse of the market for certain types of asset-backed securities (mortgage-related securities known as CDOs). Many banks, particularly in the US and Europe, announced huge losses, due largely to the requirement to write down their investments in these financial instruments to fair value, even though fair value was difficult to assess.

Despite these problems, it looks increasingly likely that the IASB will require greater use of fair value in future.

Recent developments

- Improved Conceptual Framework
- Conceptual framework discussion paper
- ED 2009/5: Fair value measurement
- ED 2009/2: Credit risk in liability measurement

12 Recent developments

12.1 Improved Conceptual Framework

The IASB and the US Financial Accounting Standards Board (FASB) are developing a common conceptual framework that improves on the existing conceptual frameworks of both boards. The IASB has stated that the improved framework "would provide a sound foundation for developing future accounting standards and is essential to fulfilling the boards' goal of developing standards that are principles-based, internally consistent, internationally converged, and that lead to financial reporting that provides the information needed for investment, credit, and similar decisions".

There are eight phases to the project:

Phase	Topic
A	Objectives and qualitative characteristics
B	Elements and recognition
C	Measurement
D	Reporting entity
E	Presentation and disclosure
F	Purpose and status
G	Application to not-for-profit entities
H	Remaining issues, if any

In May 2008, they issued an exposure draft: *Preliminary Views on an Improved Conceptual Framework for Financial Reporting: The Objective of Financial Reporting and Qualitative Characteristics of Decision-useful Financial Reporting Information*. This deals with phase A of the project.

The boards are still discussing other phases of the project.

12.2 Conceptual framework exposure draft

The exposure draft: *Preliminary Views on an improved Conceptual Framework for Financial Reporting: The Objective of Financial Reporting and Qualitative Characteristics of Decision-useful Financial Reporting Information* is summarised below. It discusses the first two chapters of the proposed framework, chapter 1 dealing with the objective of financial reporting and chapter 2 dealing with the qualitative characteristics of useful financial information.

It is useful to compare this ED with the comparable sections of the IASB Framework.

Objectives of financial reporting

The exposure draft puts forward the following views.

- Financial statements should be prepared from the perspective of the entity itself (an entity perspective) rather than from the perspective of its owners (a proprietary perspective).
- Present and potential capital providers are the main primary user group for financial statements. Capital providers include investors in share capital and lenders of capital. However the ED also states that employees might provide human capital (and some of their remuneration, in the form of a pension, might not be received for many years), suppliers provide capital when they extend credit and customers may provide capital by pre-paying for goods or services. 'To the extent that employees, suppliers, customers or other groups make decisions relating to providing capital to the entity in the form of credit, they are capital providers.'
- The objective of financial reporting should be broad enough so that information is provided to equity investors, lenders and other providers of capital to enable them or help them to make decisions in their capacity as capital providers. For example, financial reports should enable investors to make decisions about allocating their investment resources, and protecting or enhancing their investments.

Qualitative characteristics of financial information

The exposure draft suggests qualitative characteristics of 'decision-useful financial reporting information' that differs in some ways from the IASB Framework.

The desirable **qualitative characteristics** of financial information are divided into:

- **fundamental qualitative characteristics**: these are essential characteristics that financial information must have to be useful to decision-makers
- **enhancing qualitative characteristics**: these are characteristics that enhance or improve the quality of financial information, but which have no value unless the information also possesses the fundamental qualitative characteristics.

According to the ED, there are **two fundamental qualitative characteristics** of financial information:

- **Relevance**: financial information must be relevant to the needs of tits users. This means that the information must have a predictive value or a confirmatory value (as defined in the IASB Framework). Relevant information should be capable of making a difference to decisions made by providers of capital to the entity, in their role as capital providers.
- **Faithful representation**: financial information must represent faithfully the economic reality, and represent reliably what it is intended to represent. To provide faithful representation, information must be complete, free from material error and neutral (free from bias). The ED comments that freedom from

material error does not mean total freedom from error but that for **accounting estimates** a **minimum level of accuracy** is needed for the estimate to provide faithful representation.

Enhancing qualitative characteristics of financial information improve the quality of financial information, but only if the information possess the two fundamental qualitative characteristics. The ED identifies four enhancing characteristics:

- **Comparability**
- **Understandability**: however users of financial statements should be assumed to possess a reasonable knowledge of economic and business affairs
- **Timeliness**: information should be provided in time t influence the decisions of users of the financial statements. However, 'timeliness' does not necessarily mean that information should be current or recent. Some users of financial statements make decisions on the basis of a study of trends over a long period of time.
- **Verifiability**. Information is verifiable when different knowledgeable and independent observers (for example auditors) could reach a general consensus about the financial information being free from bias and material error.

The ED also recognises two 'pervasive' constraints on the quality of financial information:

- **Materiality –**A financial report should include all material information and non-material items should probably be excluded. However if there are material omissions or misstatements in financial information, the information will not provide faithful representation, because it will not be complete or free from material error.
- **Benefits and costs –** Costs are a constraint on the amount or detail of information obtained and provided. The benefits of financial information should justify the costs of providing it and using it, although an assessment of 'benefits' is a qualitative judgement.

12.3 ED 2009/5: Fair value measurements

Certain IFRSs require various assets, liabilities and equity instruments to be measured at fair value. The guidance on measuring these items at fair value is detailed within the individual IFRSs rather than in one place within a conceptual framework. This adds unnecessary complexity to IFRSs. Additionally, existing guidance in IFRSs about fair value is not always consistent.

The IASB's objectives in issuing this ED are to:

- establish a single source of guidance for all fair value measurements required by IFRSs, in order to reduce comlexity and improve consistency in the application of fair value measurements
- clarify the definition of fair value, and
- enhance disclosures about fair value, so that users of financial statements can assess the extent to which fair values are used to measure an entity's assets and liabilities.

Main features of the ED

Fair value is defined as 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 (an exit price).

In the absence of an actual transaction at the measurement date, a fair value measurement assumes a hypothetical transaction in the most advantageous market for the asset or liability.

Fair value measurement is based on the assumption that the transaction takes place in the most advantageous market to which the entity has access.

Fair value is determined using the assumptions that market participants would use in pricing the asset or liability.

There is further specific guidance on the measurement of the fair value of liabilities, specific transactions and valuation techniques (including specific guidance on markets that are no longer active).

12.4 DP 2009/2: Credit risk in liability measurement

If the credit risk of a borrower deteriorated then the fair value of the lender's asset would fall. For example if two people each borrowed £200,000 and one was in financial difficulty such that he might breach the terms of the loan, the lender would put less value on the loan to the person in difficulty.
The above illustration looks at things from the viewpoint of the lender but if credit worthiness can affect the value of an asset then it must also affect the value of the liability (there can only be one fair value).
This DP explores the fundamental question of whether credit risk should be considered when measuring liabilities.

Arguments for incorporating credit risk

Consistency at initial recognition

- The initial measurement of a liability incurred in an exchange of cash includes the effects of the borrower's credit risk so there is no reason why subsequent current measurements should exclude changes in factors that were included in the initial measurement.

Accounting mismatch

- Changes in creditworthiness of a borrower affect the fair vale of the receivable.
- Failure to include own credit risk in the measurement of liabilities leads to an accounting mismatch.

Arguments against incorporating credit risk

Counter-intuitive results

- Where the credit worthiness of a borrower falls then the fair value of the liability will also fall. If the liability is being measured at fair value in the financial statements this would lead to the recognition of a gain!

Realisation

- An asset can be sold at any time to realise gains and losses. It is not always as easy to settle a liability so any gain is hypothetical and is unlikely to be realised.

CHAPTER 2

The professional and ethical duty of the accountant

Contents

Professional behaviour and compliance with accounting standards

- Introduction
- Professional behaviour
- ACCA Code of Conduct
- Compliance with accounting standards

1 Professional behaviour and compliance with accounting standards

1.1 Introduction

Professional behaviour and business ethics have been in the foreground of media attention over the last few years due to the high profile nature of cases such as Enron, Worldcom, Parmalat and others.

Ethics can be difficult to define, but it is principally concerned with human character and conduct. Ethical behaviour goes beyond obeying laws, rules and regulations. It is about doing 'the right thing'.

The accountancy profession as a whole has accepted the commitment to act ethically and in the public interest. Professional accountants may find themselves in situations where values are in conflict with one another, due to responsibilities to employers, clients, and the public. Professional accountancy bodies have their own codes of conduct which accountants are expected to follow and also provide guidance to members in situations where ethical issues arise.

1.2 Professional behaviour

Accounting information is important for investors to make business decisions. If information is inadequate then there is the potential for investors to lose money and confidence in the accountancy profession is undermined.

Accountants in practice

Professional ethics is applicable to accountants in practice and in business. Auditors have a duty to ensure that financial information has been prepared in accordance with the relevant accounting standards and that it shows a true and fair view. It is important for auditors to remain independent and ensure that they are not pressured into accepting an accounting treatment they do not agree with.

Some commentators believe that auditors cannot be independent as they are performing a service, which the client pays for. This debate has been raging for years with no suitable outcome. Another issue is that auditors take on non-audit work such as taxation advice, management consultancy and due diligence for acquisitions. This work is often very lucrative and worth more than the value of the

audit. This is seen to be an inhibitor to independence in the audit; the firm may be persuaded to accept a dubious accounting treatment so as not to lose other valuable work.

Accountants in business

Accountants in business need to ensure that they do not prepare financial information in a way that is misleading and does not show a true and fair view of the entity's operations.

Codes of conduct

The professional accountancy bodies want their members to act ethically and so produce ethical codes of conduct which members are required to adhere to. These are equally relevant for accountants in practice and accountants in business.

1.3 ACCA Code of conduct

The ACCA has published a Code of Conduct which members are expected to comply with. It sets out five fundamental principles which should be complied with. These are discussed below:

Integrity

Integrity requires members to be straightforward and honest in their business and professional relationships.

Further to this, members should not be associated with any reports or information where they feel it contains materially false or misleading statements or omits or obscures information that must be included for a proper understanding of the situation.

Objectivity

Objectivity requires that members do not compromise their professional judgement because of bias, conflict of interest or the undue influence of others. Members may be exposed to situations that impair their objectivity and they should try and avoid such situations.

Professional competence and due care

Professional competence requires members to ensure they maintain professional knowledge and skill at the level required to ensure clients or employers receive competent service. They must also act diligently in accordance with technical and professional standards when providing professional services.

This principle is of key importance as accountants must ensure they are capable and have the ability to deal with a situation. If not, then the information that is produced will be of inferior quality and reflects badly not only on the accountant preparing the information but on the profession as a whole.

There are two elements to professional competence: (1) achieving competence and then (2) maintaining that competence. This is why there is a requirement for continuing professional development (CPD) after qualification.

Confidentiality

The principle of confidentiality requires members to refrain from disclosing any confidential information acquired in a business or professional setting without the authorisation to do so, unless there is a legal or professional right or duty to disclose.

Additionally, members should not use confidential information acquired through business or professional relationships to make personal gain or gain for third parties.

Confidentially does not end at the end of the relationship with the client. Members should use their prior experience but not use the confidential information.

Professional behaviour

The principle of professional behaviour requires members to comply with relevant laws and regulations and not do anything that could bring discredit to the profession. Members should also behave with courtesy and consideration to those they come into contact with in a professional capacity.

1.4 Compliance with accounting standards

Compliance with accounting standards is important if the financial statements are to fairly represent the activities of the entity. If accounting standards are not complied with, then it may be that the financial statements are misleading. Investors then stand to lose money if they have made decisions based on misleading financial information.

It is also important that employers have a code of ethics so that employees in a situation where they feel they may have to act unethically have somewhere to go for help. Some companies have codes of business ethics so that guidance is there for employees to know how they are expected to act and ask for assistance in an ethical dilemma.

Accountants who are responsible for the preparation of financial information must ensure that the information they prepare is technically correct, reports the substance of the transaction and is adequately disclosed. The danger is that they are put under influence from senior managers to present figures that inflate profit or assets or understate liabilities. This puts the accountant in a difficult position. On one hand, they wish to prepare proper information and on the other hand, there is a possibility they might lose their job if they do not comply with their managers wishes.

In this case, ethics starts with the individual preparing the information. They have a difficult decision to make; whether to keep quiet or take the matter further. If they keep quiet, they will certainly be aware that they are not complying with the ethics of the accounting body they belong to. If they speak out, they may be bullied at

work into changing the information or sacked. Many accounting bodies have ethical 'help lines' where an individual can ring for advice.

A well publicised example of acting about unethical practices occurred in Enron where Sherron Watkins wrote to the Enron chairman and the company's auditors to alert them of unethical practices in the business. Her action caused a chain of events that would see the company go bankrupt and the auditors cease business. Enron were hiding losses and liabilities in partnerships that were not consolidated into the group accounts. The group had been reporting profits rather than losses for several years. The auditors initially ignored the practices; which was to prove to be a fatal error as once the public found out about Andersen's involvement, the firm lost all of its clients.

As a result of corporate accounting standards in the US, the Sarbanes-Oxley Act was introduced in 2002. It aimed to take a legislative approach to corporate accountability. The CEO and CFO are personally responsible for the accuracy of their company's financial information. All companies listed on US stock exchanges must provide a signed certificate to the Securities and Exchange Commission (SEC) confirming the accuracy of their financial accounts.

Consequences of unethical behaviour

- The onsequences of unethical behaviour
- Exam focus

2 Consequences of unethical behaviour

2.1 The consequences of unethical behaviour

There are many consequences of unethical behaviour and most of them are very serious.

- Accountants are expected to be competent, objective and reliable. If they are not, then action is likely to be taken, leading to loss of reputation. An accountant's reputation is a very important asset.
- Other penalties include prison sentences, fines, and prohibition of holding a director's position in the future.

For example, in the Enron case, many senior managers were given prison sentences and some were ordered to repay money they had gained from the fraud.

Another fraud at the US company, Worldcom resulted in prison sentences for senior executives and a 25 year sentence for the CEO.

For accountancy firms, there is the prospect of the partners being sentenced to prison sentences and a serious loss of professional reputation. After news of the Enron fraud, Arthur Anderson lost its clients which eventually resulted in the winding up of the partnership.

The accounting fraud at the Italian dairy company, Parmalat resulted in two audit partners being banned from practising for two years as well as having to make huge compensation payments to Parmalat.

2.2 Exam focus

The Examiner has said that ethical and social issues will be dealt with in question 1 of the paper. This is a 50 mark question, which is mainly computational and may ask you to consider the ethical implication of a particular situation. You will need to think about the right way to act and talk about the ethical principles discussed above.

Example

The Finance Director has set up a company, River, through which Zambeze conducts its investment activities. Zambeze has paid $400 million to River during the year and this has been included in dividends paid. The money was invested in a specified portfolio of investments.

Ninety five per cent of the profits and one hundred per cent of the losses in the specified portfolio of investments are transferred to Zambeze. An investment manager has charge of the company's investments and owns all of the share capital of River. An agreement between the investment manager and Zambeze sets out the operating guidelines and prohibits the investment manager from obtaining access to the investments for the manager's benefit. An annual transfer of the profit/loss will occur on 30th June annually and the capital will be returned in four years time. The transfer of $400 million cash occurred on 1st January 2008 but no transfer of profit/loss has yet occurred. The statement of financial position of River at 30th June 2008 is as follows:

River – Statement of financial position at 30th June 2008

	$m
Investment at fair value through profit or loss	390
	390
Share capital	400
Retained earnings	(10)
	390

Discuss briefly the importance of ethical behaviour in the preparation of financial statements and whether the creation of River could constitute unethical practice by the finance director of Zambeze. **(6 marks)**

Answer

Ethics in accounting is of utmost importance to accounting professionals and those who rely on their services. Accounting professionals know that people who use their services, especially decision makers using financial statements, expect them to be highly competent, reliable, and objective. Those who work in the field of accounting must not only be well qualified but must also possess a high degree of professional integrity. A professional's good reputation is one of his or her most important assets.

There is a very fine line between acceptable accounting practice and management's deliberate misrepresentation in the financial statements. The financial statements must meet the following criteria:

(i) Technical compliance: A transaction must be recorded in accordance with generally accepted accounting principles (GAAP).

(ii) Economic substance: The resulting financial statements must represent the economic substance of the event that has occurred.

(iii) Full disclosure and transparency: Sufficient disclosure must be made so that the effects of transactions are transparent to the reader of the financial statements.

In the case of River it could be argued that the first criterion may be met because the transaction is apparently recorded in technical compliance with IFRS, but technical compliance alone is not sufficient. The second criterion is not met because the transaction as recorded does not reflect the economic substance of the event that has occurred.

Accounting plays a critical function in society. Accounting numbers affect human behaviour especially when it affects compensation, and to deliberately mask the nature of accounting transactions could be deemed to be unethical behaviour. River was set up with the express purpose of keeping its activities off the balance sheet. The Finance Director has an ethical responsibility to the shareholders of Zambeze and society not to mask the true nature of the transactions with this entity.

Further, if the transaction has been authorised by the Finance Director without the authority or knowledge of the Board of Directors, then a further ethical issue arises. Showing the transfer of funds as a dividend paid is unethical and possibly illegal in the jurisdiction. The transfer should not be hidden and River should be consolidated.

CHAPTER 3

Social reporting

Contents

Corporate social responsibility

- Corporate social responsibility: the issues
- Reporting requirements
- Voluntary CSR reporting

1 Corporate social responsibility

1.1 Corporate social responsibility: the issues

Corporate social responsibility (CSR) is a term for the responsibility that a company should have towards society and the environment in which it operates.

Another important term is **sustainability**. The concept of sustainability is that organisations and individuals should meet their own needs today without compromising the needs of future generations. It requires organisations and individuals to preserve the environment and society at large.

Historically, companies have considered themselves responsible to their shareholders by generating dividends and capital growth on their investment. More recently, companies have been criticised for striving to maximise profits at the cost of the environment, through underpaying its workforce or by abusing its power over its smaller suppliers to negotiate prices and terms.

There is now a widely-accepted view that companies should be answerable to a wider range of 'stakeholders' who are taking an increasing interest in their activities. They are interested in the good and bad aspects of a company's operations – its products and services, its impact on the environment and local communities and how it treats and develops its workforce.

Many large companies now accept (possibly for commercial reasons) that their responsibilities extend beyond their shareholders to other stakeholders – their employees, the government, the local community and society in general. Initiatives include sourcing goods from deprived countries at fair prices, campaigns to promote re-cycling of materials, job-sharing and flexi-time working to improve working opportunities and conditions for employees.

The practice of CSR increases the transparency and accountability of an organisation. Transparency is important as stakeholders want to know about an organisation's activities. (They want to 'see into' an entity, to understand what it is doing and which strategic directions it is taking.) For example, if a local community believe that a company is dumping waste in the local area, then it will be important to understand what is actually happening. Likewise, the company needs to accept that it is accountable for its actions. Stakeholders believe that they have a right to know whether a company is acting in the best interests of society and the environment and wish to understand what the company is doing to remedy any faults.

CSR covers the following areas:

- Ethical behaviour by a company and its employees (business ethics)
- The treatment of employees by the entity (employer)
- The treatment of human beings generally (for example, respect for human rights, refusing to use suppliers who employ slave labour or child labour, and so on)
- The entity's relationship with society at large, and the communities in which it operates
- Environmental issues, such as the responsibility of companies to protect and sustain the natural environment.

CSR issues are not the same for each company, because companies operate in different environments. However, for most companies there are some CSR issues, which they might deal with in any of the following ways:

- They might ignore the issues, regardless of the effect of any bad publicity on their reputation and public image.
- They might comply with legislation and regulations on CSR issues, but do very little of a voluntary nature.
- They might seek to promote active CSR initiatives, which will probably involve communicating information about these initiatives both to shareholders and the general public.

1.2 Reporting requirements

There are no international accounting standards on social and environmental reporting.

In some countries, large companies are required to present social and environmental information on an annual basis. In the US the Securities and Exchange Commission, which regulates the stock markets, requires listed companies to quantify their environmental expenditure. They are also required to discuss the effects that compliance may have on their profits and any lawsuits against them relating to environmental issues. Denmark and the Netherlands require mandatory environmental reporting and other countries such as Sweden and France require environmental information to be published alongside the financial information in the annual report.

In the European Union, quoted companies are now required to present certain information in the annual directors' report, as a narrative business review. This review should contain information about the main trends and factors likely to affect the future development, performance and position of the company's business, and information about:

- environmental matters (including the impact of the company's business on its environment
- the company's employees
- social and community issues.

The review should also include:

- analysis using financial key performance indicators, and
- where appropriate, analysis using other key performance indicators, including information relating to environmental matters and employee matters.

In the UK, for example, the government has issued guidance on key environmental performance indicators, including 22 quantifiable performance measures relating to emissions into the air, emissions into the water, emissions into the earth and the use of non-renewable resources.

Since the business review is a part of the annual directors' report, the external auditors are required to give an opinion on whether the information in the report is consistent with the financial statements.

However, this requirement for a business review applies only in the EU, not internationally.

1.3 Voluntary CSR reporting

Because of the potential importance of CSR issues for their reputation and public image, many large companies voluntarily publish an annual CSR report. This is often called an Environmental Report, or a Social and Environmental Report. The intended users of social and environmental reports, or environmental, social and governance (ESG) reports, include stakeholders other than shareholders.

The IASB is happy for companies to present such information, but does not prescribe the content or the format of reports. As a result, the length and style of such reports differs significantly between companies, and the content can vary substantially for companies in different industries.

Some companies include their report on social and environmental issues as part of their financial statements (normally in the directors' report), whereas other companies publish a report as a separate document. Preparing the information as a separate document helps to distinguish between the readers: the annual report is designed for the shareholders, whereas the corporate social responsibility report is prepared for the other stakeholders in addition to the shareholders.

Contents of an environmental report

Typically, an environmental report will include an outline of:

- the entity's policies towards environmental issues
- any improvements since previous years
- an assessment of the key risks faced and how the company intends to respond
- government legislation on environmental matters and how the entity ensures compliance with the legislation
- significant initiatives taken by the company to improve environmental issues
- key environmental performance indicators: targets of the industry and the relative performance of the entity.

- financial information relating to environmental costs, including the entity's accounting policy.

Contents of a social report

A social report (which may be combined with the environmental report) may refer to:

- employee numbers and employee involvement
- employee sick leave, health and safety issues, accidents at work, recruitment of ethnic minorities and the disabled
- involvement with local charities and local communities
- working groups to communicate with stakeholders.

Voluntary guidelines for the content of social and environmental reports

The information provided does not have to be audited, but most organisations will request some kind of audit on the information before it is published to enhance its credibility.

Even so, since the content of these voluntary reports is not regulated and not audited, companies can include whatever they choose (the 'good news') and omit whatever they do not want in the report (the 'bad news'). For this reason, voluntary environmental reports have been treated with some caution by readers.

A number of organisations have produced codes of practice and guidelines for companies to follow, but to date these are non-mandatory. This can lead to problems in comparability of the content of these reports, although having the information in the annual report is better than not disclosing at all.

Global Reporting Initiative

One of the most popular guidelines were issued by the **Global Reporting Initiative (GRI)**. Their *Sustainability Reporting Guidelines* were originally published in 1999 to develop and share guidelines globally. In October 2006, the latest version of these guidelines was published, known as the G3 (third generation) guidelines. Many large international companies have registered to use these guidelines and links to their reports can be found on the GRI website (www.globalreporting.org).

The G3 guidelines provide guidance on the following areas of the report:

- defining the report content
- reporting principles to ensure a quality report, consisting of reliability, clarity, balance, comparability, accuracy and timeliness
- determining which entities will be included in the report
- determining the base content that should be included in the report in four areas: strategy and analysis, organisational profile, report parameter and governance
- management approach to risks and opportunities and the associated sustainability
- performance indicators.

The **Institute of Social and Ethical Accountability** (ISEA) has developed a series of principles-based standards that are intended to provide the basis for improving the sustainability performance of organisations. These standards (which are called AccountAbility standards or the **AA1000** Series) include standards on sustainability and social reporting. On the GRI website, individual company sustainability reports are noted as complying with the GRI guidelines and the AA1000 series if that is the case.

Some sustainability reports are referred to as '**triple bottom line reporting**' because they report on performance and targets in three major areas: economic (financial), social and environmental.

Institutional investors' demand for corporate social responsibility by companies

There has been a significant increase in the demand by major institutional investors for companies in which they invest to pursue social and environmental policies. One such initiative was launched by the United Nations, with the support of 32 major international institutional investors.

In 2006, the UN Global Compact issued six Principles for Responsible Investment. These are intended to encourage institutional investors to give attention to environmental, social and corporate governance (ESG) issues when making their investment decisions. One of the six principles is that companies should be encouraged by their shareholders to provide disclosures on ESG issues – in other words, to report on these issues.

Although there are no international standards on CSR reporting, there is a strong trend towards the provision of more information, on a statutory or a voluntary basis, and this trend in corporate reporting can be expected to continue in the future.

Example: BP Amoco Sustainability Report

BP Amoco produced a 78-page 'Sustainability Report' for 2005, covering its business, environmental record and role in society. BP Amoco follows the GRI guidelines, and subscribes to the ten UN Global Compact Principles.

In its Sustainability Report, there is a cross reference from these ten Principles (and the associated GRI indicators of performance) to the specific part of the report where details are provided.

The ten Principles are as follows:

(1) Businesses should support and respect the protection of international proclaimed human rights within their sphere of influence.

(2) Businesses should make sure that they are not compliant in human rights abuses.

(3) Businesses should uphold the freedom of association and the effective recognition to the right of collective bargaining.

(4) Businesses should uphold the elimination of all forms of forced and compulsory labour.

(5) Businesses should uphold the effective abolition of child labour.

(6) Businesses should eliminate discrimination in respect of employment and occupation.

(7) Businesses should support a precautionary approach to environmental challenges.

(8) Businesses should undertake initiatives to promote greater environmental responsibility.

(9) Businesses should encourage the development and diffusion of environmentally-friendly technologies.

(10) Businesses should work against all forms of corruption, including extortion and bribery.

Management commentary

- Definition and purpose of management commentary
- ED 2009/7: Management commentary

2 Management commentary

2.1 Definition and purpose of management commentary

'Management commentary' is additional information about an entity that complements the information provided in the financial statements of an entity. Two important features of management commentary are that:

- it is provided by management, and expresses the view of the management of the entity
- it is a commentary; therefore much of it is in a narrative form.

The Canadian Accounting Standards Board has defined management commentary as a 'narrative explanation, through the eyes of management, of how your company performed during the period covered by the financial statements and of your company's financial condition and future prospects.' The IASB agrees with most of this definition, but believes that management commentary should include quantitative information as well as narrative; therefore to call it a 'narrative' explanation is misleading.

Management commentary is useful to the users of financial statements because it provides them with additional information that supplements the figures in the accounts. It also gives them an insight into how management view the performance of the business and what they hope to achieve in the future. An assessment of the risks and opportunities facing the entity can also be useful for an investor who may want to make a decision as to whether to continue investing in the entity.

Management commentary is common in many countries. In the European Union, companies are required to include a business review in their annual report and accounts. A business review is a management commentary, and might sometimes be called an Operating and Financial Review (OFR). In the UK there is a statement of best practice that gives guidance on the content and presentation of information in an OFR, which is consistent with the statutory requirements for the content of the business review.

2.2 ED 2009/7: Management commentary

This ED will not result in an IFRS but proposes non-binding guidance on the preparation of a management commentary.
The proposals are intended to provide a basis for the development of good management commentary. It offers a non-binding framework which could be adapted to the legal and economic circumstances of individual jurisdictions.

Main features of the ED

The ED defines management commentary as a narrative report accompanying financial statements prepared in accordance with IFRSs that provides users with historical and prospective commentary on the entity's financial position, financial performance and cash flows, and a basis for understanding management's objectives and its strategies for achieving those objectives.
The ED prescribes a framework for the preparation and presentation of management commentary to assist management in preparing decision-useful management commentary to accompany financial statements prepared in accordance with IFRS.

Management commentary may help users to understand:
- the entity's risk exposures, its strategies for managing risks and the effectiveness of those strategies
- how resources that are not presented in the financial statements could affect the entity's operations
- how non-financial factors have influenced the information presented in the financial statements.

Management commentary should:
- provide management's view of the entity's performance, position and development
- supplement and complement information presented in the financial statements; and
- be orientated to the future.

The relevant focus of management commentary will vary with facts and circumstances but a decision-useful management commentary should include information that is essential to an understanding of:
- the nature of the business
- management's objectives and strategies for meeting those objectives
- the entity's most significant resources, risks and relationships
- the results of operations and prospects
- the critical performance measures and indicators that management uses to evaluate the entity's performance against stated objectives.

CHAPTER 4

Group financial statements

Contents

Revision of principles of consolidation

- International accounting standards and group accounts
- Parent company and subsidiaries
- The nature and purpose of consolidated accounts
- The requirement to prepare consolidated accounts

1 Revision of principles of consolidation

You should already be familiar with the preparation of simple consolidated accounts from your earlier studies. This chapter provides revision material, but also introduces some topics that might not be familiar to you, such as accounting for joint ventures and step acquisitions. It is important that you should understand the basic rules of consolidation before you go on to study more complex group accounts.

1.1 International accounting standards and group accounts

There are four IASs and IFRSs relating to the financial statements of groups of companies:

- IAS 27 *Consolidated and separate financial statements*
- IAS 28 *Investments in associates*
- IAS 31 *Interests in joint ventures*
- IFRS 3 *Business combinations.*

In 2008, revised versions of IAS 27 and IFRS 3 were issued and these are examinable. These revised accounting standards have made some important changes to the rules on accounting for business combinations.

IAS 1 (revised) and group accounts

The requirements for preparation of financial statements, including consolidated financial statements, were changed by IAS 1 (revised) which was issued in November 2007.

One of the requirements of IAS 1 (revised) is that entities should make a distinction in their financial statements between:

- changes in equity during the period that are due to transactions between the entity and its owners in their capacity as owners, such as new share issues and equity dividend payments, and
- changes in equity during the period that are due to other reasons, such as profit or loss in the period and revaluations of current assets.

Changes in equity arising from these 'other reasons' are known collectively as 'total comprehensive income' during the period. Total comprehensive income should be separated into:

- profit or loss in the period, and
- other comprehensive income.

Entities are required by IAS 27 revised to present as part of their financial statements either:

- a statement of comprehensive income, which reports profit or loss during the period, followed by other comprehensive income and total comprehensive income for the period, or
- a separate income statement that reports profit or loss, followed by a statement of comprehensive income that begins with profit after tax for the period, and then presents other comprehensive income and total comprehensive income for the period.

Financial statements are therefore required to distinguish between:

- profit or loss for the period
- other comprehensive income, which consists of gains or losses that are not reported in profit or loss – such as gains on asset revaluations
- transactions between the entity and its owners in their capacity as owners, which are called 'equity transactions' and reported in the statement of changes in equity, but not in the statement of comprehensive income.

These changes affect the reporting and presentation of consolidated accounts (group accounts). This chapter and subsequent chapters in the text will therefore usually refer to:

- 'profit and loss' or 'profit or loss' instead of 'income statement'. This is because entities may now include the components of profit and loss within a statement of comprehensive income rather than as a separate income statement, and
- 'equity transactions' which are transactions between an entity and its owners (shareholders) in their capacity as owners and which are accounted for directly in equity and are not reported through the statement of comprehensive income.

1.2 Parent company and subsidiaries

A group consists of a parent entity and one or more subsidiary entities. (There may also be 'associates' or 'joint ventures' in a group).

- An entity is a **subsidiary** of another entity if it is controlled by that other entity. 'Control' usually means that more than 50% of its equity shares are owned by that other entity.
- Within a group, Company C might be a subsidiary of Company B, which is a subsidiary of Company A. Company C is then a sub-subsidiary of Company A. Group structures with sub-subsidiaries are not examinable.
- The entity that ultimately controls all the entities in the group is called the **parent.**

A parent is defined as 'an entity that has one or more subsidiaries' (IAS 27).

Definition of 'control'

Deciding whether a company is a parent depends on the existence of control.

IAS 27 (revised) defines control as 'the power to govern the financial and operating policies of an entity so as to obtain benefits from its activities.'

Control is assumed to exist when the parent owns directly, or indirectly through other subsidiaries, more than 50% of the voting power of the entity, unless in exceptional circumstances it can be clearly demonstrated that such control does not exist.

Control also exists when the entity (parent) owns 50% or less than 50% of the voting power of the entity but any of the following circumstances also applies:

- The entity has power over more than 50% of the voting rights in the subsidiary by virtue of an agreement with other investors.
- The entity has power to govern the financial and operating policies of the subsidiary entity under a statute or agreement.
- The entity has power to appoint or remove a majority of the members of the board of directors of the subsidiary, and the board of directors has control over the entity.
- The entity has power to cast a majority of votes at meetings of the board of directors of the subsidiary, and the board of directors has control over the entity.

1.3 The nature and purpose of consolidated accounts

A subsidiary is acquired by purchasing a controlling interest in its equity. The parent makes a long-term investment in the subsidiary. In the statement of financial position of the parent, there is a non-current asset:

'Investment in subsidiary, at cost'

In some groups, the parent company has no assets at all except shares in the subsidiaries in the group. A parent whose main assets (or only assets) are shares in subsidiaries is sometimes called a **holding company**.

When a large part of the assets of a parent company consists of investments in subsidiaries, it is difficult for the users of the financial statements of the parent to understand anything about its financial position or financial performance. To find out meaningful information about their investment, users of the parent's financial statements need to know about the financial position and performance of the operating subsidiaries.

The purpose of consolidated accounts is to provide financial statements that have meaning and relevance to users.

When a parent acquires a subsidiary, both the parent and the subsidiary remain legally separate entities. However, in practice they operate as if they were one organisation. Consolidated financial statements reflect the reality (or substance) of the situation: the group is a **single economic unit**. Consolidated accounts are financial statements of all the entities in the group combined. The parent and its subsidiaries:

- combine their profits in a consolidated statement of comprehensive income, or a separate consolidated income statement and a statement of comprehensive income (IAS revised)
- combine their assets and liabilities in a consolidated statement of financial position. (However, the share capital and reserves for the consolidated statement of financial position are not calculated simply by adding the capital and reserves of all the companies in the group!)

Consolidated accounts should include all the subsidiaries of the parent (IAS 27).

1.4 The requirement to prepare consolidated accounts

IAS 27 states that, with certain exceptions, a parent must present consolidated financial statements in which it consolidates all its investments in subsidiaries. In other words, a parent must prepare consolidated financial statements for the group as a whole.

The requirement to include all subsidiaries

Consolidated financial statements should include **all** the subsidiaries of the parent (IAS 27).

There are several reasons why a parent may not wish to consolidate a particular subsidiary, for example:

- The subsidiary's activities are dissimilar from those of the parent, so that the consolidated financial statements might not present the group's financial performance and position fairly.
- The subsidiary has been acquired only so that it can be re-sold within a short time.
- Obtaining the information needed would be expensive and time-consuming and might delay the preparation of the consolidated financial statements.
- The subsidiary operates under severe long term restrictions, so that the parent is unable to manage it properly. For example, a subsidiary might be located in a country badly disrupted by a war or a revolution.

None of these is allowed as a reason for excluding a subsidiary from consolidation.

However:

- Sometimes a subsidiary is acquired with a view to its sale in the short term. An example of this is when the parent company acquires a group but does not wish to keep all the subsidiaries within that group and intends to dispose of the subsidiaries it does not want. The accounting treatment for this is to consolidate

the subsidiary and treat it as a discontinued operation in accordance with IFRS 5 *Non-current assets held for sale and discontinued operations.*

- If a parent actually loses control over an entity which has been a subsidiary, it is no longer a subsidiary, even if the parent still holds more than 50% of its equity shares. This means that it does not have to be consolidated. This may be the case where there are long-term restrictions in place that make it impossible to control the entity. IAS 27 states that it should not be consolidated. This may happen if the subsidiary is located in a foreign country and the laws of that country do not allow the repatriation of funds to the parent company.

Exception to the rule

There is an exception to this rule. A parent need not present consolidated financial statements if (and only if) **all** the following conditions apply:

- The parent itself (X) is a wholly-owned subsidiary, with its own parent (Y).

  Alternatively, the parent (X) is a partially-owned subsidiary, with its own parent (Y), and the other owners of X are prepared to allow it to avoid preparing consolidated financial statements.
- The parent's debt or equity instruments are not traded in a public market.
- The parent does not file its financial statements with a securities commission for the purpose of issuing financial instruments in a public market.
- The parent's own parent, or the ultimate parent company (for example, the parent of the parent's parent), **does** produce consolidated financial statements for public use that comply with International Financial Reporting Standards.

Special purpose entities (SPEs) and consolidation

A group may include companies that are known as special purpose entities (SPEs) or special purpose vehicles (SPVs). These companies are established in such a way that the 'parent' company does not have legal control over the SPE, although some form of effective control does exist. SIC Interpretation 12 states that special purpose entities (SPEs) should be consolidated in the normal way for subsidiaries where the substance of the relationship between the reporting entity and the SPE indicates that the SPE is controlled by the reporting entity (even though legally a parent-subsidiary relationship does not exist).

- The term 'special purpose entity' is not defined by SIC 12.
- SIC 12 provides examples of circumstances in which control of an SPE may exist in substance:
  - the SPE carries on activities on behalf of the reporting entity
  - the reporting entity has decision-making powers over the SPE, and
  - the reporting entity has rights to the majority of the benefits and has exposure to significant risks of the SPE.

Revision of principles of consolidation: the basic calculations

- The consolidated statement of financial position: basic rules
- Preparing a consolidated statement of financial position: partial goodwill method
- Fair value method of accounting for NCI (full goodwill method)
- Preparing a consolidated statement of comprehensive income: basic rules

2 Revision of principles of consolidation: the basic calculations

IAS 27 states that consolidated financial statements are the financial statements of a group presented as those of a **single economic entity**. This means that groups must present their financial statements in the form of consolidated accounts.

In order to present financial statements as those of a single economic entity, assets, liabilities, income and expenses of subsidiaries are aggregated with the corresponding items of the holding company.

The following notes deal with the consolidated statement of financial position first; then the consolidated statement of comprehensive income

2.1 The consolidated statement of financial position: basic rules

A consolidated statement of financial position is prepared as follows:

Most of the assets and liabilities in the consolidated statement of financial position are calculated by adding together the assets and liabilities of the parent and the assets or liabilities of its subsidiaries. (Adjustments are required to eliminate inter-company debts between the parent and subsidiaries, and unrealised profit is eliminated at the year end from inventory that has been sold between group companies.)

Costs of acquisition: transaction costs

IFRS3 (revised) introduced a change in the rule for measuring the cost of an acquisition. **Transaction costs** incurred in making an acquisition, such as the cost of the fees of advisers and lawyers, must not be included in the cost of the acquisition. These costs must be treated as an expense as incurred and written off to profit or loss.

The amount of transaction costs associated with an acquisition and written off during the period to profit or loss must be disclosed in a note to the financial statements.

However, if an entity borrows money to finance an acquisition, the costs associated with arranging the borrowing are treated in accordance with the rules of IAS 39.

These costs are deducted from the value of the debt and amortised over the term of the debt using the effective rate of interest (i.e. the amortised cost method).

Measuring goodwill: acquiring 100% of a subsidiary

Purchased goodwill arises on the acquisition of a subsidiary. When 100% of the equity of a subsidiary is acquired, purchased goodwill is the difference between:

- the cost of the investment in the subsidiary and
- the fair value of the net assets acquired in the subsidiary.

Fair value of net assets of subsidiary at acquisition	$A
Percentage of equity shares acquired	h%
	$
Purchase consideration for the shares acquired	X
Fair value of net assets attributable to parent entity shareholders = $A × h%	Y
Goodwill at acquisition attributable to parent entity shareholders	X – Y

Purchased goodwill is not amortised, but may be subject to impairment. When goodwill has been impaired, it cannot subsequently be re-valued upwards.

Non-controlling interest

The term 'non-controlling interest' has replaced the previously-used term 'minority interests'.

IAS 27 (revised) has adopted an 'economic entity' model for groups, by which all providers of equity capital are owners or shareholders of the group, including the non-controlling interests (NCI) in subsidiaries.

The previous accounting practice had been the 'parent company approach', by which the consolidated financial statements were seen from the perspective of the shareholders in the parent company.

In most respects this change in approach does not affect the preparation of consolidated financial statements. However, there are some changes in the rules affecting the partial disposal of shares in a subsidiary by the parent, or the acquisition of additional shares in an existing subsidiary. These are explained later.

Measuring goodwill when there is a non-controlling interest

The parent company may acquire and own less than 100% of the equity shares of the subsidiary, so that there is a **non-controlling interest** in the subsidiary. A non-controlling interest is included in the consolidated statement of financial position as a part of total equity, but is shown separately from the parent company's equity interest in the group.

- With the revision of IFRS 3 (2008) two methods are permissible to account for non-controlling interests in the consolidated statement of financial position.
  - **Method 1: the 'partial goodwill' method**. The non-controlling interest reflects the carrying value of the net assets of the subsidiary at the end of the reporting period that are attributable to the external (non-group) shareholders in the subsidiary.
  - **Method 2: the 'full goodwill' method or full fair value method**. This is the same as Method 1, except that the non-controlling interests also include an amount for goodwill in the subsidiary that is attributable to the non-controlling interests. This goodwill is measured when the subsidiary is acquired, and subsequently may be subject to impairment.

IFRS3 (revised) allows either method to be used for any acquisition. The choice of method is on a transaction-by-transaction basis, and the same method does not have to be used for every acquisition by the parent company.

The 'full goodwill method', also called the 'full fair value method', is consistent with the 'economic entity model' for reporting the financial results of a group of companies, and it is likely to be examined regularly.

Pre-acquisition profits and measuring purchased goodwill

A group comes into existence as a result of a 'business combination' when the parent company acquires one or more subsidiaries. If the subsidiary acquired is an existing entity that has already been trading, and is not a newly-incorporated entity, some of the subsidiary's net assets at the date of the business combination will represent the accumulated retained profits of the subsidiary that have been earned up to that date, before the combination occurred. These profits are reflected in the net assets purchased by the parent and in the price that it pays. They are treated as **'pre-acquisition' profits**, and are not reported as group profits in the consolidated financial statements.

The net assets acquired are adjusted to their fair values at the date of acquisition.

The difference between the fair value of the net assets acquired and the purchase cost of the subsidiary is the **purchased goodwill** attributable to equity holders in the parent company recognised on the combination.

Measuring equity in the group statement of financial position

In the consolidated statement of financial position, equity consists of the equity attributable to owners of the parent company plus the non-controlling interests in subsidiaries.

The **equity attributable to shareholders of the parent company** consists of:	
The equity share capital of the parent	A
The reserve accounts of the parent	B
The parent's share of the post-acquisition reserves of the subsidiary: these are the parent's share of the post-acquisition retained profits of the subsidiary, and any other post-acquisition movements in the subsidiary's reserves, such as its revaluation reserve	C
Plus or minus any 'consolidation adjustments'	D
For example, accumulated impairment of the purchased goodwill (attributable to equity holders in the parent company) is deducted	
Equals: Equity attributable to the shareholders of the parent	A + B + C, + or - D

The **non-controlling interests** are calculated as follows:

- If the partial goodwill method is used:

  NCI = Carrying value of net assets of Subsidiary × % equity in Subsidiary held by NCI

- If the full goodwill method is used:

Carrying value of net assets of Subsidiary × % equity in Subsidiary held by NCI	A
Plus: Goodwill attributable to NCI at acquisition	B
Minus: Subsequent impairment off goodwill	(C)
Equity attributable to non-controlling interests	A + B – C

2.2 Preparing a consolidated statement of financial position: partial goodwill method

We recommend a five-step approach to preparing a basic consolidated statement of financial position, where there is just one subsidiary and where the accounting policy is that non-controlling interests in the subsidiary should not include an element for goodwill. (If there is more than one subsidiary, the same steps apply to each subsidiary in turn.)

- **Step 1**. Calculate the parent's percentage share and the non-controlling interest percentage share in the subsidiary.
- **Step 2**. Calculate the net assets of the subsidiary (1) at the date of acquisition and (2) at the end of the reporting period. The net assets at the date of acquisition are revalued to their fair value. The difference between the net assets of the subsidiary at these two dates is used to calculate the **post-acquisition accumulated profits of the subsidiary.**

	At end of reporting period	At acquisition	Post acquisition accumulated profits
	$	$	$
Equity shares	X	X	-
Accumulated profits	Y	Z	Y – Z
	X + Y	X + Z	

- **Step 3**. Calculate the purchased goodwill on acquisition. Then reduce this goodwill by any accumulated impairments to date, to calculate the figure for goodwill to include in the consolidated statement of financial position.
- **Step 4**. Calculate the non-controlling interest, as an appropriate percentage of the net assets of the subsidiary at the end of the reporting period. (For non-controlling interests, there is no need to distinguish between pre-acquisition and post-acquisition profits.)
- **Step 5**. Calculate consolidated accumulated profits, using the post-acquisition profits of the subsidiary now identified in Step 2 and any impairments to goodwill from Step 3.

Parent accumulated profits	A
Parent's share of subsidiary's post-acquisition profits	B
Minus: Impaired goodwill since acquisition	(C)
	A+ B – C

Sometimes a subsidiary has reserves other than retained earnings. The same basic rules apply. If a reserve existed at the acquisition date, it is included in the goodwill calculation and treated in the same way as pre-acquisition profits. If a reserve arose after the acquisition date, it is treated in the same way as post-acquisition profits.

You can then prepare the consolidated statement of financial position.

Example

The statements of financial position of a parent company P and its subsidiary S at 31 December Year 6 are as follows:

	Parent P	Subsidiary S
	$	$
Non-current assets:		
Property, plant and equipment	620,000	120,000
Investment in S	188,000	-
	808,000	120,000
Current assets	112,000	60,000
	920,000	180,000

Capital and reserves		
Equity shares of $0.50 each	100,000	40,000
Share premium	200,000	30,000
Accumulated profits	480,000	90,000
	780,000	160,000
Bank loan	140,000	20,000
	920,000	180,000

P acquired 64,000 shares in S on 1 January Year 6 when the accumulated profits of S were $65,000. The values for assets and liabilities in the statement of financial position of S represent fair values.

The accounting policy of P is to measure non-controlling interests (NCI) at their proportionate share of the net assets of the subsidiary (and not to measure NCI by the 'fair value' method, including some goodwill).

Neither company has paid any dividends during the year. A review of goodwill at 31 December Year 6 found that goodwill had been impaired, and was now valued at $50,000.

Required

Prepare a consolidated statement of financial position as at 31 December Year 6.

Answer

Step 1

Calculate the group share (parent company's percentage share) and the NCI percentage share in the subsidiary.

The total number of shares in the subsidiary is $40,000/$0.50 per share = 80,000 shares. P acquired 64,000 shares.

	%
Parent: (64,000/80,000) × 100%	80
Non-controlling interest: (balancing figure)	20
	100

Step 2

Calculate the net assets of S at acquisition and at the end of the reporting period (= 31 December Year 6).

	At end of reporting period	At acquisition	Post acquisition accumulated profits
	$	$	$
Equity shares	40,000	20,000	-
Share premium	30,000	50,000	-
Accumulated profits	90,000	65,000	25,000
	160,000	135,000	

You should assume that the subsidiary has not issued any shares since acquisition, so the figures for equity shares and share premium will be the same at acquisition as at the end of the reporting period.

Step 3

Calculate the goodwill.

	$
Cost of the acquisition	188,000
Minus: Parent's share of the subsidary's net assets at acquisition ($135,000 (Step 2) × 80% (Step 1))	(108,000)
Goodwill at acquisition	80,000
Minus: Impairment of goodwill to date (balancing figure)	(30,000)
Balance carried forward	50,000

Step 4

Calculate the non-controlling interest's share.

Share of net assets of the subsidiary at the end of the reporting period:

= $160,000 (Step 2) × 20% (Step 1) = $32,000

Step 5. Calculate consolidated accumulated profits.

	$
Parent accumulated profits	480,000
Parent's share of subsidiary's post-acquisition profits (80% (Step 1) × $25,000 (Step 2))	20,000
Minus: Impaired goodwill since acquisition (Step 3)	(30,000)
Consolidated accumulated profits	470,000

The consolidated statement of financial position as at the date of acquisition is prepared as follows:

P Group

Consolidated statement of financial position as at 31 December Year 6

	$000
Tangible non-current assets (620,000 + 120,000)	740,000
Goodwill	50,000
	790,000
Current assets (112,000 + 60,000)	172,000
Total assets	962,000
Equity and liabilities	
Equity attributable to equity holders of the parent	
Share capital (parent only)	100,000
Share premium (parent only)	200,000
Accumulated profits (Step 5)	470,000
	770,000
Non-controlling interest (Step 4)	32,000
Total equity	802,000
Bank loans (140,000 + 20,000)	160,000
Total equity and liabilities	962,000

2.3 Fair value method of accounting for NCI: full goodwill method

NCI and goodwill

A problem with accounting for non-controlling interests is the treatment of goodwill.

- When a parent company acquires 100% of a subsidiary, it acquires 100% of the goodwill in the subsidiary, which is included in the consolidated statement of financial position as purchased goodwill.

- When a parent company acquires less than 100% of a subsidiary, there is presumably some goodwill in the subsidiary that is attributable to the non-controlling interests. However the value of this goodwill is likely to be less than the goodwill attributable to the parent company, not only because the NCI owns a smaller proportion of the shares but also because the value of goodwill is usually enhanced for the parent by having a controlling interest.

If there is some goodwill in the subsidiary that is attributable to the NCI, a question to resolve is whether this goodwill should be included in the consolidated statement of financial position.

As stated previously, IFRS 3 (revised) allows two methods of accounting for NCI, on a transaction-by-transaction basis:

- **Method 1 (partial goodwill method)**. Do not recognise any goodwill for the NCI in the consolidated statement of financial position. NCI should be valued at a proportionate share of the identifiable net assets of the subsidiary. For example if the NCI in a subsidiary is 30% and the identifiable net assets of the subsidiary are $1,000,000, the NCI should be included in the consolidated statement of financial position at $300,000. This is the 'traditional' method of accounting for NCI, described above, that has been applied by companies that use IFRSs to prepare their financial statements.
- **Method 2: fair value method or full goodwill method**. Recognise the goodwill attributable to the NCI in the consolidated statement of financial position, as at the date of acquisition. By doing this, the NCI is measured at 'fair value' as at the acquisition date. This goodwill cannot subsequently be re-valued upwards, but if the goodwill is subsequently impaired it should then be written down in value.

With this 'fair value' method, the preparation of the consolidated statement of financial position is similar to the method already described. The difference is that:

- Goodwill attributable to the NCI (asset) is included in goodwill in the consolidated statement of financial position
- NCI (equity) is increased by the amount of this goodwill.

By adding the goodwill attributable to the non-controlling interests to their proportionate share of the net assets of the subsidiary, the non-controlling interests are valued at their fair value as at the acquisition date.

IFRS 3 provides the following 'fair value' formula for the calculation of total goodwill in the consolidated statement of financial position as at the acquisition date:

	$
Purchase consideration paid by the parent company	A
Fair value of NCI at acquisition date	B
	A + B
Identifiable net assets of the subsidiary at the acquisition date (at fair value)	(C)
Total goodwill (parent and NCI)	A + B – C

After the acquisition date, the fair value formula is no longer applied. NCI is valued in the consolidated statement of financial position at:

	$
Proportionate share of identifiable net assets of subsidiary	X
Goodwill attributable to NCI (= goodwill as at acquisition date less any subsequent impairment)	Y
	X – Y

Example 1

Hold acquired 75% of the shares of Stub on 1 April Year 3 at a price of $11 per share. A summary statement of financial position of Stub at this date is as follows:

Stub **Statement of financial position at 1 April Year 3**	$
Total assets	750,000
Equity	
Ordinary shares of $1 each	100,000
Retained earnings	600,000
	700,000
Liabilities	50,000
Equity plus liabilities	750,000

It has been estimated that the goodwill attributable to the non-controlling interests in Stub at this date was $60,000.

For the purpose of preparing a consolidated statement of financial position, goodwill and the non-controlling interests should be valued as follows.

	$
Net assets of subsidiary at acquisition date = $(750,000 – 50,000)	700,000
Fair value of parent company share = 75% × $700,000	525,000
Amount attributable to NCI = 25% × $700,000	175,000
Goodwill attributable to NCI at acquisition	60,000
Fair value of NCI at acquisition date	235,000

	$
Purchase consideration paid by the parent company (75,000 shares × $11)	825,000
Fair value of parent company share of net assets	525,000
Purchased goodwill attributable to parent	300,000

	$
Purchased goodwill attributable to parent	300,000
Goodwill attributable to NCI	60,000
Total goodwill in consolidated statement of financial position	360,000

Alternatively, total goodwill could be calculated as follows:

	$
Purchase consideration paid by the parent company	825,000
Fair value of NCI at acquisition date (175,000 + 60,000)	235,000
	1,060,000
Net assets of the subsidiary at the acquisition date (at fair value)	(700,000)
Total goodwill (parent and NCI)	360,000

At the acquisition date, the NCI is valued at $235,000. Subsequently, the value of NCI in the consolidated statement of financial position should be the proportionate share of the NCI in the net assets of the subsidiary, plus the goodwill of $60,000 less any accumulated impairment of this goodwill.

Example 2

Hake acquired 60% of the equity shares in Sole in a single transaction, paying $80 million in cash. Based on the trading price of shares in Sole at the acquisition date, a value of $50 million is assigned to the 40% of Sole held by the non-controlling interests.

At the acquisition date, the fair value of Sole's identifiable net assets was $90 million.

If the **fair value method** is used and goodwill in Sole is attributed to the NCI, the transaction would be accounted for as follows:

	Debit	**Credit**
	$ million	$ million
Fair value of assets acquired	90	
Goodwill (800 + 500 – 900)	40	
Cash		80
Non-controlling interests		50

	$ million
Purchase consideration paid by Hake	80
Net assets in Sole attributable to Hake shareholders (60% × $90 m)	54
Purchased goodwill attributable to Hake shareholders	26

	$ million
Value assigned to NCI at acquisition	50
Net assets in Sole attributable to NCI (40% × $90 m)	36
Purchased goodwill attributable to NCI	14

If the partial goodwill method is used and NCI is valued at a proportionate share of the net assets of the subsidiary, the transaction would be accounted for as follows:

	Debit	Credit
	$ million	$ million
Fair value of assets acquired	90	
Goodwill (Hake shareholders only - see above)	26	
Cash		80
Non-controlling interests (40% × $90 m)		36

Comparing the full goodwill and partial goodwill methods

The following example shows the differences between the partial goodwill and the full goodwill methods of consolidation.

Example

Hand acquired 70% of the equity shares in Sand in a single transaction, paying $226 million in cash. At the acquisition date the fair value of the net assets of Sand was $220 million. The fair value of the non-controlling interest at this date was $69 million.
At the acquisition date, Hand had $600 million of ordinary shares in issue and reserves of $800 million, and net assets of $1,400 million, including the investment in Sand at cost. It has no other subsidiaries.

Required
Prepare a consolidated statement of financial position at the acquisition date, using:
(a) the partial goodwill method
(b) the full goodwill method.

Answer

Partial goodwill method

	$ million
Fair value of net assets of subsidiary at acquisition date	220
NCI (30%)	(66)
	154
Purchase consideration	226
Goodwill	72

Consolidated statement of financial position	$ million
Fair value of net assets (1,400 – 226 + 220)	1,394
Goodwill	72
	1,466

Ordinary shares (Hand)	600
Reserves attributable to equity holders of Hand	800
	1,400
Non-controlling interest	66
Total equity	1,466

Full goodwill method

	$ million
Purchase consideration	226
Fair value of NCI	69
	295
Fair value of net assets of subsidiary at acquisition date	220
Goodwill	75

Consolidated statement of financial position	$ million
Fair value of net assets (1,400 – 226 + 220)	1,394
Goodwill	75
	1,469
Ordinary shares (Hand)	600
Reserves attributable to equity holders of Hand	800
	1,400
Non-controlling interest	69
Total equity	1,469

The goodwill is higher with the full goodwill method, and so too is the value of the NCI.

How is the goodwill attributable to NCI calculated?

For the purpose of your examination, if you are asked to prepare a consolidated statement of financial position using the fair value method for NCI, the exam question will either give the value of the goodwill attributable to the NCI or will provide information that enables you to calculate it. NCI might be calculated in one of the following ways.

- The exam question might state that the fair value of the NCI at the acquisition date was $X. The value of attributable goodwill can then be calculated as the difference between this total fair value ($X) and the proportionate share of the NCI in the net assets of the subsidiary at the acquisition date.
- The exam question might give the market value of the shares in the subsidiary before its acquisition. The fair value of the NCI can then be estimated as the number of shares held by the NCI multiplied by the pre-acquisition price per share. Having established the total fair value of the NCI, the attributable goodwill is calculated by subtracting the proportionate share of the NCI in the net assets of the subsidiary at the acquisition date (same as the method above).

In the P2 exam, it is more likely that you will be given the fair value of the NCI at the acquisition date. The examiner has commented (Student Accountant, February 2009): 'Although measuring NCI at fair value may prove difficult, goodwill impairment testing is likely to be easier under full goodwill, as there is no need to gross up goodwill for partially-owned subsidiaries.'

Impairment of goodwill after acquisition: fair value method of measuring NCI

When non-controlling interests are valued by the fair value method, any impairment in the total goodwill after acquisition should be shared between the parent company shareholders and the NCI. It is tempting to allocate the write off of goodwill between the parent and NCI by prorating. However, para C6, Appendix C to IAS 36 says that the impairment should be "allocated between the parent and the NCI on the same basis as that on which profit or loss is allocated".

Example

S has 10 million shares of $1 each in issue. H acquired 80% of these shares at a price of $11.6 million when the net assets of S were $10 million. Prior to the acquisition, the shares of S had been trading in the stock market at $1.20 per share.

	$
Purchase consideration paid by the parent company	11,600,000
Fair value of parent company share of net assets (80% × $10 million)	8,000,000
Purchased goodwill attributable to parent	3,600,000

	$
Fair value of NCI at acquisition date (2,000,000 × $1.20)	2,400,000
NCI share of net assets at this date (20% × $10 million)	2,000,000
Purchased goodwill attributable to NCI	400,000

Total goodwill = $3,600,000 + $400,000 = $4,000,000.

Suppose that subsequently goodwill is impaired in value by $1.5 million, so that it is now valued at just $2,500,000.

The impairment in the goodwill may be attributed to the parent company and the NCI in the according to the proportions used to allocate profit or loss (80:20)

	Total	Attributable to parent	Attributable to NCI
	$	$	$
Original goodwill	4,000,000	3,600,000	400,000
Impairment	(1,500,000)	(1,200,000)	(300,000)
Revised value	2,500,000	2,400,000	100,000

Note that with the full goodwill method, the net assets of the group will be higher than with the partial goodwill method, because of the larger amount for goodwill. However, subsequent impairments of goodwill will also be larger with the full goodwill method.

2.4 Preparing a consolidated statement of comprehensive income: basic rules

IAS 1 requires consolidated financial statements to include either:

- a single consolidated statement of comprehensive income, or
- two statements: (1) a consolidated income statement that reports the components of profit or loss, and (2) a consolidated statement of comprehensive income that begins with profit after tax and then shows the other components of comprehensive income.

This is the same requirement as for single entities.

In addition, in consolidated financial statements, there must also be disclosure of:

(1) the profit or loss for the period attributable to:
  - owners of the parent company, and
  - non-controlling interests.

(2) total comprehensive income for the period attributable to:
  - owners of the parent company, and
  - non-controlling interests.

When there are two separate statements, item (1) should be disclosed in the consolidated income statement and item (2) should be disclosed in the statement of comprehensive income.

The main problems with preparing a consolidated statement of comprehensive income relate to reporting profit or loss for the period, and this section therefore focuses on profit or loss items.

Pre- and post-acquisition profits

When a parent acquires a subsidiary **during** a financial year, the profits of the subsidiary have to be divided into pre-acquisition and post-acquisition profits.

For the purpose of reporting the consolidated profit or loss, we need to calculate the pre-acquisition and post-acquisition profit in the current year.

- The pre-acquisition profit is used to calculate the goodwill.
- The post-acquisition profit (or loss) is included in the consolidated profit for the year, in the consolidated statement of comprehensive income or the consolidated income statement.

Unless you are given information that suggests an alternative, assume that in the year of acquisition, the profits of the subsidiary occur at an even rate throughout the year. The division of the annual profit of the subsidiary into pre-acquisition and post-acquisition elements can then be done on a time basis.

Non-controlling interest in consolidated profit or loss

When there is a non-controlling interest in a subsidiary, the consolidated profit or loss should show:

- the post-acquisition profit for the year for the group as a whole, including all the post-acquisition profit of the subsidiary, and
- the amount of this total profit that that is attributable to the parent's equity shareholders and the amount that is attributable to the non-controlling interest in the subsidiary.

For the purpose of preparing the consolidated statement of comprehensive income (or consolidated income statement), **all the pre-acquisition profits of the subsidiary are excluded**. The statement should include the following analysis:

Profit for the period	X
Attributable to:	
Equity holders of the parent	Y
Non-controlling interest	Z
	Y + Z = X

Example

Entity P acquired 400,000 shares in Entity S on 1 September Year 7. The total net assets of Entity S at 1 January Year 7 were $1,330,000.

The statement of financial position of entity S at 31 December Year 7 was as follows:

Entity S

Statement of financial position as at 31 December Year 7

	$000
Property, plant and equipment	1,400
Current assets	600
	2,000
Equity and liabilities	
Equity shares of $1 each	600
Share premium	300
Accumulated profits	700
	1,600
Liabilities	400
	2,000

There has been no dividend payment by S in the year. The profit after tax of Entity P for the year was $530,000. There has been no impairment of goodwill.

Required

Calculate the consolidated profit for the year to 31 December Year 7, and the allocation of this profit between the equity holders of the parent and the non-controlling interests in S.

Answer

Step 1

Establish the percentage share in the subsidiary of the parent P and the non-controlling interests.

	%
Parent share: (400,000/600,000) × 100%	66.67
NCI share: (200,000/600,000) × 100%	33.33
	100.00

Step 2

Establish the post-acquisition profit of the subsidiary.

Since there has been no dividend payment, the annual profit for the subsidiary can be calculated as the difference between the net assets of Entity S at the end of the year and the net assets at the beginning of the year.

	$
Net assets of subsidiary at 31 December Year 7 (2,000 – 400)	1,600,000
Net assets of subsidiary at 1 January Year 7	1,330,000
Profit for the year after tax	270,000
Post-acquisition profit (4 months, therefore 4/12 × $270,000)	90,000

Step 3

Allocate the subsidiary's post-acquisition profit between the parent's equity shareholders and the non-controlling interests in Entity S.

	$
Parent P share: 66.67% × $90,000	60,000
NCI share: 33.33% × $90,000	30,000

Step 4

Calculate the profit for the year for the group as a whole, and separate into the parent's share and the profit attributable to the NCI:

	$
Profit for the year of Entity P	530,000
Post-acquisition profit of subsidiary S	90,000
Consolidated profit for the year	620,000
Attributable to:	
Equity holders of the parent (530,000 + 60,000)	590,000
Non-controlling interests	30,000
	620,000

Other adjustments to the consolidated profit or loss: impairment of goodwill

There may be other adjustments to the consolidated profit or loss for the year.
One such adjustment is impairment of goodwill. When purchased goodwill is impaired, the impairment does not affect the individual financial statements of the parent company or the subsidiary. The effect of the impairment applies exclusively to the consolidated statement of financial position and the consolidated statement of comprehensive income.

If goodwill is impaired:

- it is written down in value in the consolidated statement of financial position, and
- the amount of the write-down is charged as an expense in profit or loss, usually as an administration expense.

When the partial goodwill method of accounting is used, a write-down in goodwill affects the parent entity only, not the non-controlling interests. It should therefore be deducted from the profit attributable to the equity holders in the parent.

When the full goodwill or fair value method is used, a write-down in goodwill affects both the parent company shareholders and the NCI, and the impairment attributable to each is calculated using the method explained earlier.

NCI and losses

When a group reports a loss for the year rather than a profit, IAS 27 (revised) requires that the loss should be attributed to the owners of the parent company and the NCI, in the same way that profits are allocated between them.

This requirement is different from the rule in the previous version of IAS 27. Previously, it was permitted to allocate a share of a consolidated loss to the NCI only if the NCI had entered into a binding obligation to fund their share of the loss.

Other aspects of IFRS 3 (revised)

- Fair values at acquisition and recognitiion criteria
- Recognition of intangible assets at acquisition
- Bargain purchases
- Measuring the cost of an acquisition (the consideration)
- Fair value adjustments in a subsequent period
- Fair value adjustments in the income statement

3 Other aspects of IFRS 3 (revised)

3.1 Fair values at acquisition and recognition criteria

When a subsidiary is acquired, the parent company acquires a share of the fair value of the net identifiable assets of the subsidiary. The assets and liabilities of the subsidiary are re-measured at fair value for the purpose of consolidation, and goodwill attributable to the parent entity at acquisition is the difference between the purchase consideration and the parent's share of the fair value of the net assets of the subsidiary.

Establishing fair value is therefore an important requirement in accounting for acquisitions. Fair value is the amount at which an asset could be exchanged or a liability settled, between knowledgeable, willing parties in an arm's length transaction.

IFRS 3 states that the acquirer (parent company) at the acquisition date should recognise, separately from goodwill:

- the identifiable assets acquired
- the liabilities assumed, and
- any non-controlling interest in the subsidiary ('acquiree').

The recognition of assets and liabilities in the subsidiary is subject to certain rules.

- To qualify for recognition, assets and liabilities must meet the definitions of assets and liabilities in the IASB Framework.
- The application of the recognition rules by the acquirer may result in recognising some assets that the acquiree (subsidiary) does not recognise in its financial statements. For example the acquirer might acquire rights in brand names or patent rights that the acquired subsidiary does not include in its financial statements. Recognising intangible assets at acquisition is described in more detail later.

The table below shows how different types of asset and liability should be valued.

Item	Fair value
Marketable investments	Current market value
Non-marketable investments	Estimated values that take into consideration features such as: (a) price earnings ratios (b) dividend yield (c) expected growth rates of comparable investments
Trade and other receivables	Present values of the amounts to be received. This is normally the same as the book value. Discounting is not usually required because amounts are expected to be received within a few months.
Inventories: finished goods	Selling price less the sum of: (a) the costs of disposal, and (b) a reasonable profit allowance for the selling effort of the acquirer based on profit for similar finished goods.
Inventories: work in progress	Selling price of finished goods less the sum of: (a) costs to complete, (b) costs of disposal, and (c) a reasonable profit for the completing and selling effort based on profit for similar finished goods.
Inventories: raw materials	Current replacement costs
Land and buildings	Market value
Plant and equipment	Normally market value. Use depreciated replacement cost if market value cannot be used (e.g., because of the specialised nature of the plant and equipment or because the items are rarely sold, except as part of a continuing business).
Intangible assets	Described later.
Trade and other payables; long-term debt and other liabilities.	Present values of amounts to be disbursed in meeting the liability determined at appropriate current interest rates. For current liabilities this is normally the same as book value.

Contingent liabilities

Many acquired businesses will contain contingent liabilities such as contingent liabilities for the settlement of legal disputes or for warranty liabilities. IFRS 3 states that contingent liabilities should be recognised at acquisition 'even if it is not probable that an outflow of resources embodying economic benefits will be required to settle the obligation.'

- The contingent liabilities should be measured at fair value at the acquisition date. (Contingent assets are not recognised).
- After the acquisition date, contingent liabilities should subsequently be re-measured in the consolidated statement of financial position at the **higher** of the original amount and the amount that would be reported under the relevant standard, IAS 37. However, the contingent liabilities cannot be recognised in the entity's individual financial statements (and the rules of IAS 37 apply).

Deferred tax

Deferred income tax assets and liabilities are recognised and measured in accordance with IAS 12 *Income Taxes*, rather than at their acquisition-date fair values.

Restructuring costs

An acquirer should not recognise a liability for the cost of restructuring a subsidiary or for any other costs expected to be incurred as a result of the acquisition (including future losses).

This is because a plan to restructure a subsidiary after an acquisition cannot be a liability at the acquisition date. For there to be a liability (and for a provision to be recognised) there must have been a past obligating event. This can only be the case if the subsidiary was already committed to the restructuring before the acquisition.

This means that the acquirer cannot recognise a provision for restructuring or reorganisation at acquisition and then release it to profit and loss in order to 'smooth profits' or reduce losses after the acquisition.

Example

Entity P acquired 100% of the shares of Entity S on 1 May at a cost of $700,000. The statements of financial position of the entities at the acquisition date were as follows:

	At the acquisition date 1 May	
	P	**S**
	$	$
Non-current assets:		
Property, plant and equipment	500,000	350,000
Investment in S	700,000	-
	1,200,000	350,000

Current assets		
Inventory	70,000	60,000
Other current assets	130,000	110,000
	1,400,000	520,000
Equity		
Ordinary shares	300,000	200,000
Share premium	200,000	100,000
Retained earnings	580,000	170,000
	1,080,000	470,000
Current liabilities	320,000	50,000
	1,400,000	520,000

The fair value of the subsidiary's inventory at 1 May is estimated as $52,000.

The fair value of the non-current assets of the subsidiary at 1 May is estimated as $420,000.

The directly attributable costs of the acquisition were $45,000 paid in cash. This payment has not been included in the statement of financial position for P above. (Note: If the payment had been included, the 'other current assets' of P would be $45,000 lower and the cost of the investment in S would be $45,000 higher.)

P uses the partial goodwill method of accounting for non-controlling interests, so that NCI is valued at a proportionate share of the fair value of the net assets in S.

The **goodwill** is calculated as follows:

	$
Fair value of net assets:	
Non-current assets	420,000
Inventory	52,000
Other current assets	110,000
Liabilities	(50,000)
	532,000
Consideration paid	700,000
Goodwill	168,000

A consolidated statement of financial position as at the date of acquisition will be as follows, after recording the acquisition costs of $45,000. These costs reduce the current assets and the profits of the parent P.

P Group

Consolidated statement of financial position as at the date of acquisition of S

		$
Non-current assets:		
Property, plant and equipment	(500,000 + 420,000)	920,000
Goodwill at cost		168,000
Current assets		
Inventory	(70,000 + 52,000)	122,000
Other current assets	(130,000 + 110,000 – 45,000)	195,000
		1,405,000
Equity		
Ordinary shares (P only)		300,000
Share premium (P only)		200,000
Consolidated retained earnings	(580,000 – 45,000)	535,000
		1,035,000
Current liabilities	(320,000 + 50,000)	370,000
		1,405,000

Note that the statement of financial position of the subsidiary S at the date of acquisition is adjusted as follows, for the purpose of consolidation:

S

Adjusted statement of financial position at 1 May

Non-current assets:	$
Property, plant and equipment	420,000
Current assets	
Inventory	52,000
Other current assets	110,000
	582,000
Equity	
Ordinary shares	200,000
Share premium	100,000
Revaluation reserve (420,000 – 350,000) – see Note 1	70,000
Retained earnings – see Note 2	162,000
	532,000
Current liabilities	50,000
	582,000

Notes

(1) A revaluation reserve is created for the revaluation of the non-current assets. The retained earnings are adjusted downwards to allow for the downwards revaluation of the inventory by $8,000.

(2) The retained earnings of the subsidiary after the fair value adjustments are calculated as follows:

	$
Retained earnings in the accounts of S as at the acquisiton date	170,000
Minus downward adjustment to inventory valuation (60,000 – 52,000)	(8,000)
Adjusted retained earnings of subsidiary S	162,000

3.2 Recognition of intangible assets at acquisition

Intangible assets should be recognised when a subsidiary is acquired, regardless of whether or not they are recognised in the financial statements of the subsidiary itself. If the intangible can be separately identified, it must be recognised as an asset at acquisition, even if obtaining a reliable measure of its value is difficult.

The acquirer (parent company) is required to recognise intangibles such as brands, licences and customer relationships. As a consequence of recognising such intangibles:

- The amount of purchased goodwill is smaller than it would be if the intangibles had not been recognised.
- After the acquisition, the intangibles that have been recognised are subject to amortisation (whereas goodwill is not amortised and is only subject to impairment).

For example if a company acquires a subsidiary which has a contractual agreement with a major customer that has three years remaining, the value of the customer relationship should be recognised as an intangible asset and amortised over the next three years.

Guidelines on the implementation of IFRS 3 give some suggestions about what types of intangible asset might be recognised in an acquisition, and provide five broad categories of intangible:

- Marketing-related intangible assets, such as the value of brand names, trade marks, and internet domain names
- Customer-related intangible assets, such as customer lists, a backlog of customer orders, contracts with customers or relationships with non-contractual customers
- Artistic-related intangible assets, such as the value of films, photographs, musical works and pictures owned by the acquiree
- Contract-related intangible assets such as the value of licences, royalty rights, lease agreements, construction permits, broadcasting rights and franchising rights

- Technology-based intangible assets, such as patented technology, non-patented technology, software and databases.

Example

H acquires S. At the acquisition date, S has a four-year agreement to supply regular quantities of a product to a customer, C. Customer C has indicated that he is likely to renew the agreement at the end of the four-year period.

In this situation, H should recognise the following intangibles on acquisition of S, separately from goodwill:

(1) Existing four-year customer agreement

(2) Long-term customer relationship.

Example

H acquires S. At the acquisition date, S has a backlog of unfulfilled customer orders amounting to three months of output and sales. 80% of the customers of S are recurring and long-standing customers

In this situation, H should recognise the following intangibles on acquisition of S, separately from goodwill:

(1) Backlog of current orders

(2) Long-term customer relationships.

Operating leases

IFRS 3 requires that if a subsidiary (acquiree) is the lessee for an operating lease, the acquirer (parent) must recognise an intangible asset or a liability at acquisition, to the extent that the terms of the lease are more favourable (intangible asset) or less favourable (liability) than current market rates for similar operating leases.

3.3 Bargain purchases

Goodwill is not amortised. However, it is subject to an annual impairment test.

Occasionally, there may be 'negative goodwill', when the cost of the shares acquired in the subsidiary is less than the parent's share of the fair value of the net assets of the subsidiary. The value of the goodwill is therefore a negative amount.

'Negative goodwill' is not described as such by IFRS 3. Instead, IFRS 3 refers to 'bargain purchases'.

- If the acquirer's interest in the fair value of the acquired identifiable net assets exceeds the cost of the investment in the subsidiary, this excess must be recognised immediately as a gain in profit and loss, attributable to the shareholders in the parent entity.

- Before an acquirer can conclude that there has been a bargain purchase and that 'negative goodwill' has arisen, however, it must re-assess:
  - the identification and measurement of the assets, liabilities, and contingent liabilities of the acquired subsidiary, and
  - the measurement of the cost of the acquisition.

3.4 Measuring the cost of an acquisition (the consideration)

IFRS 3 states that the purchase consideration for an acquisition (business combination) is the sum of:

- the fair values, at the acquisition date, of the assets transferred by the acquirer, such as cash
- the liabilities incurred by the acquirer to the former owners of the acquiree
- equity instruments issued by the acquirer in exchange for control of the acquiree.

The purchase consideration may include some deferred consideration.

When the acquirer issues shares as part of the purchase consideration and the shares are quoted equity instruments, they are normally valued at their market price at the acquisition date for the purpose of measuring the consideration/acquisition cost.

Costs directly attributable to the business combination include legal, accountancy and similar fees. These must be expensed and do not form part of the purchase consideration.

Deferred consideration

Sometimes all or part of the cost of an acquisition is deferred and does not become payable until a later date.

The amount of any deferred consideration (the amount not payable immediately) is **discounted** to its present value at the acquisition date.

Contingent consideration

Sometimes the final cost of the combination is contingent on (depends on) a future event. For example, an acquirer could agree to pay an additional amount if the acquired subsidiary's profits exceed a certain level within three years of the acquisition.

In a situation such as this, the contingent payment should be included in the cost of the combination (discounted to present value if the payment will occur more than 12 months in the future).

Under the rules of the previous IFRS 3, contingent consideration was recognised as part of the purchase consideration only if it was probable (more likely than not) that the contingent consideration would actually have to be paid.

Under the rules of IFRS 3 (revised), contingent consideration must be recognised at fair value at acquisition, even if it is not probable that the consideration will actually have to be paid.

Example

Company P acquired 80% of the shares of Company S when the fair value of the net assets of S was $800,000. The purchase price was $300,000 in cash plus 100,000 new shares in Company P. The market value of P's shares at the time was $4 each. The costs of making the acquisition were $80,000.

The cost of the investment in the shares of S = $300,000 + (100,000 × $4) = $700,000. The costs of making the acquisition should be written off to profit or loss.

The parent company's share of the net assets of S at the acquisition date was $640,000 (80% × $800,000). Purchased goodwill attributable to owners of the parent company is therefore $60,000 ($700,000 - $640,000).

Example

Company X purchased 100% of the issued capital of Company S on 1 January Year 4.

The purchase agreement required Company X to pay $300,000 in cash immediately and an additional sum of $100,000 on 31 December Year 6 if the earnings of Company S increase at an annual rate of 25% per year in each of the three years following the acquisition.

How should the contingent payment be recognised in calculating the goodwill arising at the date of acquisition?

Answer

The contingent consideration should be included in the cost of investment (the purchase consideration) Whether or not it is probable that it will have to be paid. The contingent consideration of $100,000 should be measured at fair value.

If it is fairly certain that the contingent consideration will have to be paid, an appropriate measure of fair value might be the present value of the future payment, discounted at an appropriate cost of capital. The purchase consideration is therefore $300,000 plus the present value of the contingent (deferred) consideration.

If there is still contingent consideration at the end of an accounting period, it might be necessary to re-measure it.

- If the contingent consideration will be payable in cash, it should be re-measured to fair value at the end of the reporting period. Any gain or loss on re-measurement should be taken to profit or loss.

- If the contingent consideration will take the form of debt, the amount of the debt is re-measured at fair value at the end of the reporting period and the change in value is recognised in profit or loss in the period.
- If the contingent consideration will take the form of equity, it is not re-measured at the end of the reporting period. The eventual settlement of the payment will be accounted for as an equity transaction (i.e. a transaction between the entity and owners of the group in their capacity as owners).

A reason for re-measuring the contingent consideration is that the amount payable might depend on the performance of the subsidiary after its acquisition.

- If the profits are higher than expected, the contingent consideration might be re-measured to a higher value, increasing the liability (the contingent payment) and reducing the reported profit for the period.
- Similarly if the profits are lower than expected, the contingent consideration might be re-measured to a lower value, reducing the liability (the contingent payment) and increasing the reported profit for the period.

(Note: Under the previous accounting rules, before the introduction of IFRS 3 (revised), any increase in the value of contingent consideration was charged to goodwill.)

Share options given to the previous owners

When an entity acquires a subsidiary that was previously managed by its owners, the previous owners might be given share options in the entity as an incentive to stay on and work for the subsidiary after it has been acquired. IFRS 3 states that the award of share options in these circumstances is not a part of the purchase consideration. The options are post-acquisition employment expenses and should be accounted for as share-based payments in accordance with IFRS 2.

3.5 Fair value adjustments in a subsequent period

Fair value adjustments continue to affect the consolidated statement of financial position after the acquisition date.

Sometimes this is simply a matter of including the original fair value adjustment in the calculation of the subsidiary's net assets at the end of the subsequent reporting period.

	At end of current reporting period	At acquisition	Post acquisition
	$		
Equity shares	X	X	-
Retained earnings	X	X	X
Fair value adjustments	**X**	**X**	**-**
	X	X	

Occasionally the situation is more complicated. For example:

- Where a non-current asset in the acquired subsidiary has been revalued upwards for the purpose of consolidation, extra depreciation must be charged on the difference between the asset's book value and its fair value.
- Where a long-term loan has been discounted to net present value, the discount unwinds and the net present value of the loan increases in subsequent periods. The unwinding of the discount is an additional expense (a finance charge).

In both these cases:

- the amount of the fair value adjustment changes after the acquisition date, and
- post-acquisition reserves are affected.

	At end of current reporting period	**At acquisition**	**Post acquisition**
	$		
Equity shares	X	X	-
Retained earnings	X	Y	X – Y
Fair value adjustments	**X**	**Y**	**X - Y**
	X	Y	X – Y

Example

Entity P acquired 100% of the shares of Entity S on 1 January Year 1, when S had equity share capital of $500,000 and retained earnings of $200,000.

The summarised statement of financial position of S at 31 December Year 1 is shown below.

S

Statement of financial position at 31 December Year 1

	$
Non-current assets:	
Property, plant and equipment	1,200,000
Current assets	300,000
	1,500,000
Equity	
Ordinary shares	500,000
Retained earnings	300,000
	800,000
Non-current liabilities: loan	500,000
Current liabilities	200,000
	1,500,000

At 1 January Year 1 the fair values of S's property, plant and equipment exceeded their book value by $200,000. They had a remaining useful life of five years at this

date. The long-term loan of $500,000 is repayable on 31 December Year 5. The loan is interest-free, but the interest rate on a similar borrowing would be 10%.

The book values of the other assets and liabilities of S were approximately equal to their fair values at 1 January Year 1.

The effect of the fair value adjustments is as follows:

- Property, plant and equipment increases by $200,000 at the acquisition date. In Year 1, additional depreciation of $40,000 is charged. At 31 December Year 1, fair values exceed book values by $160,000.
- At 1 January Year 1 the long-term loan is discounted to $310,500 (500,000 × 0.621). At 31 December Year 1 the loan is discounted to $341,500 (500,000 × 0.683). The unwinding of the discount is the difference between these two amounts: $31,000. Discounting the long-term loan **increases** the net assets of S by $189,500 at acquisition and by $158,500 at the end of the current reporting period.

The net assets of S are calculated below.

	At end of current reporting period	**At acquisition**	**Post acquisition**
	$	$	$
Equity shares	500,000	500,000	-
Retained earnings	300,000	200,000	100,000
Fair value adjustments:			
Non-current assets	160,000	200,000	(40,000)
Long term loan	158,500	189,500	(31,000)
	1,118,500	1,089,500	29,000

3.6 Fair value adjustments in profit or loss

If the subsidiary's assets and liabilities have been adjusted to their fair values, this may affect the consolidated profit or loss.

For example, if a non-current asset has been revalued upwards, the depreciation expense is also increased.

Example

Entity P acquired 100% of the shares of Entity S on 1 January Year 1.

At 1 January Year 1 the fair values of S's property, plant and equipment exceeded their book value by $200,000. They had a remaining useful life of five years at this date.

S also had a long-term loan of $500,000 which was repayable on 31 December Year 5. The loan is interest-free, but the interest rate on a similar borrowing would be 10%.

The book values of the other assets and liabilities of S were approximately equal to their fair values at 1 January Year 1.

Two adjustments are made to the consolidated profit or loss for Year 1:

- Property, plant and equipment increases by $200,000 at the acquisition date and so there is an additional depreciation expense of $40,000 (200,000/5). This is included either in cost of sales or in administrative expenses, depending on the nature of the assets that have been re-valued.
- At 1 January Year 1 the long-term loan is discounted to $310,500 (500,000 × 0.621). During Year 1 the discount unwinds by $31,050 (310,500 × 10%). Therefore there is an additional finance cost, which represents the amount by which present value of the loan has increased during the year.

Revision of intra-group adjustments

- Types of intra-group transaction
- Intra-group sales
- Intra-group balances
- Intra-group balances: items in transit
- Unrealised profit in inventory
- Intra-group loans and interest

4 Revision of intra-group adjustments

4.1 Types of intra-group transaction

In many groups, business and financial transactions take place between entities within the group. These 'intra-group' transactions might be:

- the sale of goods or services between the parent and a subsidiary, or between two subsidiaries in the group
- loans by one entity in the group to another, and the payment of interest on intra-group loans.

Intra-group transactions should be eliminated on consolidation. The purpose of consolidated accounts is to show the financial position and the financial performance of the group as a whole, as if it is a single operating unit. If intra-group transactions are included in the consolidated financial statements, the statements will show too many assets, liabilities, income and expenses for the group as a single operating unit.

4.2 Intra-group sales

Consolidated profit or loss shows the total sales and the total cost of sales for the group as a whole during a financial period. If entities within the same group sell goods or services to each other, these intra-group transactions will be included:

- in the revenue of the entity making the sale
- as a cost of sale of the entity making the purchase.

Looking at the group as a single operating unit, however, there has been no sale and no purchase. The intra-group sale, for the group as a unit, is simply a transfer of goods or services within the group.

The revenue from intra-group sales and the cost of intra-group purchases must therefore be eliminated from consolidated profit or loss.

No inventories of intra-group sales items

Provided that the items sold and bought internally have been used to make a sale outside the group, so that there are **no inventories of intra-group sales items**, the adjustment is made **in consolidated profit or loss** by:

- deducting the revenue from intra-group sales from the total revenue for the group, and
- deducting the **same amount** from the cost of sales.

Example

A parent company and its subsidiary had the following revenue and cost of sales in the year just ended. The parent has owned the subsidiary for several years.

	Parent P	Subsidiary S
	$000	$000
Revenue	800	400
Cost of sales	500	250
Gross profit	300	150

Included in these figures are sales of $50,000 by subsidiary S to parent P. The cost of these sales for subsidiary P was $30,000. P has used all the items it bought from S to make sales outside the group.

The revenue of subsidiary S includes $50,000 of sales within the group to P. The cost of sales of P includes $50,000 for the items bought from S. The total profit of the group is unaffected, but the double-counting in revenue and the cost of sales must be eliminated.

The figures for including in consolidated profit or loss are calculated as follows:

	Parent P	Subsidiary S	Adjust for intra-group sales	Consolidated profit and loss
	$000	$000	$000	$000
Revenue	800	400	- 50	1,150
Cost of sales	500	250	- 50	700
Gross profit	300	150	no change	450

The gross profit of the group is unaffected, because all the intra-group items have been sold outside the group. However the group revenue and the group cost of sales must exclude the intra-group transactions.

When there are inventories of intra-group sales items

A slightly different situation arises when, at the end of the financial year, some intra-group sales items are still held as inventory by the group entity that bought them. This is because the inventory includes some '**unrealised profit**'. This problem is explained later.

4.3 Intra-group balances

When entities within a group sell goods to other entities in the same group, the terms of trading are normally similar to those for sales to external customers. The selling group company will expect payment in cash for the goods sold, but will give credit terms to the buying group company.

When this happens, group entities will include other group entities within their trade receivables (for intra-group sales) and trade payables (for intra-group purchases).

The trade receivables of the selling group entity should equal the trade payables of the buying group entity. These 'intra-group balances' must be eliminated on consolidation and excluded from the consolidated statement of financial position.

For example, if subsidiary S sells goods to parent P for $6,000 and P has not paid for the goods as at the end of the financial year, the statement of financial position of parent P will have a trade payable for $6,000 and subsidiary S will have a trade receivable for $6,000. These intra-group balances should be eliminated, and neither of them should appear in the consolidated statement of financial position.

4.4 Intra-group balances: items in transit

At the year-end, there might be a difference in the intra-group balances, due to goods in transit or cash in transit. When cash or goods are in transit, they are in the process of being transferred from one group entity to another. The entity sending the cash or goods will have recorded the transaction in its ledger accounts. However, the entity receiving the cash or goods has not yet received anything, and so has not yet recorded the transaction in its accounts.

Goods in transit

One group entity might have sent goods to another entity in the group. The entity making the sale will therefore have recorded the sale, the cost of goods sold and a profit. It will also have reduced its inventory and recorded a trade receivable. If the goods are in transit, the entity making the purchase will not yet have recorded the purchase, the inventory received or the trade payable in its ledger accounts.

Cash in transit

One group entity owing money to another group entity might have made a payment and recorded the payment in its accounts, by crediting cash and debiting the trade payable. However, the other group entity might not yet have received the

payment, and so will not have recorded the cash received or the reduction in its total trade receivables.

Differences in the intra-group balances caused by items in transit must be removed for the purpose of consolidation.

Adjusting for items in transit

When the transaction is between a parent and a subsidiary, the difference will be due to goods in transit or cash in transit either from the parent to the subsidiary or from the subsidiary to the parent. **The adjustment should be made in the accounts of the parent, regardless of the direction of the transfer.**

For example:

- If cash is in transit from the parent to a subsidiary, the following adjustment should be made to the statement of financial position of the parent:
  - Debit: Cash (increase cash in the parent's statement of financial position)
  - Credit: Amount payable to the subsidiary (increase the total amount payable to the subsidiary)

  The parent therefore reverses the transaction for the cash in transit, as though the payment has not yet been made.
- If cash is in transit from a subsidiary to the parent, in the statement of financial position of the parent:
  - Debit: Cash (increase cash in the parent's statement of financial position).
  - Credit: Amount receivable from the subsidiary (reduce the total amount owed to the parent as trade receivables from the subsidiary).

  The parent therefore records the receipt of the cash payment from the subsidiary, even though the cash has not yet been received.

Having made the adjustment for the item in transit, the normal rules can then be applied to prepare the consolidated financial statements.

Example

The statements of financial position of a Parent and its Subsidiary at 31 December Year 6 are as follows:

	Parent	Subsidiary
Assets	$	$
Property, plant and equipment	400,000	300,000
Investment in Subsidiary	260,000	-
Current assets		
Receivables: Balance on the account with Parent	-	25,000
Other current assets	40,000	65,000
Total assets	700,000	390,000

Equity and liabilities		
Share capital: equity shares $1	150,000	100,000
Accumulated profits	450,000	270,000
	600,000	370,000
Liabilities		
Payables: Balance on account with Subsidiary	15,000	-
Other liabilities	85,000	20,000
Total equity and liabilities	700,000	390,000

A parent acquired 80% of the equity shares of a subsidiary some years ago, when the net assets of the subsidiary were $250,000. (The **partial goodwill method** of accounting is used for this acquisition, and non-controlling interest is valued at a proportionate share of the net assets of the subsidiary.)

The difference in the intra-group balances is due to a cash payment by the parent to the subsidiary, which has been recorded in the accounts of Parent but has not yet been recorded in the accounts of the subsidiary.

There has been no impairment in goodwill since the acquisition of the subsidiary.

Required

Prepare a consolidated statement of financial position as at 31 December Year 6.

Answer

First, eliminate intra-group balances

The parent has recorded a payment to the subsidiary, but the receipt of the payment has not yet been recorded by the subsidiary. The cash in transit is $10,000 ($25,000 – $15,000). Adjust for the cash in transit in the statement of financial position of the parent as follows:

- Debit: Cash $10,000
- Credit: Payables: Balance on account with Subsidiary $10,000.

The intra-group balances (in the statements of financial position of the parent and the subsidiary) are now both $15,000 and are eliminated on consolidation.

The current assets of the parent increase by $10,000 (cash).

Having eliminated the intra-group balances, carry out the normal five steps for preparing a consolidated statement of financial position.

Step 1

Calculate the group share (parent company share) and the NCI share of the equity of the subsidiary.

	%
Parent's share	80
NCI	20
	100

Step 2

Calculate the net assets of S at acquisition and at the balance sheet date.

	At end of current reporting period	**At acquisition**	**Post acquisition**
	$		
Equity shares	100,000	100,000	-
Accumulated profits	270,000	150,000	120,000
	370,000	250,000	

Step 3

Calculate the goodwill.

	$
Cost of the acquisition	260,000
Parent's share of subsidiary's net assets at acquisition	
(80% (Step 1) × $250,000 (Step 2))	200,000
Goodwill (attributable to owners of parent)	60,000

Step 4

Calculate the non-controlling interest.

NCI share of net assets of the subsidiary at the end of the reporting period = 20% (Step 1) × $370,000 (Step2) = $74,000.

Step 5

Calculate consolidated accumulated profits.

	$
Parent's accumulated profits	450,000
Parent's share of subsidiary's post- acquisition profts	
(80% (Step 1) × $120,000 (Step 2))	96,000
Consolidated accumulated profits	546,000

Consolidated statement of financial position

The consolidated statement of financial position is prepared as follows:

Consolidated statement of financial position of Parent Group	
Assets	$
Property, plant and equipment (400,000 + 300,000)	700,000
Goodwill (Step 3)	60,000
	760,000
Current assets (40,000 + 10,000 cash in transit + 65,000)	115,000
Total assets	875,000
Equity and liabilities	
Equity	
Share capital: equity shares $1	150,000
Accumulated profits (Step 5)	546,000
Equity attributable to equity holders of the parent	696,000
Non-controlling interest (Step 4)	74,000
Total equity	770,000
Liabilities (85,000 + 20,000)	105,000
Total equity and liabilities	875,000

4.5 Unrealised profit in inventory

When entities within a group trade with each other, the selling entity makes a profit on the goods that it sells. Provided that all the goods are eventually sold outside the group, the internal profit does not matter for consolidation, because the revenue of the selling entity is a cost of sale for the buying entity. The matching revenue and cost of sale are both deducted from consolidated revenue and cost of goods sold, as described earlier, and the gross profit on consolidation is not affected.

A different situation arises, however, when some of the inventory sold by one group entity to another group entity is still held as inventory by the buying entity at the end of the reporting period.

When intra-group sales are still held as inventory:

- the entity that made the sale has recorded a profit on the sale, but
- this profit is included within the inventory valuation of the entity that made the purchase, because inventory is valued at the purchase cost to the buying entity.

The inventory is still held within the group, so the group as a unit has not made an external sale. The profit made by the selling entity is included in the cost of the

closing inventory of the buying entity. The profit on the sale of this inventory must be eliminated on consolidation. It is **unrealised profit.**

Unrealised profit: 100%-owned subsidiary

The following rules should be applied for a 100%-owned subsidiary:

Unrealised profit is eliminated from the **consolidated statement of financial position** by:

- reducing the consolidated accumulated profit by the amount of the unrealised profit, and
- reducing the valuation of the inventory by the amount of the unrealised profit.

In **consolidated profit and loss (statement of comprehensive income)**:

- reduce consolidated **revenue** by the amount of the intra-group sales (R)
- reduce the consolidated cost of goods sold by the intra group-sales (R) minus the amount of unrealised profit in the closing inventory (P).

	$
Revenue from intra-group sales	R
Unrealised profit in closing inventory of intra-group sales	P
Reduction in consolidated cost of goods sold	(R – P)

This has the effect of reducing the consolidated profit for the year by the unrealised profit in the closing inventory. (This is because consolidated revenue is reduced by R and the cost of goods sold is reduced by a smaller amount, (R – P).

Example

The revenue and cost of goods sold for a parent entity P and its 100%-owned subsidiary S are shown below, for the year to 31 December Year 6.

	P	S
	$000	$000
Revenue	800	300
Cost of goods sold	600	200
Gross profit	200	100

The subsidiary S made sales of $50,000 to P during the year. Of these sales, $20,000 is still held as inventory by P at the year-end. The mark-up on goods sold by S to P is 150% of cost.

Required

Calculate the revenue and cost of goods sold for inclusion in consolidated profit and loss.

Answer

The closing inventory of P that was purchased from S is carried in the accounts of P at $20,000. However, the unrealised profit must be eliminated.

When unrealised profit is stated as a percentage mark-up on cost, it is calculated as:

$$\text{Unrealised profit} = \text{Sales value} \times \frac{\text{Mark - up \%}}{(\text{Mark - up \%} + 100\%)}$$

In this example, the unrealised profit in the inventory is:

$$\$20{,}000 \times \frac{150}{(150+100)} = \$12{,}000$$

Consolidated revenue is reduced by the total amount of intra-group sales, $50,000.

The consolidated cost of goods sold is reduced by the total intra-group sales minus the unrealised profit in the inventory. It is therefore reduced by $50,000 – $12,000 = $38,000.

P Group

Extract from consolidated statement of comprehensive income

for the year to 31 December Year 6

	$000
Revenue (800 + 300 – 50)	1,050
Cost of goods sold (600 + 200 – 38)	762
Gross profit (200 + 100 – 12)	288

In the consolidated statement of financial position, the unrealised profit should be deducted from the inventory, and the inventory should be valued at $8,000 ($20,000 – $12,000).

Unrealised profit: partly-owned subsidiary

When there is unrealised profit in closing inventory within a group, and the inventory has been sold or purchased by a partly-owned subsidiary, **the entire unrealised profit should be eliminated from the inventory value**.

Normal practice is to charge the **non-controlling interest** with its share of the unrealised profit.

4.6 Intra-group loans and interest

It is quite common for group entities to lend money to other group entities, and to charge interest on the loan.

Intra-group loans

If one group entity makes a loan to another group entity, the asset of the lender is matched by the liability of the borrower, and the asset and liability should both be eliminated on consolidation.

For example, if a parent lends $100,000 to a subsidiary, the loan will be excluded from both long-term assets and long-term liabilities of the group on consolidation.

Any **non-controlling interest** in the subsidiary will be calculated taking the loan into account in calculating the net assets of the subsidiary.

Intra-group interest

When one group entity makes a loan to another group entity, there may be accrued interest payable in the statement of financial position of the borrower at the year-end. This should be matched by interest receivable by the lender. The current liability (interest payable) and the current asset (interest receivable) should therefore be self-cancelling on consolidation, and both the asset and the liability should be excluded from the consolidated statement of financial position.

(**Note**: If one of the entities has failed to record the accrued interest in its accounts, you should correct this omission and record the transaction in the accounts of the entity where it is missing. Having recorded the missing transaction, you can then cancel the matching asset and liability.)

Non-controlling interests and intra-group loans

The non-controlling interest in the equity of a subsidiary and the subsidiary's profit for the year are calculated on the assumption that the non-controlling interest is the relevant proportion of:

- the subsidiary's net assets **including** the intra-group loan as an asset or liability, and
- the subsidiary's profit for the year **including** the interest as an expense or as income, depending on whether the subsidiary is the borrower or the lender.

Accounting for associates and joint ventures

- Definition of associate and joint venture
- Methods of accounting for associates and joint ventures
- Accounting for investments in associates: equity method
- Accounting for interests in joint ventures
- Accounting for jointly-controlled entities

5 Accounting for associates and joint ventures

5.1 Definition of associate and joint venture

In consolidated accounts, subsidiaries are accounted for by the 'purchase method' or 'acquisition method'. The principle underlying the purchase method is that subsidiaries are under the **control** of the parent entity; therefore it is appropriate to present financial statements for the parent and its subsidiaries as if the group were a single operating entity and single economic entity.

Consolidation using the purchase method is not required where there is an investment in shares of another company, but the investment does not give control.

If an entity owns a **fairly small interest** in the equity shares of another company, and the investment is long-term:

- the shares are shown in the statement of financial position as long-term assets (an investment) and valued in accordance with IAS 39
- any dividends received for the shares are included in profit or loss for the year as other income.

Some investments in the equity shares of another company are **fairly substantial without giving control**. They are more than simple small investments, because the entity owning the shares has a reasonable degree of influence through the size of its shareholding. However, the investment does not give control; therefore it cannot be treated as a subsidiary.

These fairly substantial investments are accounted for as an investment in an associate entity or as an investment in a joint venture. The accounting standards that apply are as follows:

- IAS 28 *Investments in associates* deals with accounting for associates
- IAS 31 *Interests in joint ventures* deals with accounting for joint ventures.

Definition of an associate

An associate is defined by IAS 28 as: 'an entity… over which the investor has significant influence… that is neither a subsidiary nor an interest in a joint venture.'

Significant influence is defined as the power to participate in the financial and operating policy decisions of the entity, but is not control or joint control.

- IAS 28 states that if an entity holds 20% or more of the voting power (equity) of another entity, it is presumed that significant influence exists, and the investment should be treated as an associate.
- If an entity owns less than 20% of the equity of another entity, the normal presumption is that significant influence does not exist.

Holding 20% to 50% of the equity of another entity therefore means as a general rule that significant influence exists, but not control; therefore the investment is treated as an associate, provided that it is not a joint venture.

The **'20% or more' rule** is a general guideline, however, and IAS 28 states more specifically how significant influence arises. The existence of significant influence is usually evidenced in one or more of the following ways:

- representation on the board of directors
- participation in policy-making processes, including participation in decisions about distributions (dividends)
- material transactions between the two entities
- an interchange of management personnel between the two entities
- the provision of essential technical information by one entity to the other.

An entity loses significant influence when it loses the ability to participate in financial and operating policy decisions of the entity in which it has invested (the 'investee ' entity). This might occur, for example, if the investee becomes subject to the control of a government, a court or a regulator. Alternatively, influence might be lost if an entity holds 25% of the equity in another company but the other 75% of the equity is acquired by a single purchaser who therefore gains control.

Definition of a joint venture

A joint venture is defined by IAS 31 as: 'a contractual arrangement whereby two or more parties undertake an economic activity that is subject to joint control.'

Joint control is defined as 'the contractually agreed sharing of control over an economic entity.' Joint control only exists when the strategic financial and operating decisions relating to the economic activity require the **unanimous consent** of the entities sharing control (the joint venturers).

Joint control is the key factor in deciding whether a joint venture exists. The following characteristics are common to all types of joint venture:

- two or more joint venturers are bound by a contractual arrangement (usually in writing); and
- the contractual arrangement establishes joint control.

IAS 31 identifies three broad types of joint venture:

- jointly-controlled operations
- jointly-controlled assets
- jointly-controlled entities.

Jointly-controlled operations

In a jointly-controlled operation, each joint venture partner:

- uses its own property, plant and equipment
- carries its own inventory
- incurs its own expenses and liabilities
- raises its own finance, which represents its own obligations.

The contractual agreement between the joint venturers usually provides a means by which revenue from the joint venture activities and any expenses incurred in common are shared among the venturers.

IAS 31 gives an example of a jointly-controlled operation. This is a consortium of separate companies that form a venture to manufacture, market and distribute a particular product, such as an aircraft. Each of the venturers makes a different part of the aircraft. Each venturer:

- bears its own costs and
- receives a share of the revenue in accordance with a predetermined contractual agreement.

Jointly-controlled assets

Some joint ventures involve the joint control and joint ownership of some assets that are acquired for the joint venture and used specifically for the purpose of the joint venture.

The venturers do not form a separate entity that owns the assets. They own a percentage of the assets themselves. Each venturer may take a share of the output from the assets and bear an agreed share of the expenses of operating the assets.

IAS 31 gives as an example an oil pipeline that might be jointly-owned by several oil production companies.

Jointly-controlled entities

A jointly-controlled entity involves setting up a separate entity such as a company, with its own equity, assets and liabilities. Each joint venturer owns an agreed share of the equity of this entity and is entitled to a share of the profits and distributions (dividends).

The proportion of the equity owned by each joint venturer can vary. A jointly-controlled entity differs from a subsidiary because there is joint control, not control

by a majority owner of the equity. Similarly, it differs from an associate because there is joint control, rather than significant influence.

IAS 28 gives as an example an entity setting up business in a foreign country in conjunction with the government or a government agency of that country. A separate entity is established, and the two joint venturers share joint control.

5.2 Methods of accounting for associates and joint ventures

IAS 28 states that **associates** must be accounted for in consolidated financial statements using the **equity method of accounting**. This rule applies whether or not the entity also has subsidiaries and prepares consolidated financial statements.

The only exceptions to the requirement to use the equity method to account for investments in associates are:

- when the reporting entity presents separate financial statements in accordance with IAS 27, or
- when the associate is acquired and held with a view to disposal within 12 months of acquisition.

IAS 31 states that the method of accounting for **joint ventures** will depend on what type of joint venture it is.

5.3 Accounting for investments in associates: equity method

The main features of the equity accounting method are as follows:

Statement of financial position: investment in the associate

In the statement of financial position of the reporting entity (the investor), an investment in an associate is valued at:

- cost
- **plus** the investor's share of the retained post-acquisition profits of the associate (or minus the investor's share of any post-acquisition losses)
- **minus** any impairment in the value of the investment since acquisition.

There is no separately-recognised goodwill on acquisition of an investment in an associate. However, the investment in the associate should be subject to an annual impairment review in accordance with IAS 36. Any impairment in the investment is deducted from the carrying value of the investment in the statement of financial position (and deducted from the reporting entity's accumulated profits).

Statement of financial position: accumulated profits

The accumulated profits of the reporting entity, or the consolidated accumulated reserves when consolidated accounts are prepared, should include:

- the investor's share of the post-acquisition retained profits of the associate,
- **minus** any impairment in the value of the investment since acquisition.

Statement of comprehensive income

In the statement of comprehensive income, there should be a separate line for:

- 'Share of profits of associate' in the profit and loss section of the statement
- 'Share of other comprehensive income of associates' in the 'other comprehensive income' section of the statement.

The share of the profits of the associate for inclusion in profit or loss is the reporting entity's **share of the associate's profits after tax**. If the associate has partly-owned subsidiaries, the reporting entity's share of the profits of the associate is the share of the associate's after-tax profits attributable to equity holders of the associate..

Example

Entity P acquired 30% of the equity shares in Entity A during Year 1 at a cost of $147,000 when the fair value of the net assets of Entity A was $350,000. Since that time, the investment in the associate has been impaired by $18,000.

Since acquisition of the investment, there has been no change in the issued share capital of Entity A, nor in its share premium reserve or revaluation reserve. At 31 December Year 5, the net assets of Entity A were $600,000.

In the year to 31 December Year 5, the profits of Entity A after tax were $80,000.

Required

What figures would be included for the associate in the financial statements of Entity P for the year to 31 December Year 5?

Answer

It is presumed that the investment in Entity A is an investment in an associate.

Retained post-acquisition profits of Entity A	$
Net assets of the associate at 31 December Year 5	600,000
Net assets of Entity A at date of acquisition of shares	(350,000)
Retained post-acquisition profits of Entity A	250,000
The share 'owned' by Entity P is 30% × $250,000	= $75,000

In the **statement of financial position**, the investment in the associate is as follows:

	$
Investment at cost	147,000
Investor's share of post-acquisition profits of A	75,000
Minus: Accumulated impairment in the investment	(18,000)
Investment in the associate	204,000

Alternatively this can be calculated as:

	$
Investor's share of net assets at end of reporting period:	
(600,000 × 30%)	180,000
Goodwill (147,000 – (350,000 × 30%))	42,000
Less impairment	(18,000)
Investment in the associate	204,000

The **accumulated profits** will include:

	$
Investor's share of post-acquisition profits of A	75,000
Minus: Accumulated impairment in the investment	(18,000)
	57,000

In the **statement of comprehensive income**, the share of the associate's after-tax profit for the year is shown on a separate line in the profit or loss section of the statement:

- Share of profits of associate (30% × $80,000): $24,000.

Trading with an associate: unrealised profit in closing inventory

When the investor entity (or a subsidiary) trades with an associate:

- the investor entity might owe money to the associate at the end of the reporting period, or be owed money by the associate
- closing inventory might be held by the investor entity or by the associate that includes some unrealised profit on sales between the investor entity and the associate (in the same way that there might be unrealised profit in inventory sold between a parent and a subsidiary).

The accounting rules for dealing with these items for associates are different from the rules for subsidiaries.

Inter-entity balances. Any amount owed by the investor entity to the associate or owed by the associate to the investor entity should be included in the current liabilities or current assets in the statement of financial position of the investor entity (and in its consolidated statement of financial position, if it prepares consolidated accounts). In other words, inter-entity balances are not self-cancelling.

Unrealised inter-group profit. However, any unrealised profit in closing inventory must be removed.

- If the unrealised profit is held in inventory of the investor/reporting entity, the inventory should be reduced in value by the amount of the unrealised profit
- If the unrealised profit is held in inventory of the associate, the investment in the associate should be reduced by the **investor's share (reporting entity's share)** of the unrealised profit.

In both cases, there should also be a reduction in the post-acquisition profits of the associate, and the investor entity's share of those profits (as reported in profit or loss). This will reduce the accumulated profits in the statement of financial position.

Example

Entity P acquired 40% of the equity shares of Entity A several years ago. The cost of the investment was $205,000. There has been no impairment in the investment.

Entity P's share of the post-acquisition retained profits of Entity A was $90,000 as at 31 December Year 5. In the year to 31 December Year 6, the reported profits after tax of Entity A were $50,000.

In the year to 31 December Year 6, Entity P sold $200,000 of goods to Entity A, and the mark-up was 100% on cost. Of these goods, $30,000 were still held as inventory by Entity A at the year-end.

The unrealised profit on this inventory is $30,000 × (100/200) = $15,000. Entity P's share of this unrealised profit is (40%) $6,000.

The unrealised profits are in inventory held by the associate; therefore the investment in the associate is reduced by the investor company's share of the unrealised profit. The investment in the associate at 31 December Year 6 is as follows:

	$
Cost of the investment	205,000
Entity P's share of post-acquisition profits of Entity A [$90,000 + (40% × $50,000)]	110,000
Minus: Entity P's share of unrealised profit in inventory	(6,000)
Minus: Accumulated impairment in the investment	(0)
	309,000

The share of the profits of Entity A reported in the profit or loss of Entity P for the year to 31 December Year 6 is after deducting its share of the unrealised profit:
= (40% × $50,000) – $6,000 = $14,000.

This will also be included within the accumulated profits in the statement of financial position of Entity P as at 31 December Year 6.

The reasons for the use of the equity method

The equity method is used to represent the nature of the relationship between an investor and an associate.

The equity method reflects the investor's significant influence. This is less than control, but more than just the right to receive dividends that a simple investment would give.

Consolidated financial statements include 100% of a subsidiary's assets and liabilities, because these are controlled by the parent, even if the parent owns less than 100% of the equity shares. Consolidation would not be an appropriate way of accounting for an associate.

Under the equity method:

- the investor's **share** of the associate's assets, liabilities, profits and losses is included in the investor's financial statements; this represents significant influence
- the investor's share of the associate is shown on one line in profit or loss, one line in other comprehensive income and one line in the statement of financial position, making it clear that the associate is separate from the main group (a single economic entity).

Disadvantages of the equity method

The equity method has some important disadvantages for users of the financial statements.

Because only the investor's share of the net assets is shown, information about individual assets and liabilities can be hidden. For example, if an associate has significant borrowings or other liabilities, this is not obvious to a user of the investor's financial statements.

In the same way, the equity method does not provide any information about the components that make up an associate's profit for the period.

5.4 Accounting for interests in joint ventures

The method of accounting for an interest in a joint venture depends on what type of joint venture it is.

Accounting for a jointly-controlled operation

When an entity has an interest in a jointly-controlled operation, it should recognise the following in its financial statements:

- the assets that it controls and the liabilities that it incurs
- the expenses that it incurs, and
- its share of the income that it earns from sales by the joint venture.

Example

Entity X and Entity Y undertake a joint venture. Each entity undertakes to bear its own expenses, but to share revenues from sales by the joint venture 50:50.

During the first year of the operation, Entity X made sales of $420,000 and Entity Y made sales of $370,000. Costs incurred by Entity X were $280,000 and by Entity Y were $290,000.

To finance the operation, Entity X took out a bank loan of $40,000.

Profit or loss of Entity X

Since each joint venturer bears all its own expenses, the profit or loss of Entity X will include:

	$
Share of sales: $(420,000 + 370,000) × 50%	395,000
Own costs	280,000
Profit	115,000

The sales reported by each joint venturer are 50% of the total sales of the joint venture, in accordance with the joint venture agreement. The reported sales are not the sales actually made by the entity: for example the reported sales of Entity X are not $420,000.

Since Entity X made more sales than Entity Y, the joint venture agreement will provide for a payment by Entity X to Entity Y, to equalise their actual revenues.

Extracts from statement of financial position, Entity X

The statement of financial position of Entity X will include:

	$
Liabilities	
Bank loan	40,000
Payable to Entity Y (see below)	25,000

Workings

Joint venture with Y: current account

	$		$
Sales (50% share)	395,000	Cash (own sales)	420,000
Balance (payable to Y)	25,000		
	420,000		420,000
		Balance (payable to Y)	

Accounting for jointly-controlled assets

When an entity has an interest in jointly-controlled assets, it should recognise the following in its financial statements:

- Its share of the jointly-controlled assets, classified according to the nature of the assets. For example, a joint share of an oil pipeline would be included in property, plant and equipment in the statement of financial position
- Any liabilities that it has incurred
- Its share of any liabilities incurred jointly with the other joint venturers
- Its income from the sale (or use of) its share of the output of the joint venture, together with its share of any expenses incurred by the joint venture
- Any expenses that it has incurred in respect of its interest in the joint venture.

These assets, liabilities, income and expenses are recognised in the financial statements of the venturer. This means that no adjustments are needed on consolidation for these items, when the venturer prepares consolidated financial statements.

Example

On 1 January 20X7, Entity B and Entity C entered into a joint venture to purchase and operate an oil pipeline. Both entities would contribute equally to the purchase cost of $20 million. Entity C was responsible for carrying out all maintenance work on the pipeline, but maintenance expenses were to be shared between B and C in the ratio 40%: 60%.

In order to pay for the pipeline, the joint venturers obtained a joint loan of $20,000,000 from a bank. Interest of $1,500,000 was paid for the year on 31 December by Entity B.

Both entities would use the pipeline for their own operations, but any income from third parties would be shared 50%: 50%.

The pipeline has an estimated useful life of 20 years and no residual value. Both entities apply this depreciation policy to the asset. A full year's depreciation will be charged in 20X7.

During the year to 31 December 20X7, maintenance and running expenses were $1,200,000 and income from third parties was $900,000. All this income was paid to Entity C by the third parties.

Required

Show the relevant figures that would be recognised in the financial statements of Entity B and Entity C for the year to 31 December 20X7.

Answer

	Total amount	In Entity B financial statements	In Entity C financial statements
	$	$	$
Jointly-controlled assets			
Property, plant and equipment			
Cost	20,000,000	10,000,000	10,000,000
Accumulated depreciation	1,000,000	500,000	500,000
	19,000,000	9,500,000	9,500,000
Share of liabilities incurred			
Bank loan	20,000,000	10,000,000	10,000,000
Current: account with B (owed to B) – see workings			720,000
Current: account with C (owed by C) – see workings		720,000	
Share of expenses			
Depreciation (50:50)	1,000,000	500,000	500,000
Maintenance costs (40:60)	1,200,000	480,000	720,000
Interest on loan (50:50)	1,500,000	750,000	750,000

Workings

In the accounts of B

Joint venture with C: current account

	$		$
Revenue receivable from C	450,000	Maintenance costs (payable to C)	480,000
Interest payable by C	750,000	Balance (payable by C)	720,000
	1,200,000		1,200,000
Balance b/d	720,000		

In the accounts of C

Joint venture with B: current account

	$		$
Maintenance costs (payable by B)	480,000	Interest payable to B	750,000
		Revenue payable to B	450,000
Balance (payable to B)	720,000		
	1,200,000		1,200,000
		Balance b/d	720,000

5.5 Accounting for jointly-controlled entities

IAS 31 requires that an entity should disclose its interest in a jointly-controlled entity using either:

- the **proportionate consolidation method**, or
- the **equity method** of accounting. This is **exactly the same as accounting for investments in associates**.

Proportionate consolidation is described below.

Proportionate consolidation

Proportionate consolidation is a method of accounting in which the financial statements of a joint venturer recognise:

- in its statement of financial position (or consolidated statement of financial position)
  - its proportionate share of the assets it controls jointly, and
  - its proportionate share of the liabilities for which it is jointly responsible
- in its statement of comprehensive income (or consolidated statement of comprehensive income), its proportionate share of the income and expenses of the jointly-controlled entity

Two methods of presentation

Proportionate consolidation can be presented in either of two ways. Both ways are permitted by IAS 31.

Method 1

A joint venturer may combine its share of the assets, liabilities, income and expenses of the jointly-controlled entity with similar items, line by line, in its financial statements.

For example, in its statement of financial position it may combine its share of the joint venture's inventory with its own inventory, and combine its share of the property, plant and equipment of the joint venture with its own property, plant and equipment.

Method 2

Alternatively, a joint venturer may include separate line items for its share of the assets, liabilities, income and expenses of the jointly-controlled entity.

For example, in its statement of financial position it may show its share of a current asset of the jointly-controlled asset on a separate line as part of current assets. Similarly it may show its share of the property, plant and equipment of the joint venture in a separate line as part of property, plant and equipment.

CHAPTER 5

Group financial statements: complex groups

Contents

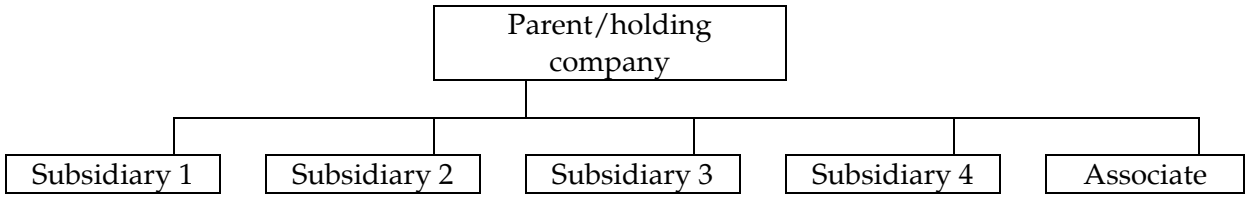
The nature of complex groups

- Complex group structures
- Checking the status of investments
- Consolidation in practice and consolidation in the examination
- Problem areas with complex groups

1 The nature of complex groups

1.1 Complex group structures

In a simple group, a parent owns one or more subsidiaries and possibly also has an associate or joint venture.



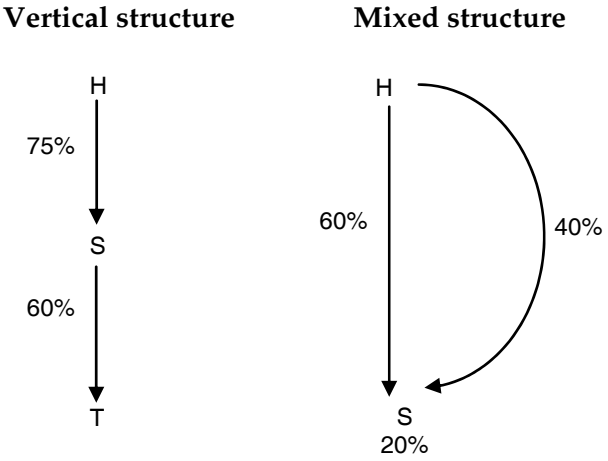
A more complex group may be one of the following two types:

A 'vertical group' in which the parent company or holding company (H) owns a subsidiary (S) and the subsidiary owns its own subsidiary (T)

A 'mixed group', in which the parent company (H) owns shares in two companies. It owns more than 50% in one of these companies (S), but less than 50% in the other company (T). However, company S also owns shares in T, and the combined shareholding of H and S in company T, taken together, exceeds 50%. (Note that mixed groups are sometimes called D-shaped groups due to the shape of the group structure.)

These two types of group are illustrated in the diagrams below. The percentage shareholdings are included for illustrative purposes, but these percentages will be used in the examples and explanations that follow.

Examples



In an examination question, there may be more subsidiaries than are shown here. There may also be associates or joint ventures. However, all the key consolidation rules can be learned and applied using the structures shown above with just three companies, H, S and T.

1.2 Checking the status of investments

To deal with complex groups, it is important always to check the status of the investments and to decide whether an investment is a subsidiary, an associate or a simple investment. With complex groups, the key test is usually to decide whether an investment is:

- a subsidiary, or
- an associate.

The key test of owning a subsidiary in IAS 27 is based on the concept of **control**. One important test of control is ownership of more than 50% of the equity share capital of an entity.

Vertical group example

In the example above of a vertical group above:

- H controls S because it owns more than 50% of the shares of S, and
- S controls T, because S owns more than 50% of the shares of T.

H therefore controls T through its control of S. T is described as a **sub-subsidiary** of H. (A sub-subsidiary is a subsidiary of a subsidiary.)

H is said to have:

- a direct interest in S, and
- an indirect interest in T.

H is therefore a holding company with two subsidiaries, S and T. Both S and T will be included (consolidated) into the group accounts of the H Group.

(**Note**: You might think that T should not be a subsidiary of H because the effective interest of H in T is only 75% × 60% = 45%, which is less than 50%. However, this is an incorrect view. H controls S and S controls T; therefore H controls T through its control of S.)

Mixed group example

In the example of the mixed group shown above:

- H controls S because it owns more than 50% of the shares of S, and
- H controls T through its direct ownership of 40% of T and the 20% holding in T by its subsidiary S. H and S between them own 60% of T, which is sufficient for control.

Because of this control, T is a subsidiary in the H Group, and both S and T are subsidiaries of H. Both S and T must therefore be consolidated in the accounts of the H Group.

1.3 Consolidation in practice and consolidation in the examination

The way in which you should prepare consolidated accounts for a complex group in the examination should be different from the way that it is done in practice. The reason for this is to save time in the examination. You should use a short-cut method that is fully acceptable for examination purposes.

The short-cut method is to prepare the consolidated accounts in a single stage, using a **one-stage method of consolidation**. In practice, consolidated accounts for complex groups are prepared in two (or more) stages.

Consider the example of the vertical group example above, where H owns 75% of S and S owns 60% of T.

- There are two separate groups here:
  - T is a subsidiary of S. In practice, this means that S must prepare consolidated financial statements for the Group S (which consists of S and T). The consolidated accounts of S should be presented to all the shareholders of S, including the shareholders other than H.
  - T and S are both subsidiaries of H. H is therefore required to prepare consolidated financial statements for the H Group, including both S and T.
- In practice, two sets of consolidated financial statements must therefore be prepared, one by S for the S Group and one by H for the H Group.

For complex groups, an exam question would require you to prepare consolidated financial statements for the H group (H, S and T). It would be acceptable to prepare these financial statements in two stages, first by preparing consolidated accounts for S and then preparing consolidated accounts for H. However this would take a long time.

It is more efficient and time-saving to prepare the consolidated financial statements for the total H group in one stage. This one-stage approach method of consolidation (also called the 'direct method') is described below. We strongly recommend that you should use it in the examination, should you be required to prepare financial statements for a complex group.

1.4 Problem areas with complex groups

Several aspects of consolidation with complex groups need careful attention. These are:

- calculating the percentage group holdings and the non-controlling interests in the subsidiaries
- deciding the date of acquisition for sub-subsidiaries in vertical groups and subsidiaries in mixed groups
- calculating the amount in the consolidated statement of financial position for the non-controlling interests, and
- calculating the purchased goodwill.

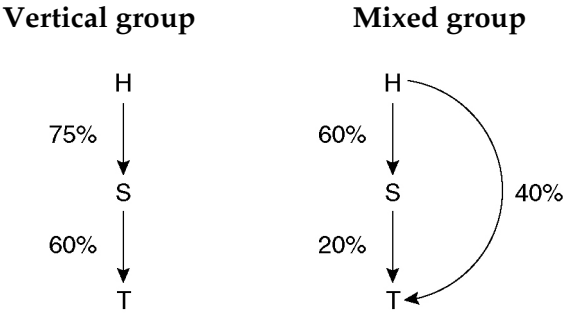
Calculating parent entity holdings and non-controlling interests

- The problem
- The rules for vertical groups
- The rules for mixed groups

2 Calculating parent entity holdings and non-controlling interests

2.1 The problem

In complex groups, care must be taken when calculating the interest of the parent entity and the non-controlling interests in the subsidiaries. The same group structures that were used as examples before will be used again here.



Careful attention must be given in these group structures to calculating the parent entity interest and the non-controlling interest in the 'bottom' company in the group, which in this example is T.

To prepare the consolidated financial statements of H, we need to know the percentage interest held by:

- H in S and
- H in T.

The percentage ownership of H in S is straightforward. The problem is to decide the percentage ownership of H in T.

2.2 The rules for vertical groups

In a vertical group structure, the holding company H is said to have an 'indirect' interest in the sub-subsidiary T. H does not own any shares in T, but it has an indirect interest in T through its control of subsidiary S, which in turn controls T.

When the one-stage method of consolidation is used, the indirect interest of the holding company in a sub-subsidiary is calculated, as a percentage, as follows:

Indirect holding of H in T (%) =
[% direct holding by H in S] × [% direct holding by S in T]

This indirect holding may be less than 50%.

The **non-controlling interest in T**, as a percentage =
100% minus Indirect holding of H in T (%)

Example

In the above example of a vertical group, the direct and indirect interests of H in its subsidiaries are calculated as follows:

Ownership of S	
Direct holding of H in S	75%
Non-controlling interest in S (the balance)	25%
	100%
Ownership of T	
Direct holding of H	0%
Indirect holding of H (75% × 60%)	45%
	45%
Non-controlling interest in T (the balance)	55%
	100%

Note that the non-controlling interest in the sub-subsidiary T is more than 50% in this example. This is not unusual in complex groups when the one-stage method of consolidation is applied.

The ownership percentages calculated in this way are used in the consolidation process for the vertical group. H has a 75% share of S and a 45% share of T. The non-controlling interest is 25% in S and 55% in T.

2.3 The rules for mixed groups

In our example of a mixed group, H has two interests in T:

- It has a direct interest in T, with the shares that it owns in T.
- It also has an indirect interest in T, through its control of S, which also owns shares in T.

The group interest in the sub-subsidiary T is the sum of the direct interest and the indirect interest in T.

	%
Direct holding by H in T	A
Indirect holding in T [% direct holding by H in S] × [% direct holding by S in T]	B
	A + B

Non-controlling interest % = 100% – (A + B)%

Example

Using the example of the mixed group above and applying the one-stage method of consolidation, the percentage interest of the holding company in S and T, and the percentage non-controlling interest in S and T, are calculated as follows:

Ownership of S	
Direct holding of H	60%
Non-controlling interest in S (the balance)	40%
	100%
Ownership of T	
Direct holding of H	40%
Indirect holding of H (60% × 20%)	12%
	52%
Non-controlling interest in T (the balance)	48%
	100%

H has a 60% interest in S and a 52% interest in T. The non-controlling interest is 40% in S and 48% in T. These percentages should be used in the consolidation process.

Identifying the date of acquisition

- The problem
- The rules for vertical groups
- The rules for mixed groups

3 Identifying the date of acquisition

3.1 The problem

It is important to establish the date on which a subsidiary is acquired by the group, for the purpose of consolidation. The date of acquisition is needed to calculate the pre-acquisition profits, the goodwill and the group's share of post-acquisition profits.

Under the 'one-stage approach', the consolidated financial statements are prepared for the 'top company' H, which is the holding company for the entire group. Pre-acquisition profits must be calculated for each subsidiary as at the date that the subsidiary became a member of the H group.

The problem is that it is not 'obvious' what this date should be, in the case of sub-subsidiaries.

3.2 The rules for vertical groups

The acquisition date for a sub-subsidiary in a vertical group depends on whether:

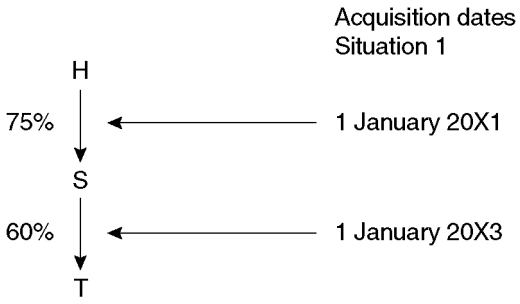
- the holding company H acquired its shares in subsidiary S **before** S acquired its shares in the sub-subsidiary T, or
- the holding company H acquired its shares in subsidiary S **after** S acquired its shares in the sub-subsidiary T.

The rules are as follows:

- If the holding company H acquired its shares in subsidiary S **before** S acquired its shares in the sub-subsidiary T, the date that T becomes a member of the H Group is the date that S acquired the shares in T.
- If the holding company H acquired its shares in subsidiary S **after** S acquired its shares in the sub-subsidiary T, the date that T becomes a member of the H Group is the date that H acquired its shares in S.

Pre-acquisition reserves and post-acquisition reserves are calculated for each subsidiary and sub-subsidiary from its date of acquisition.

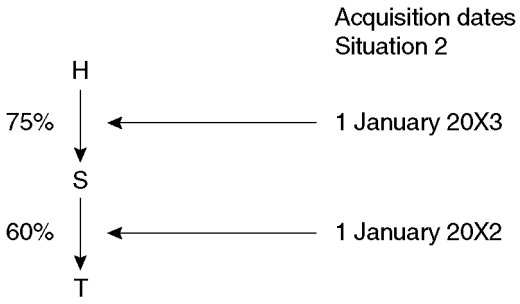
Example: H acquires control of S before S acquires control of T



In this example, H acquired its 75% interest in S on 1 January 20X1 and S acquired its interest in T on 1 January 20X3, two years later. H acquired control of S **before** S acquired control of T.

- S joined the H group on 1 January 20X1, and the pre-acquisition profits of S, for the purpose of the consolidated accounts of the H Group, are the profits existing at 1 January 20X1.
- T joined the H Group on 1 January 20X3, and the pre-acquisition profits of T, for the purpose of the consolidated accounts of the H Group, are those existing at 1 January 20X3.

Example: H acquires control of S after S acquires control of T



In this example, H acquired its 75% interest in S on 1 January 20X3 and S acquired its interest in T on 1 January 20X2, one year earlier. H therefore acquired control of S **after** S acquires control of T.

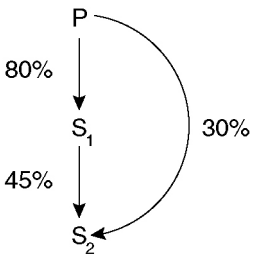
- S joins the H group on 1 January 20X3, and the pre-acquisition profits of S for the purpose of the consolidated accounts of the H Group are those existing at 1 January 20X3.
- The date that H acquires control of T is the same date that it acquires control of S. Therefore, T also joins the H Group on 1 January 20X3, and the pre-acquisition profits of T for the purpose of the consolidated accounts of the H Group are those existing at 1 January 20X3.

3.3 The rules for mixed groups

The same rules apply to mixed groups as they do to vertical groups.

Example

The group structure of the P Group is as follows:



Required

Calculate when S_1 and S_2 became subsidiaries in the P Group in each of the following situations:

(a) **Situation 1**: P acquired its shares in S_1 on 1 May 20X1, and its shares in S_2 on 1 May 20X2, and S_1 acquired its shares in S_2 on 1 May 20X3.

(b) **Situation 2**: P acquired its shares in S_1 on 1 May 20X4, and its shares in S_2 on 1 May 20X2, and S_1 acquired its shares in S_2 on 1 May 20X1.

Answer

The interest of P in S_2 is 30% + (80% × 45%) = 66%.

Situation 1

P obtains control of S_1 on 1 May 20X1 and the pre-acquisition profits of S_1 at that date are used for consolidation purposes.

The date that P acquires control of S_2 is the date that S_1 acquires its stake in S_2, which is 1 May 20X3. The pre-acquisition profits of S_2, when consolidating the 66% effective interest of P, are the accumulated profits as at 1 May 20X3.

From 1 May 20X2 to 1 May 20X3, S_2 is an associate of P.

Situation 2

P obtains control of S_1 on 1 May 20X4 and the pre-acquisition profits of S_1 at that date are used for consolidation purposes.

The date that P obtains control of S_2 is 1 May 20X4, which is the date that he acquires his stake in S_1 and hence gains indirect control over S_1's holding in S_2.

From 1 May 20X2 to 1 May 20X4, S_2 is an associate of P.

Calculating the non-controlling interest and goodwill: indirect holdings

- The problem: indirect non-controlling interest
- Calculating the non-controlling interest for the consolidated statement of financial position
- Cost of the parent entity's investment in T
- Calculating the purchased goodwill

4 Calculating the non-controlling interest and goodwill: indirect holdings

In this section, it is assumed initially that the **partial goodwill method** of accounting for non-controlling interests and goodwill is used. No goodwill in subsidiaries is therefore attributed to the non-controlling interests.

Applying the full goodwill method to complex groups will be explained later.

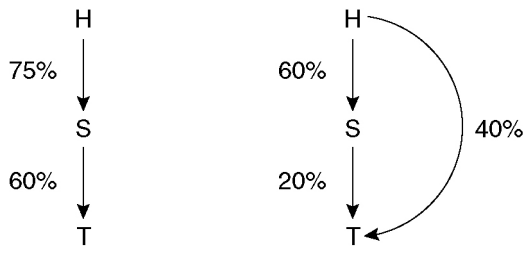
4.1 The problem: indirect non-controlling interest

When the one-stage method is used to calculate the percentage share of the ownership of subsidiaries and the percentage share owned by the non-controlling interests, these percentages have to be converted into a money value for the purpose of preparing consolidated accounts.

A problem arises whenever the holding company of the group has an indirect holding in the shares of a sub-subsidiary (or a subsidiary in a mixed group) through shares held by a subsidiary. When there is an indirect holding by the parent company through ownership of shares in a subsidiary, there is also an indirect non-controlling interest. This is because the non-controlling interests in the subsidiary S have an interest in the shares of T through their ownership of the shares in S.

The same group structures that we have used before will be used again as illustration.

Vertical group **Mixed group**



Vertical group: indirect non-controlling interest

It has already been shown that using the one-stage method, the percentage ownership of T in the vertical group is as follows:

Vertical group	
Ownership of T	
Direct holding of H	0%
Indirect holding of H (75% × 60%)	45%
H share of ownership of T	45%
Non-controlling interest in T (the balance)	55%
	100%

In our vertical group, H has two subsidiaries S and T. This consists of a direct interest of 75% in the shares of S and an indirect interest of 45% in the shares of T, through its ownership of S. This gives a non-controlling interest of 25% in S and 55% in T.

The non-controlling interest in T consists of two elements:

- 40% of the shares of T are held by shareholders other than S
- The 25% non-controlling interest in S owns a share of the 60% of T that is owned by S. This is an indirect non-controlling interest in T – the part of T that is owned by the non-controlling interest in S.

Vertical group	
Non-controlling interest in T	
Direct non-controlling interest in T	40%
Indirect non-controlling interest in T (25% × 60%)	15%
Total non-controlling interest, one-stage method	55%

Mixed group: indirect non-controlling interest

A similar analysis can be applied to a mixed group. It has already been shown that using the one-stage method, the percentage ownership of T in the mixed group is as follows:

Mixed group	
Ownership of T	
Direct holding of H	40%
Indirect holding of H (60% × 20%)	12%
H share of ownership of T	52%
Non-controlling interest in T (the balance)	48%
	100%

In our mixed group, H has two subsidiaries, S and T.

- It has a 60% interest in S
- It has a 52% interest in T. This comprises a direct interest of 40% plus an indirect interest through S of 12% (60% × 20%).

As already seen, this gives non-controlling interests of 40% in S and 48% in T. The non-controlling interest in T consists of two elements:

- 40% of the shares of T are held by shareholders other than S

- The 40% non-controlling interest in S owns a share of the 20% of T that is owned by S. This is an indirect non-controlling interest in T – the part of T that is owned by the non-controlling interest in S.

Mixed group	
Non-controlling interest in T	
Direct non-controlling interest in T	40%
Indirect non-controlling interest in T (40% × 20%)	8%
Total non-controlling interest, one-stage method	48%

4.2 Calculating the non-controlling interest for the consolidated statement of financial position

We need to establish a value for non-controlling interest in the consolidated statement of financial position.

- For a direct subsidiary S, this is not a problem. The non-controlling interest in S is the percentage of shares held directly by the non-controlling interest in S, multiplied by the net assets of S.
- For a sub-subsidiary, or any other subsidiary with an indirect non-controlling interest (T), there is a problem. We can calculate a non-controlling interest in T as the percentage non-controlling interest multiplied by the net assets of T. However, this would involve some **double-counting**, of the non-controlling interest in S and the indirect non-controlling interest in T

(This double-counting problem arises only with the one-stage method of consolidation.)

To calculate the total non-controlling interest in the group, we have to remove the double counting. The following approach is recommended:

Non-controlling interest in the H group		
Non-controlling interest (NCI) in S	(% NCI in S) × (Net assets of S)	X
Non-controlling interest (NCI) in T	(% NCI in T) × (Net assets of T)	Y
Direct and indirect non-controlling interest in S and T		(X + Y)
Subtract double counting:		
Cost of indirect non-controlling interest in T	**(% NCI in S) × (Cost of investment by S in T)**	(Z)
Non-controlling interest in H Group		(X + Y - Z)

4.3 Cost of the parent entity's investment in T

Having calculated the non-controlling interest in T, we can calculate the **parent's share of the cost of the investment in T**.

The cost of the indirect non-controlling interest in T must be subtracted from the total cost of the investment by S in T, to obtain the cost of the group's investment in T.

Cost of investment of S in T	A	
Cost of indirect non-controlling interest in T	B	= (X + Y – Z) above
Cost of parent's investment in T	A – B	

The cost of the parent's investment in T is then used to calculate the **purchased goodwill on the acquisition of** T.

Example

On 1 June 20X5, H acquired 75% of the shares of S at a cost of $180,000. On the same date, S acquired 60% of the share capital of T at a cost of $88,000.

Immediately after the acquisition, the statements of financial position of the three companies were as follows:

	H	S	T
	$	$	$
Investment in S at cost	180,000	-	-
Investment in T at cost	-	88,000	-
Other net assets at fair value	420,000	112,000	100,000
	600,000	200,000	100,000
Share capital and reserves	600,000	200,000	100,000

Required

(a) Calculate the non-controlling interests in the H Group immediately after the share acquisitions.

(b) Calculate the cost to H of the investment in T.

The H Group uses the partial goodwill method of consolidation.

Answer

The parent entity's interest in T is 45% (75% × 60%). The non-controlling interest in T is 55% (100% – 45%).

The non-controlling interest in the H group

		$
Non-controlling interest in net assets of S	25% × $200,000	50,000
Non-controlling interest in net assets of T	55% × $100,000	55,000
		105,000
Subtract		
Cost of indirect non-controlling interest in T	25% × $88,000	(22,000)
Non-controlling interest in H Group		83,000

An alternative way of calculating the non-controlling interest would be as follows:

	$
Net assets of S, excluding investment in T (200,000 – 88,000)	112,000
	$
NCI share of these assets in S: 25% × $112,000	28,000
NCI share of net assets of T: 55% × $100,000	55,000
Non-controlling interest in H Group	83,000

Cost of parent's investment in T

	$
Cost of investment of S in T	88,000
Cost of indirect non-controlling interest in T (see above)	(22,000)
Cost of parent's investment in T	66,000

4.4 Calculating the purchased goodwill

When the cost of the parent's investment in the sub-subsidiary has been calculated, the purchased goodwill on acquisition can be calculated in the normal way, using the partial goodwill method. It is the difference between the parent's cost of the investment and the parent's share of the net assets acquired, at fair value.

Example

Continuing the previous example of the H Group, and using the partial goodwill method of consolidation, the goodwill on acquisition is calculated separately for S and for T, as follows:

		S		T
		$		$
Cost of investment		180,000	(see above)	66,000
Share of net assets acquired	(75% × $200,000)	150,000	(45% × $100,000)	45,000
Goodwill		30,000		21,000

The total purchased goodwill for the H Group at acquisition is therefore $30,000 + $21,000 = $51,000.

The consolidated statement of financial position of the H Group at the date of the acquisition of S by H and of T by S can now be constructed as follows.

	$
Purchased goodwill	51,000
Other net assets of H group at acquisition (420 + 112 + 100)	632,000
	683,000

Shares and reserves of H	600,000
Post-acquisition profits of subsidiaries	0
	600,000
Non-controlling interests (see above)	83,000
	683,000

The following example illustrates how a consolidated statement of financial position should be prepared for a complex group. The steps to take on consolidation are those described in the previous chapter on consolidated accounts (for the partial goodwill method), except that calculating the non-controlling interest (which was Step 4) must now come before calculating the purchased goodwill (which was Step 3).

Example

The summary statements of financial position as at 31 December 20X7 are as follows:

	Entity A	Entity B	Entity C
	$000	$000	$000
Investment in B at cost: 2,400 shares	5,000		
Investment in C at cost: 180 shares		750	
Sundry net assets	9,900	5,000	1,000
	14,900	5,750	1,000
Share capital: ordinary shares of $1 each	10,000	3,000	300
Accumulated profits	4,900	2,750	700
	14,900	5,750	1,000

Entity A acquired its investment in Entity B on 1 January 20X7. Entity B acquired its investment in Entity C on 1 January 20X4. At the dates of the share purchases, the following information is available:

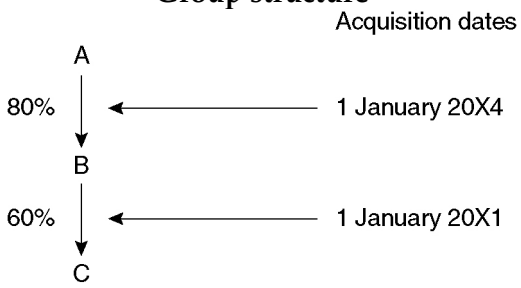
	Date	Accumulated profits, Entity B	Accumulated profits, Entity C
		$000	$000
Entity B	1 January 20X4	2,000	500
Entity B	1 January 20X7	2,300	650

Required

Prepare the consolidated statement of financial position for the A Group as at 31 December 20X7, using the partial goodwill method of consolidation.

Answer

Group structure



Entity B acquired its interest in Entity C before A purchased its interest in B; therefore the date of entry into the A Group is the same for both Entity B and Entity C. This is 1 January 20X7.

Step 1

Calculate the percentage ownership of the subsidiaries held by A and the percentage ownership of the non-controlling interests.

Ownership of B

Direct holding of A	80%
Non-controlling interest in B (balancing figure)	20%
	100%

Ownership of C

Direct holding of A	0%
Indirect holding of B (80% × 60%)	48%
	48%
Non-controlling interest in T (balancing figure)	52%
	100%

Step 2

Calculate the net assets of Entity B and Entity C at (1) the end of the current reporting period and (2) the date of acquisition by the group.

	Entity B		Entity C	
	At 31 December 20X7	**At acquisition date**	**At 31 December 20X7**	**At acquisition date**
	$000	$000	$000	$000
Share capital	3,000	3,000	300	300
Accumulated profits	2,750	2,300	700	650
Net assets (share capital plus reserves)	5,750	5,300	1,000	950
Post-acquisition accumulated profits	450 = (5,750 – 5,300)		50 = (1,000 – 950)	

Step 3

Calculate the non-controlling interest

Use the method described earlier in this chapter.

		$
Non-controlling interest in net assets of B	20% × 5,750	1,150
Non-controlling interest in net assets of C	52% × 1,000	520
		1,670
Subtract		
Cost of indirect non-controlling interest in C	20% × 750	(150)
(= 20% × Cost of investment by B in C)		
Non-controlling interest in A Group		1,520

Step 4

Calculate the purchased goodwill

To do this, we must first calculate the cost of the parent company's investment in Entity C.

	$000
Cost of investment of B in C	750
Cost of indirect non-controlling interest in C (see above)	(150)
Cost of parent's investment in C	600

	Investment in B		**Investment in C**
	$000		$000
Cost of investment	5,000	(see above)	600
Minus share of net assets acquired:			
80% × 5,300 (see Steps 1 and 2)	(4,240)		
48% × 950 (see Steps 1 and 2)			(456)
Purchased goodwill	760		144

Total purchased goodwill for the group (in $000) = 760 + 144 = 904. (There has been no impairment of goodwill.)

Step 5

Calculate the post-acquisition accumulated profits of the parent company

	$000
Entity A accumulated profits (parent company)	4,900
Parent's share of:	
Entity B accumulated profits (80% × 450) – see Step 2	360
Entity C accumulated profits (48% × 50) – see Step 2	24
	5,284

We can now prepare the consolidated statement of financial position as at 31 December 20X7.

Consolidated statement of financial position at 31 December 20X7	$000
Goodwill (Step 4)	904
Sundry net assets (9,900 + 5,000 + 1,000)	15,900
	16,804
Share capital	10,000
Reserves (Step 5)	5,284
Parent company's share in equity of the group	15,284
Non-controlling interest (Step 3)	1,520
	16,804

4.4 Complex groups: the full goodwill method

The full goodwill method differs from the partial goodwill method in the following ways:

- the calculation of the goodwill at acquisition
- the valuation of non-controlling interests, and
- the accounting treatment of subsequent impairments in goodwill.

An example will be used to demonstrate the accounting method required, and how it differs from the partial goodwill method.

Example

The summary statements of financial position as at 31 December Year 8 are as follows:

	Entity A	**Entity B**	**Entity C**
	$000	$000	$000
Investment in B at cost: (80% holding)	3,300		
Investment in C at cost: (60% holding)		2,200	
Sundry net assets	2,700	1,400	3,000
	6,000	3,600	3,000

Share capital: ordinary shares of $1 each	4,000	2,500	2,000
Accumulated profits	2,000	1,100	1,000
	6,000	3,600	3,000

Entity A acquired its investment in Entity B on 1 January Year 7. Entity B acquired its investment in Entity C on 31 December Year 7

The following information is relevant:

Date	Retained earnings Entity B	Retained earnings, Entity C
	$000	$000
1 January Year 7	400	200
31 December Year 7	700	320

Date	Fair value of NCI, Entity B	Fair value of NCI, Entity C
	$000	$000
1 January Year 7	800	1,600
31 December Year 7	960	2,000

The goodwill of Entity B is impaired as at 31 December Year 7 by $500,000.

Required
Prepare the consolidated statement of financial position of the Entity A Group as at 31 December Year 8, using:

(a) the full goodwill method

(b) the partial goodwill method.

Answer

The acquisition of Entity B by Entity A occurred before the acquisition of Entity C by Entity B. The effective share of the A Group in Entity C is 80% × 60% = 48%.

The relevant retained earnings for the purpose of goodwill calculation are:

- Entity B: at 1 January Year 7, $400,000
- Entity C: at 31 December Year 7, $320,000.

Full goodwill method

(a) Calculation of goodwill

The fair value of the consideration held in Entity C represents the 60% shareholding in entity C purchased by Entity B. The 20% shareholding held by the NCI in Entity B should be deducted in the calculation, as shown below.

The purchased goodwill relating to Entity B and Entity C are calculated as follows.

	Entity B	Entity C
	$000	$000
Fair value of consideration	3,300	2,200
Indirect holding of C belonging to NCI of B (20% × 2,200)		(440)
Fair value of NCI at acquisition	800	2,000
	4,100	3,760
Fair value of identifiable net assets at acquisition (Entity B: 2,500 + 400) (Entity C: 2,000 + 320)	2,900	2,320
Purchased goodwill	1,200	1,440

Allowing for the impairment of goodwill in Entity B, the total goodwill at 31 December Year 8 (in $000) = $1,200,000 + $1,440,000 – $500,000 = $2,140,000.

(b) Calculation of NCI

Again, an adjustment is required to the NCI in Entity C to allow for the 20% share held by the NCI of B in the investment in C.

	Entity B	Entity C
	$000	$000
Fair value of NCI at acquisition	800	2,000
Indirect holding of C belonging to NCI of B (20% × 2,200)		(440)
Post-acquisition profit attributable to NCI :		
Entity B : 20% × (1,000 – 400)	140	
Entity C : 52% × (1,000 – 320)		354
Impairment of goodwill: attributable to NCI in B (20% × 500)	(100)	
	840	1,914

The total NCI at 31 December Year 8 is (in $000) $2,754.

(c) Calculation of consolidated retained earnings attributable to equity holders of A

Attributable to parent:	$000
Retained earnings of Entity A	2,000
Post-acquisition profit of B: 80% × (1,100 – 400)	560
Post-acquisition profit of C: 48% × (1,000 – 320)	326
Impairment of goodwill attributable to parent: 80% × 500	(400)
Consolidated retained earnings at 31 December Year 8	2,486

(d) Consolidated statement of financial position as at 31 December Year 8 (full goodwill method)

	$000
Net assets excluding goodwill: (2,700 + 1,400 + 3,000)	7,100
Goodwill (see (a))	2,140
	9,240
Equity shares	4,000
Retained earnings attributable to equity holders of A (see (c))	2,486
	6,486
NCI (see (b))	2,754
	9,240

Partial goodwill method

With the partial goodwill method, the calculation of goodwill and NCI are different. In addition, the full impairment of goodwill is attributed to the equity holders of A; therefore the consolidated retained profits attributable to the equity holders of A are also less.

(e) Calculation of goodwill

The purchased goodwill relating to Entity B and Entity C are calculated as follows.

	Entity B	**Entity C**
	$000	$000
Fair value of consideration	3,300	2,200
Indirect holding of C belonging to NCI of B (20% × 2,200)		(440)
	3,300	3,760
Fair value of identifiable net assets at acquisition		
Entity B: 80% × (2,500 + 400) (Entity C: 48% × (2,000 + 320)	2,320	1,114
Purchased goodwill	980	646

Allowing for the impairment of goodwill in Entity B, the total goodwill at 31 December Year 8 (in $000) = $980,000 + $646,000 – $500,000 = $1,126,000.

(f) Calculation of NCI

Again, an adjustment is required to the NCI in Entity C to allow for the 20% share held by the NCI of B in the investment in C.

	Entity B	Entity C
	$000	$000
NCI at acquisition (20% × 2,900: 52% × 2,320)	580	1,206
Indirect holding of C belonging to NCI of B (20% × 2,200)		(440)
Post-acquisition profit attributable to NCI :		
Entity B : 20% × (1,000 – 400)	140	
Entity C : 52% × (1,000 – 320)		354
Total NCI	720	1,120

The total NCI at 31 December Year 8 is (in $000) $1,840.

(g) Calculation of consolidated retained earnings attributable to equity holders of A

Attributable to parent:	$000
Retained earnings of Entity A	2,000
Post-acquisition profit of B: 80% × (1,100 – 400)	560
Post-acquisition profit of C: 48% × (1,000 – 320)	326
Impairment of goodwill attributable to parent: 100% × 500	(500)
Consolidated retained earnings at 31 December Year 8	2,386

(h) Consolidated statement of financial position as at 31 December Year 8 (full goodwill method)

	$000
Net assets excluding goodwill: (same as before)	7,100
Goodwill (see (e))	1,126
	8,226
Equity shares	4,000
Retained earnings attributable to equity holders of A (see (g))	2,386
	6,386
NCI (see (f))	1,840
	8,226

CHAPTER 6

Group financial statements: step acquisitions and disposals

Contents

Piecemeal acquisitions

- What is a step acquisition?
- Accounting for step acquisitions: IFRS 3 (revised)
- Increasing or reducing a shareholding whilst retaining control

1 Step acquisitions

1.1 What is a step acquisition?

A 'step acquisition' is a business combination achieved in stages, where the acquirer (parent company) gains control of an acquiree (subsidiary) in stages over a period of time.

For example, a company may purchase a 30% stake in the equity shares of another company, and then a year later purchase another 40%, so that its ownership of the subsidiary increases from 30% to 75%.

In this example, the acquirer would probably have accounted for its investment in the other company as an investment in an associate, using the equity method of accounting. After acquiring the next 40% of the shares, the associate becomes a subsidiary.

1.2 Accounting for step acquisitions: IFRS 3 (revised)

The rules on accounting for step acquisitions were amended by IFRS 3 (revised 2008).

The current rules are simpler than the 'old' rules, which were sometimes referred to as a 'cost accumulation model'. Under the old rules, the underlying assumption was that the cost of the investment accumulated with each step towards acquisition, so that for each stage of the step acquisition an amount had to be calculated for goodwill. This method of accounting for step acquisitions has been rejected by IFRS 3 (revised).

The new accounting rules for step acquisitions assume that when an entity gains control of another through a step acquisition, it effectively 'gives up' its previous investment in order to acquire control. A gain or loss should be reported on the 'giving up' of the previous investment. For the acquisition of the shares that give the acquirer control there is an amount for purchased goodwill, but under the current rules this amount will be less than under the 'old' rules.

When an entity owns equity in another company but does not have control, and then acquires additional shares in the company that give it control, the step acquisition is accounted for as follows:

- All the equity interests held by the entity before control was obtained (which might be an interest in an associate, an interest in a joint venture or simply an investment) should be re-measured to fair value at the date when control is obtained.
- The difference between the previous carrying value of the investment and the fair value re-measurement is a gain or loss. This should be reported in profit or loss for the period in which control is obtained.

These rules will be illustrated using the following example.

Example

S has share capital of 1,000 $10 shares, unchanged since incorporation. H acquires an 80% holding in S over two years, as follows:

Date	Shares acquired	Cost of investment	Net assets of S
1 January 20X5	(30%) 300	$20,000	$60,000
1 January 20X7	(50%) 500	$90,000	$90,000
31 December 20X7			$105,000

The net assets of S at 1 January 20X5 are at fair value. The fair value of the 30% shareholding of H at 1 January 20X7 is measured as $45,000. The fair value of the net assets of S at 1 January 20X7 is measured as $150,000.

The initial investment is probably accounted for as an associate by the equity method. It is assumed that there has been no impairment to the investment, so that the carrying value of the investment at 1 January 20X7, when control is obtained, is:

	$
Investment at cost	20,000
Plus share of retained profits since purchase of investment (30% × $(90,000 – 60,000)	9,000
	29,000

When control is obtained on 1 January 20X7, the previous investment in 30% of S is re-valued to fair value, $45,000. There is a gain on re-measurement, which is reported in profit or loss of H.

	$
Investment at fair value	45,000
Carrying value of investment at date control is obtained	29,000
Gain on re-measurement, take to profit or loss	16,000

Debit: Investment in S	$16,000
Credit: Profit or loss	$16,000

For the consolidated statement of financial position, the goodwill on acquisition attributable to the equity holders of H, using the partial goodwill method, is calculated as follows:

	$
Previous investment at fair value	45,000
Cost of additional 500 shares	90,000
Purchase consideration + previous investment at fair value	135,000
H's share of fair value of net assets of S (80% × 150)	120,000
Goodwill arising on acquisition	15,000

Example

On 1 January Year 9, Haff acquired 50% of the equity shares of Staff for $90 million. It already held a 20% equity holding in Staff which had been acquired for $30 million but which was valued at $36 million at 1 January Year 9. The fair value of the non-controlling interest at 1 January Year 9 was $60 million and the fair value of the identifiable net assets in Staff at that date was $166 million.

Using the **full goodwill method** of consolidation, the purchased goodwill would be calculated as follows:

	$ million
Purc hase consideration for shares at 1 January Year 9	90
Value of interest already held, as at 1 January Year 9	36
	126
Fair value of NCI	60
	186
Fair value of identifiable net assets	166
Goodwill	20

There is a gain on the initial investment in Staff of $6 million ($36 million - $30 million). This gain is reported in the statement of comprehensive income for the period, as other comprehensive income (not in profit or loss).

1.3 Increasing or reducing a shareholding whilst retaining control

After a parent company has acquired a subsidiary, it might increase or reduce its shareholding, whilst still retaining control. For example a subsidiary might issue new shares to non-controlling interests or the parent might sell some shares in a subsidiary. Similarly the parent might buy shares in a subsidiary from some of the minority shareholders.

IAS 27 (revised) states that when an entity changes the percentage size o fits ownership in a subsidiary without losing control, the transaction should be accounted for as an equity transaction.

- A group of companies is viewed as a single economic entity, and the equity ownership of this entity consists of equity shareholders in the parent and non-controlling interests in subsidiaries.
- The sale of shares between the parent company and non-controlling interests is therefore a transaction between equity owners of the group.
- Since the sale of the shares is a transaction between equity owners in their capacity as owners of the group, no profit or loss arises on the transaction, and there is no gain or loss to report either as 'other comprehensive income'.
- The transaction should simply result in an adjustment to equity. The carrying amounts of the parent's interests and the non-controlling interests in the equity of the group are adjusted to record the change in their ownership interests.

The rules summarised

When shares in a subsidiary are bought from or sold to non-controlling interests, but the parent entity retains control over the subsidiary, the transaction should be recorded directly in equity for the purpose of preparing consolidated accounts.

When shares are purchased from NCI, the difference between the price paid for the shares and the carrying value of the NCI shares purchased should be recorded as a debit or credit to the parent entity's equity interest in the group.

If the price paid for the shares exceeds their carrying value, there will be a reduction in the parent entity's equity interest in the group, and so the excess price paid should be debited to the parent entity's interest.

Similarly when shares in a subsidiary are sold to NCI but the parent retains control over the subsidiary the difference between the price paid for the shares and the carrying value of the NCI shares purchased should be recorded as a debit or credit to the parent entity's equity interest in the group. A 'gain' on the sale will be recorded as a credit to the parent entity's equity interest in the group.

It follows that no additional goodwill or reduction in goodwill occurs as a result of these transactions. There is also no recognition of any gain or loss on the transaction in the consolidated statement of comprehensive income (either profit or loss, or other comprehensive income).

Example

Pride owns 80% of the equity of Hide. The net assets of Hide are $4,000 million and the carrying amount of the non-controlling interest in Hide is $800 million (= 20%).

Pride now buys one half of the shares held by the NCI, increasing its equity holding by 10% to 90% of Hide. It pays $500 million for the shares.

Under the rules of IAS 27 (revised) this transaction should be accounted for as an equity transaction.

- The parent company has spent $500 million to acquire the shares of the NCI; therefore cash in the consolidated statement of financial position is reduced by $500 million.
- The NCI is reduced by $400 million.
- The parent has paid $500 million to acquire net assets of $400 million at fair value; therefore there is a reduction of $100 million in the equity attributable to owners of the parent company.

The transaction therefore has the following effect:

Debit: NCI	$400 million
Debit: Pride controlling equity interest in the group	$100 million
Credit: Cash	$500 million.

Notes

(1) An alternative method of accounting for a change in the size of an investment in a subsidiary would be to treat any excess of the transaction value over the value of the net assets acquired or sold as a change in goodwill attributable to the parent company. In the example above, for example, it would be possible to account for the increase in shares in Hide by adding $100 million to goodwill rather than reducing the parent company's equity interest by $100 million. This approach to accounting for share transactions is not allowed by IAS 27 (revised).

(2) IFRS 3 allows two methods of accounting for NCI: this text has called them the 'partial goodwill method' and the 'full goodwill method' or 'fair value method'. If an entity chooses to account for an acquisition using the full goodwill method and subsequently buys additional shares from non-controlling interests in the subsidiary, the reduction in the parent entity's interest in the group will be less than if the partial goodwill method is used. This is because the value of the NCI acquired will be higher since it will include some goodwill.

(3) The full goodwill method is illustrated below.

Example

On 1 January Year 9, Hak acquired 70% of the equity shares of Stak for $450 million. The fair value of the identifiable net assets in Stak at that date was $600 million. The fair value of the NCI at 1 January Year 9 was $264 million. Hak subsequently acquired another 10% of the equity shares of Stak on 31 December Year 9 for $102 million. The carrying value of the net assets of Stak at 31 December Year 9 was $670 million.

Hak wishes to use the full goodwill method for consolidation.

At 1 January Year 9

Using the full goodwill method, the purchased goodwill lat 1 January Year 9, when the original 70% of the shares in Stak were acquired, is calculated as follows:

	$ million
Purchase consideration for shares at 1 January Year 9	450
Fair value of NCI at 1 January Year 9	264
	714
Fair value of net assets acquired	600
Purchased goodwill	114

When the additional 10% of shares are purchased from NCI on 31 December, this is treated as an 'equity transaction' or 'treasury transaction' between equity interests in the group, and there is no alteration to the goodwill.

However, the NCI has been reduced from 30% to 20%, resulting in a reduction in NCI by 10%/30% = 1/3.

	$ m
Fair value of NCI at 1 January Year 9	264
NCI share of retained profits 1 January - 31 December = 30% × (670 – 600)	21
NCI net asset at 31 December (before share sale)	285
Transfer to equity of Hak equity shareholders (10/30)	(95)
NCI: Balance at 31 December after share sale	190

The consideration paid for the extra 10% of the shares was $102 million. There is an adjustment to the equity attributable to Hak shareholders, as follows:

	$ m
Consideration paid	(102)
Equity transfer from NCI	95
Reduction in equity attributable to Hak shareholders	(7)

Full and partial disposals of shares in a subsidiary

- Four possible situations following a disposal
- Disposals of shares in subsidiaries without loss of control
- Disposals of shares in subsidiaries and loss of control: the general accounting rules
- Full disposal of shares in a subsidiary
- Partial disposal of shares: subsidiary becomes an associate after the disposal
- Partial disposal of shares: the remaining shares become an ordinary investment

2 Full and partial disposals of shares in a subsidiary

2.1 Four possible situations following a disposal

From time to time, shares in a subsidiary in a group might be disposed of. The parent may sell its entire holding in the subsidiary (a full disposal) or just part of its shareholding (a partial disposal).

Any one of the four situations listed below could occur when a disposal of shares in a subsidiary takes place, and the holding company H disposes of shares in subsidiary S:

- **Situation 1:** H sells all its shares in S. This is a full disposal.
- **Situation 2:** H sells some of its shares in S, and after the disposal, H still owns more than 50% of the shares in S. S remains a subsidiary of the group. For example, H may own 90% of the shares in S and then dispose of 15% of them. S remains a subsidiary, but there is now a bigger non-controlling interest (up from 10% to 25%).
- **Situation 3:** H sells some of its shares in S, and after the disposal, S has become an associate for the purpose of preparing the consolidated accounts. Usually, this is because H's ownership is now between 20% and 50% of the shares in S.
- **Situation 4:** H sells some of its shares in S, and after the disposal, S has become a simple investment for the purpose of preparing the consolidated accounts. Usually, this means that H now owns less than 20% of the shares in S.

Any of the situations 1, 2 or 3 could occur following a partial disposal.

2.2 Disposals of shares in subsidiaries without loss of control

The previous section explained the accounting rules for an increase or reduction in the shareholding of a parent entity in a subsidiary, without any change in control. The transaction is accounted for within equity, as a transaction between owners of equity in the group.

The same rules apply to the disposal of some shares without losing control as to the purchase of additional shares when control already exists.

Example

Pick owns 90% of the equity of Sack. The net assets of Sack are $600 million and the carrying amount of the non-controlling interest in Sack is $60 million (= 10%).

Pick now sells 20% of the shares in Sack to a number of other investors for $155 million. Pick retains control of Sack because its shareholding is 70%.

Under the rules of IAS 27 (revised) this transaction should be accounted for as an equity transaction.

- The parent company receives $155 million from selling shares to non-controlling interests; therefore assets (cash) in the consolidated statement of financial position are increased by $155 million.
- The NCI is increased by 20%, and in the consolidated statement of financial position this will be reported as an increase of $120 million (= 20% × $600 million) in NCI to $180 million.
- Pick has received $155 million to dispose of shares with a net asset value of $120 million at fair value; therefore there is an increase of $35 million in the equity attributable to owners of the parent company.

The transaction therefore has the following effect:

Debit: Cash	$155 million
Credit: NCI	$120 million
Credit: Pick controlling equity interest in the group	$35 million.

Example

Pin owns 80% of the equity of Skin. The net assets of Skin are $300 million and Skin has 100 million equity shares in issue Skin now issues 20 million new shares for $90 million and Pin does not buy any of the shares.

After the share issue there are 120 million shares in issue and Pin owns 80 million of them. This is a 66.7% interest in Skin, and it is assumed that Pin therefore retains control.

There is a change in shareholding without loss of control, and this is accounted for as an equity transaction.

		Pin		NCI	Net assets of Skin
		$ million		$ million	$ million
Before the share issue	(80%)	240	(20%)	60	300
After the share issue	(66.7%)	260	(33.3%)	130	390
Change		+ 20		+ 70	+90

The transaction therefore has the following effect:

Debit: Cash	$90 million
Credit: NCI	$70 million
Credit: Pin controlling equity interest in the group	$20 million.

Example

On 1 January Year 9, Hak acquired 70% of the equity shares of Stak for $450 million. The fair value of the identifiable net assets in Stak at that date was $600 million. The fair value of the NCI at 1 January Year 9 was $264 million. Hak subsequently sold 10% of the equity shares of Stak on 31 December Year 9 for $102 million. The carrying value of the net assets of Stak at 31 December Year 9 was $670 million.

Hak wishes to use the full goodwill method for consolidation.

This is similar to the example in paragraph 1.3 above, except that Hak is selling 10% of its shares in Stak, whilst still retaining a controlling interest (instead of acquiring an extra 10%). The purchased goodwill at 1 January Year 9 was $114 million (see earlier example for the calculation).

	$ m
Stak net assets at 1 January Year 9	600
Increase in net assets to 31 December	70
Stak net assets at 31 December Year 9	670
Consideration received for shares	102.0
Transfer to NCI: 10% × (net assets 670 + goodwill 114)	(78.4)
Increase in equity attributable to Hak shareholders	23.6

2.3 Disposals of shares in subsidiaries and loss of control: the general accounting rules

When a parent company sells shares in a subsidiary and loses control by doing so, the general accounting rules are the same for a full or a partial disposal. These are set out in IAS 27 (revised) as follows:

Consolidated statement of financial position: general rules

The accounting changes in the (consolidated) statement of financial position are as follows:

- The assets of the former subsidiary, together with any related goodwill, are derecognised and removed from the (consolidated) statement of financial position at their carrying amount at the date when control is lost.
- The non-controlling interests in the subsidiary are also derecognised and removed from the (consolidated) statement of financial position), including any components of other comprehensive income attributable to the NCI.
- The parent recognises the fair value of the consideration (if any) received from the transaction or event that caused the loss of control. For example, if the parent sells shares for cash and loses control in doing so, it should recognise the assets (cash) received as consideration.
- Any investment retained in the former subsidiary should be recognised at its fair value at the date when control is lost, and accounted for in accordance with other IFRSs from the date that control is lost (as an associate in accordance with IAS 28 or as a financial asset in accordance with IAS 39).
- The fair value of the remaining investment on loss of control of the subsidiary should be regarded as the fair value of the investment on initial recognition (IAS 39) or as the cost on initial recognition of the investment in an associate (ISAS 28).

Consolidated statement of comprehensive income: general rules

As a result of the disposal of the shares by the parent, there will be a gain or loss on disposal attributable to the owners of the parent entity. The total gain or loss should be analysed in order to decide how much should be reported:

(1) as a direct transfer to retained earnings

(2) as a reclassification adjustment from other comprehensive income to profit or loss, and

(3) in profit or loss, as a gain or loss on disposal.

The consolidated statement of comprehensive income might previously have recognised gains or losses relating to the subsidiary in other comprehensive income. For example when control in the former subsidiary is lost, the subsidiary might hold some available-for-sale financial assets, for which a gain has previously been included in other comprehensive income. Similarly, when control in the former subsidiary is lost, the subsidiary might have non-current assets for which a revaluation gain has previously been reported in other comprehensive income.

If a gain or loss previously recognised in other comprehensive income would be reclassified to profit and loss on disposal of the related assets (or liabilities), the parent should re-classify the previously-recognised gain from equity to profit or loss as a reclassification adjustment when control in the subsidiary is lost.

For example if a subsidiary has available-for-sale financial assets on which a gain has previously been reported in other comprehensive income, the parent should reclassify the gain to profit or loss.

If a gain on revaluation previously recognised in other comprehensive income would be transferred directly to retained earnings on disposal of the asset, the parent should transfer the revaluation surplus directly to retained earnings when it loses control of the subsidiary.

Any balancing gain or loss on loss of control is reported as a gain or loss in profit and loss, before tax.

The total gain or loss on loss of control in a subsidiary is as follows:

	$m	$
Carrying value of former subsidiary's net assets at date control is lost		A
Minus Carrying value of NCI share of these net assets (including accumulated other comprehensive income attributable to the NCI)		(B)
		A – B = C
Consideration (if any) received from transaction resulting in loss of control	X	
+ Fair value of any retained investment in the former subsidiary	Y	
		X + Y = Z
Total gain (or loss)		Z – C
Amounts previously recognised as other comprehensive income relating to the former subsidiary, now accounted for as a direct transfer to retained profit or as a reclassification adjustment		+ or – D
Gain or loss to report in profit or loss		Z – C +/- D

Example

On 1 January Year 9, Hevi acquired 90% of the equity shares of Sevi for $120 million. The fair value of the identifiable net assets in Sevi at that date was $111 million. The fair value of the NCI at 1 January Year 9 was $9 million. Hevi subsequently sold 65% of the equity shares of Sevi on 31 December Year 9 for $97 million. The carrying value of the net assets of Sevi at 31 December Year 9 was $124 million. Of the increase in net assets of Sevi between 1 January and 31 December,

$10 million had been reported in profit or loss and $3 million in comprehensive income.

The remaining equity in Sevi held by Hevi at 31 December was valued at $36 million, and this investment is classified as an associate. (As a result of the sale of the shares in Sevi, no other investor obtained overall control.)

Hevi uses the **full goodwill method** for consolidation.

The gain on disposal recognised in profit or loss should be calculated as follows:

	$m	$ m
Consideration received for shares in Sevi on 31 December		97.0
Fair value of remaining interest, valued as an associate		36.0
Value of NCI at 31 December (10% × 124 million)		12.4
Gain reported in comprehensive income		3.0
		148.4
Net assets and goodwill de-recognised in consolidated accounts		
Net assets de-recognised	124.0	
Goodwill de-recognised: (120 + 9 – 111)	18.0	
		(142.0)
Gain on disposal, reported in profit or loss		6.4

2.3 Full disposal of shares in a subsidiary

In order to apply the rules in IAS 27 (revised) for the disposal of shares in a subsidiary so that loss of control occurs, it is necessary to establish the consolidated financial position as at the date when control is lost.

Consolidated profit or loss

The profits of the subsidiary are consolidated and included in the group profit for the year, but only up to the date of disposal. This profit is divided between the parent company's share and the non-controlling interest.

The carrying amount of the net assets of the subsidiary at the date when control is lost is therefore:

- the carrying amount of its net assets at the beginning of the financial year
- plus the profit after tax of the subsidiary for the year up to the date when control is lost
- minus any distributions (dividends paid) to the subsidiary's shareholders during the year up to the date of loss of control.

Example

At 1 January Year 9, Holder held 80% of the equity of Stubb. The carrying value of the net assets of Stubb at this date was $570 million. There was also goodwill of $20 million net of accumulated impairments relating to the investment in Stubb: all this goodwill is attributable to the equity owners of Holder.

On 1 April Year 9, Holder sold its entire shareholding in Stubb for $575 million in cash. At this date there was a balance of $40 million on the revaluation reserve of Stubb relating to a re-valued property.

Holder has a financial year ending 31 December. It was subsequently established that the profit after tax of Stubb for the year to 31 December Year 9 was $120 million. Stubb did not make any dividend payment during the year before the disposal of the shares.

How should the disposal of the shares be accounted for? Ignore deferred taxation.

Answer

In the three months of the year to the date of disposal of the shares in Stubb, the after-tax profit of Stubb was $30 million (= $120 million × 3/12). The carrying value of the net assets of Stubb at the date that control was lost is therefore $600 million (= $570 million + $30 million).

The requirements of IAS 27 are as follows.

- Holder must derecognise the assets and liabilities of Stubb, including any related goodwill, at their carrying amount a the date that control is lost. Holder must therefore derecognise $620 million (= $600 million net assets + $20 million goodwill).
- Holder must also de-recognise the non-controlling interest of $120 million (= $600 million net assets × 20% NCI).
- Holder must recognise the consideration received from the sale of the shares (= $620 million).
- This gives the following total gain on disposal of the shares:

	$ million
Net assets removed from statement of financial position, including goodwill	620
NCI removed/derecognised	120
Holder's share of assets derecognised	500
Consideration received from sale of shares	575
Total gain	75

When control is lost, Holder derecognises an asset for which there is a balance of $40 million on the revaluation reserve. On disposal of such an asset, the balance on

the revaluation reserve attributable to equity owners of Holder (= 80% × $40 million = $32 million) should be transferred directly to retained profits.

The balancing gain on disposal of the shares in Stubb should be reported in the profit or loss of holder for the year to 31 December Year 9.

	$ million
Transfer of revaluation surplus directly to retained profits	75
Holder: profit on disposal of shares in Stubb (balance)	32
Total gain	43

2.4 Partial disposal of shares: subsidiary becomes an associate after the disposal

When there is a partial disposal of shares in a subsidiary during the year, and the subsidiary becomes an associate after the share disposal, the same accounting rules should be applied.

Example

At 1 January Year 9, Hudd held 75% of the equity of Sudd. The carrying value of the net assets of Sudd at this date was $200 million. There was also goodwill of $15 million net of accumulated impairments relating to the investment in Hudd: all this goodwill is attributable to the equity owners of Hudd.

On 1 July Year 9, Hudd sold 50% of the shares of Sudd to a number of different investors, receiving $575 million in cash from the sales.

Hudd has a financial year ending 31 December. It was subsequently established that the profit after tax of Sudd for the year to 31 December Year 9 was $80 million. Sudd did not make any payment of dividend during the year before 1 July.

How should the disposal of the shares be accounted for? Assume that fair value of the net assets of Sudd at the date control was lost was equal to their carrying value.

Answer

In the six months of the year to the date of disposal of the shares in Sudd, the after-tax profit of Sudd was $40 million (= $80 million × 6/12). The carrying value of the net assets of Sudd at the date that control was lost is therefore $240 million (= $200 million + $40 million).

The requirements of IAS 27 are as follows.

- Hudd must derecognise the assets and liabilities of Sudd, including any related goodwill, at their carrying amount a the date that control is lost. Hudd must

therefore derecognise $255 million (= $240 million net assets + $15 million goodwill).

- Hudd must also de-recognise the non-controlling interest of $60 million (= $240 million net assets × 25% NCI).
- Hudd must recognise the consideration received from the sale of the shares (= $620 million).
- Hudd must also recognise the retained investment in 25% of the shares of Sudd, at fair value. It is assumed that fair value = 25% × net assets $240 million = $60 million.
- This gives the following total gain on disposal of the shares:

	$ million	$ million
Net assets removed from statement of financial position, including goodwill		255
NCI removed/derecognised		60
Hudd's share of assets before disposal		195
Investment in associate retained, at fair value	60	
Consideration received from sale of shares	150	
		210
Total gain		15

The entire gain on disposal should be recognised in profit or loss for the year to 31 December Year 9.

The net effect on the consolidated statement of financial position of Hudd is as follows, at the date control is lost:

	Debit	Credit
	$ million	$ million
Net assets removed from statement of financial position, including goodwill		255
Assets introduced to statement of financial position (60 investment + 150 cash)	210	
Derecognition of NCI	60	
Gain on disposal of shares		15

2.5 Partial disposal of shares: the remaining shares become an ordinary investment

When there is a partial disposal of shares in a subsidiary during the year, and the remaining shares in the former subsidiary become a simple investment, the same accounting rules should be applied. The accounting treatment is the same, with the exception that the fair value of the investment retained is treated as a financial investment in accordance with the requirements of IAS 39.

CHAPTER 7

Group reorganisations and restructuring

Contents

Group reorganisations and restructuring

- Methods of reorganising/restructuring
- Creating a new holding company
- A change in ownership of companies within a group
- Divisionalisation within a group
- A demerger
- Why reorganise/restructure?

1 Group reorganisations and restructuring

1.1 Methods of reorganising/restructuring

Groups may sometimes be restructured or reorganised. There are various reasons why a restructuring might be considered necessary or desirable. These are explained later. Examples of reorganisations or restructuring include the following:

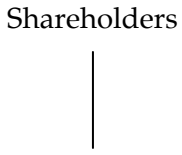
- creating a new holding company for the group
- a change in ownership between companies in the group
- divisionalisation
- a demerger.

1.2 Creating a new holding company

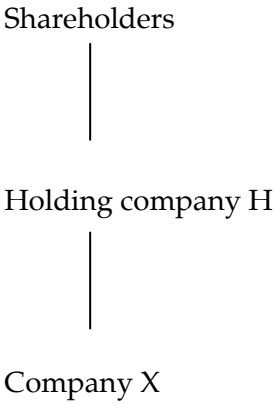
A new holding company may be created for the group. The reason for this may be to improve the structure of the group, possibly with a view to making more changes later, such as adding new subsidiaries.

The effect of creating a new holding company is typically as follows:

Before:



After:



To create the new holding company, the former shareholders of Company X may exchange their shares in Company X for shares in the new holding company H. They become the owners of H, and H is the 100% owner of Company X.

In these arrangements, there is usually just a share-for-share exchange, with shares in X exchanged for shares in H, and no cash transactions are involved.

Occasionally, however, there may be some cash transactions involved.

- The shareholders in Company X may be required to subscribe some extra cash as well as exchange their shares in Company X in order to acquire their new shares in H.
- The new holding company H may acquire cash from an external source (for example, by borrowing) and use this cash to buy back and cancel some of the shares in Company X. In this situation, some shareholders in Company X will sell their shares and no longer be shareholders in the group; the other shareholders will exchange their shares for the new shares in H.

Accounting for a new holding company

When a new holding company is created, it has to prepare consolidated financial statements for the group. **At one time** when a new holding company was created by a share exchange, with no cash transactions involved, the restructuring could be accounted for using the 'pooling of interests' method of accounting.

This is illustrated below.

Example

A group consists of a parent company A and a 100%-owned subsidiary B. Entity A has owned its shares in Entity B since B was incorporated. Their statements of financial position are shown below.

	Entity A	Entity B
	$000	$000
Tangible non-current assets	500	250
Investment in B	100	-
Net current assets	200	150
	800	400
Share capital	200	100
Reserves	600	300
	800	400

A new holding company, H, is created. H acquires all the shares in Entity A in by issuing and exchanging 400,000 $1 shares of its own.

If the consolidated statement of financial position of the new group is prepared using the 'pooling of interests' method, the shares of H are stated at nominal value rather than fair value and there is no purchased goodwill. The statements of financial position for each company and the consolidated statement of financial position for the group would be as follows, immediately after the restructuring.

	Entity H	Entity A	Entity B	Group
	$000	$000	$000	$000
Tangible non-current assets	-	500	250	750
Investment in B	400	100	-	-
Net current assets	-	200	150	350
	400	800	400	1,100
Share capital	400	200	100	400
Reserves	0	600	300	700
	400	800	400	1,100

The group reserves are the pre-restructuring reserves of A and B ($900,000) minus the nominal share capital of A.

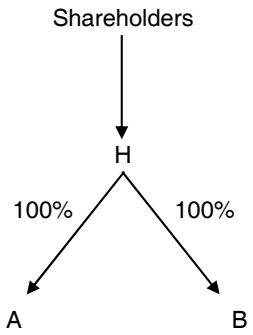
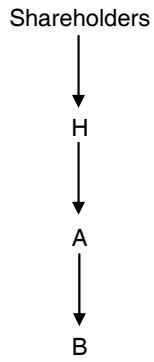
The original IFRS 3 *Business combinations* was issued in 2004. It replaced IAS 22 which had permitted the use of the pooling of interests method of accounting in certain circumstances. IFRS 3 prohibited the use of the pooling of interests method for all types of business combination covered by the IFRS.

However, IFRS 3 (revised 2008) does **not** apply to business combinations involving entities or business under common control, and so it does not apply to the creation of a new holding company (where no cash transactions occur). The IASB has this type of business combination under review.

1.3 A change in ownership of companies within a group

When companies in a group are 100%-owned, it may be decided to reorganise the group and transfer ownership of subsidiaries from one group company to another.

For example, a holding company H may own two subsidiaries, Entity A and Entity B. It may be proposed that Entity A should buy the shares in Entity B from H, for cash. As a result of this reorganisation, Entity B would become a subsidiary of Entity A and a sub-subsidiary of H. There would also be a transfer of cash from Entity A to H, in exchange for the shares in Entity B.

Current structure	Proposed structure
	 Company A buys the equity capital of B from H for cash. All companies continue to operate.

In the proposed structure, there is a change in the ownership of Entity B, as it has been transferred so that it is directly owned by Entity A, not H. The accounting implications are as follows:

- The reorganisation has not changed the assets of the group and so will not affect the group financial statements.
- In the individual accounts of H, there is a gain or loss in disposal of the shares in Entity B. In H's own financial statements, the cost of the investment in Entity B is removed and replaced with the cash received, together with the resulting gain or loss (in H's reserves).

Accounting for a change of ownership within the group

Accounting for a change in ownership will be illustrated using the same example, but with some illustrative figures.

Example

Suppose that the following data applies to the reorganisation described above, and the partial goodwill method of accounting is used:

- The cost of H's investment in B was $95. The investment was bought when the fair value of the net assets of B was $87.
- The issued capital of B is $70.
- Half of the goodwill arising on the original acquisition of B is now impaired.
- A pays H $100 to buy the share capital of B, when the net assets of B are valued at $ 75. This cash is to be loaned by H to B on an inter-company account.

Answer

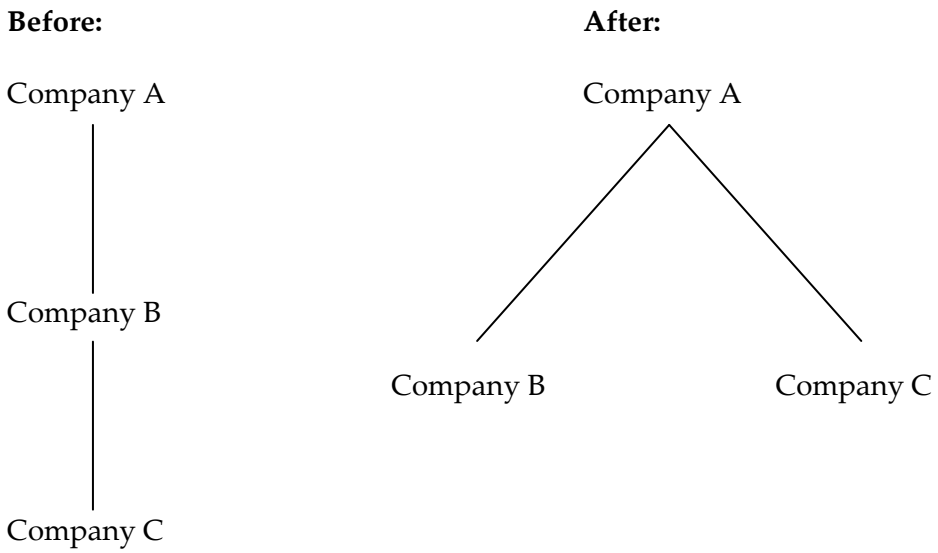
The proposal does not change the **initial** value of the goodwill arising when H purchased B. The original goodwill figure is 8 (95 - 87).

Half of this will be written off against group reserves as an impairment loss. The remaining 4 is carried on the consolidated statement of financial position of the H Group.

A gain on the disposal of the investment in Entity B will be recognised in the individual financial statements of H, but as this is an inter-company profit, it will be eliminated on consolidation.

Alternative change in ownership

An alternative situation is where a subsidiary becomes directly owned by the parent, as can be seen in the diagram below.



This type of group reorganisation is often done when the parent company wishes to sell Company B, but to retain company C. This reorganisation will have no effect on the consolidated accounts because the group remains the same. It is the individual companies whose accounts will change.

This transaction cannot normally be effected by a share-for-share exchange, because the law in some countries does not allow a subsidiary to hold shares in a parent company. Instead, Company B pays a special dividend called a 'dividend in specie' to the parent, which is effectively the cost of investment in Company C. Company B must have sufficient distributable profits to do this.

Alternatively, Company A can pay cash to Company B in return for the investment in Company C.

1.4 Divisionalisation within a group

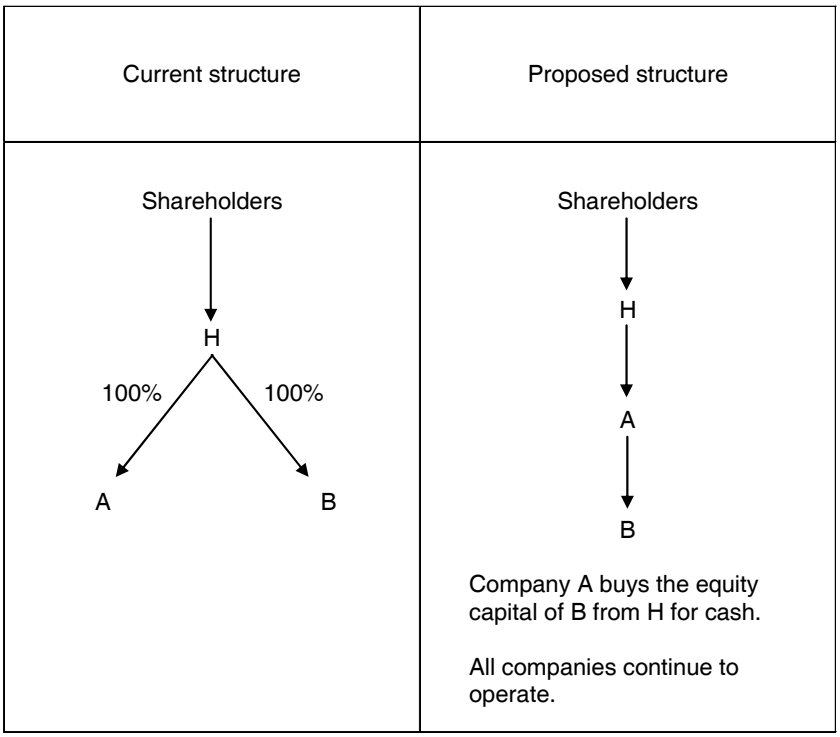
Within a group, there may be operating divisions, and each division may be established as a subsidiary company within the group. Each division may own several sub-subsidiaries, each responsible for a different aspect of the division's overall operations.

When there is divisionalisation of operations within the group, it may be decided from time to time to switch assets from one division to another. For example, it may be decided to close down one division and transfer its operations to another division.

Example

A holding company H owns two subsidiaries Entity A and Entity B. Each entity is a separate operating division within the group. Entity B has recently been making losses, and it is proposed that Entity B should be closed down. All its net assets will be transferred to Entity A, for an agreed purchase price.

The proposed restructuring is shown below.



Accounting for a divisional reorganisation

This is a divisionalisation restructuring or reorganisation. It does not affect the ownership of Entity B. Entity B is still owned by H and the investment remains in the statement of financial position of H. Entity B has simply transferred its assets, liabilities and all business operations to Entity A, in exchange for cash. As a result, Entity B is now a '**shell**' company, containing just share capital and the cash from the sale.

- There is no effect on the group financial statements as the assets of the group are unchanged.
- There has not been a disposal of shares in Entity B by H, so the investment must remain in the accounts of H.
- The investment in Entity B in the individual H's accounts will certainly have suffered impairment, given that the trade of Entity B has been transferred to Entity A.
- If any goodwill arose when H acquired B, this will also be impaired, because the business to which the goodwill relates has now been transferred.
- Entity A has not bought the shares of Entity B. It has bought the net assets of B in exchange for cash. Entity A will therefore include all of B's net assets into its own statement of financial position, as B's business operations have now been merged with A's own.

Example

The following additional information relates to the example of the divisional reorganisation above:

- The cost of H's investment in B was $95. The investment was bought when the fair value of the net assets of B was $87.
- The issued capital of B is $70.
- All the goodwill arising on the acquisition of B by H has been impaired.
- The purchase consideration is $71. This will be accounted for as an inter-company loan transaction between A and B.

Required

Explain and illustrate the impact on the group accounts of the proposed restructuring, as far as the information given permits.

Answer

The accounting treatment of the divisional reorganisation is similar to accounting for a transfer in the ownership of a subsidiary between companies in the group, as described and illustrated earlier.

- The proposal does not change the **initial** value of the goodwill arising when H purchased A. This goodwill figure is 8 (95 - 87).
- This will now be written off against group reserves as an impairment loss.
- The purchase price for the net assets of B is likely to be different from the carrying value of the assets in B's accounts. There will be a gain for A on the transaction and a loss for B, or a gain for B and a loss for A. These should be eliminated on consolidation.
- The inter- company loan will be eliminated on consolidation.

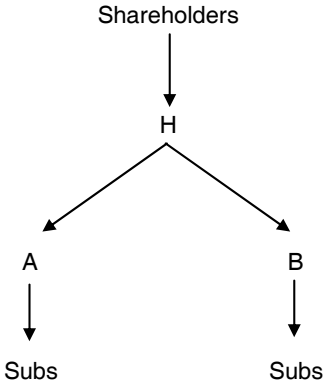
1.5 A demerger

A demerger occurs when a group is split into two or more smaller groups. Each of the new smaller groups is owned by the shareholders of the original larger group.

Demergers are not common, but when they occur, there is often a strong commercial or financial logic for the restructuring.

- The original group may consist of subsidiaries in different industries. A demerger would establish smaller groups, but each operating in an identifiable industry.
- When the original group operates in two or more completely different industries, the market value of the group is often much less than the market value of the two demerged smaller groups. Demergers will therefore often 'unlock value' for shareholders.
- Each separate smaller group is able to pursue its own independent business strategies in the future..

The nature of a demerger is illustrated in the following diagram

<table>
<tr><th>Current structure</th><th>Proposed structure</th></tr>
<tr>
<td>


Company A and its subsidiaries are in the paints and chemicals industry.

Company B and its subsidiaries are in the pharmaceuticals ('drugs') industry.
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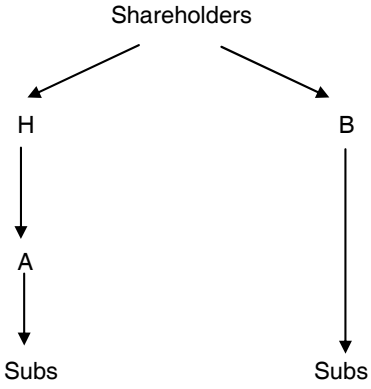

H transfers its interest in B and its subsidiaries to H's shareholders, thus splitting the group into two mini groups.
• H and its subsidiaries can now focus on paints and chemicals.
• B and its subsidiaries focus on pharmaceuticals.
Note that from the shareholders perspective they have the same interest as before as they own both of the mini groups.
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Accounting for a demerger

The accounting treatment in a demerger must recognise that H has in fact given its investment in B to its shareholders so that they are now the legal owner. The shareholders have given nothing in return, so effectively H has made a distribution (or dividend) paid in the form of shares.

To account for the demerger, H must:

- remove the cost of investment from its statement of financial position, and
- charge the equivalent amount as a distribution to the shareholders.

This would be a transaction with the owners of the entity in their capacity as owners; therefore the transaction is recorded directly in equity and reported in the statement of changes in equity.

1.6 Why reorganise/restructure?

There may be various different reasons for any reorganisation or restructuring. In principle, the underlying reason should be to improve the financial and commercial position of the group.

Reasons for a change in ownership of companies within a group

When the ownership of a subsidiary within the group is transferred from one group company to another, there is no impact on the consolidated financial statements (as illustrated earlier). However, the individual accounts of the 'buying' and 'selling' group companies will be affected.

The main reason for such a reorganisation should therefore be to improve the management of operations and improve the performance of the group as a whole.

In the example described earlier, a holding company H sold its shares in a subsidiary B to another subsidiary, A. The effect of doing this is that Entity B will come under the control of Entity A, instead of being directly controlled by H. The commercial logic or reason for doing this may be as follows:

- Entity B has been performing badly
- Entity A has been successful, and its senior management are held in high esteem by the management of H
- Entity B and Entity A operate in similar industries (or the same industry)
- It is therefore decided that the management of Entity B should be brought under the control of the management of entity A, by making B a subsidiary of A.
- This 'management shake-up' might be expected to improve the operating performance of entity B.
- However, there may be impairment of goodwill when the reorganisation occurs, which reduces group reserves in the consolidated statement of financial position and affects the group's reported profit.

Reasons for a divisional restructuring

The reasons for a divisional restructuring may be similar: to improve the management of operations and improve the performance of the group as a whole.

In the example described earlier, one division/subsidiary (Entity B) sold its net assets to another division/subsidiary (Entity A). Entity A therefore takes over the operating assets of B, but Entity B is left as a shell company with some cash. The commercial logic or reason for doing this may be as follows:

- Entity A and Entity B may operate in the same industry, or Entity B may be a supplier to Entity A or a customer of Entity A. Transferring the net assets to Entity B puts the combined operation under the direct control of the management of Entity A.
- Entity B might have been performing badly and Entity A may be performing well. If so, the reorganisation will transfer control over the assets and operations from 'poor managers' to 'successful managers', and the group might expect performance to improve.
- For example, the restructuring should lead to cost savings and higher group profits.
- Trade suppliers to Entity B may take confidence from the fact that they will now be dealing with a more successful group company, and the credit risk may be lower.
- The holding company H might want to keep Entity B in existence as a shell company, so that it can be used at some time in the future to acquire another company or other assets, and so become an operating company again, except in an entirely different area of business.

Example

This example illustrates another form of group restructuring involving a merger.

Entity K was incorporated 30 years ago by James and Sam (who are still the sole shareholders) to import glass from Spain, France and Italy. The company has been very successful. Three wholly-owned subsidiary companies (F, C and P) were set up by Entity K to deal with different areas of operations. Competition in the European Community market is changing, and James and Sam feel that their company should expand into a larger market. For this reason, a merger is proposed with Mool, a company which specialises in importing glass from Northern and Eastern Europe.

A joint meeting was arranged with the directors of both Entity K and Mool to discuss various proposals to change the structure of K and the proposed merger between K and Mool

The proposals are as follows:

- A new holding company, Euroglass, is to be set up by James and Sam for the K group. The ordinary shares in Entity K are to be exchanged on a share for share basis with Euroglass. The same share exchange will be carried out with Mool to effect the merger.

- In addition, P is to become a wholly-owned subsidiary of C. This reorganisation will be effected by the issue of ordinary shares in C.

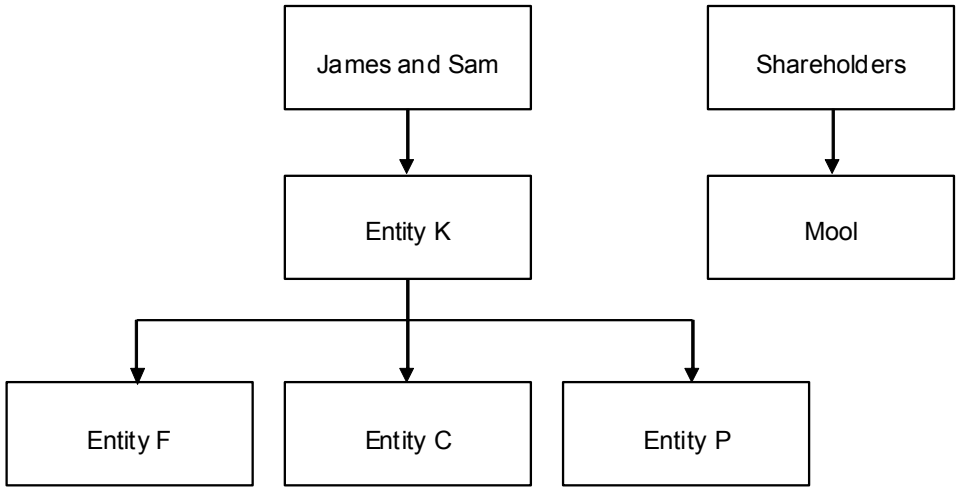
Required

(a) Identify the structure both before and after the proposals, reflecting **all** the relationships contained in the information above.

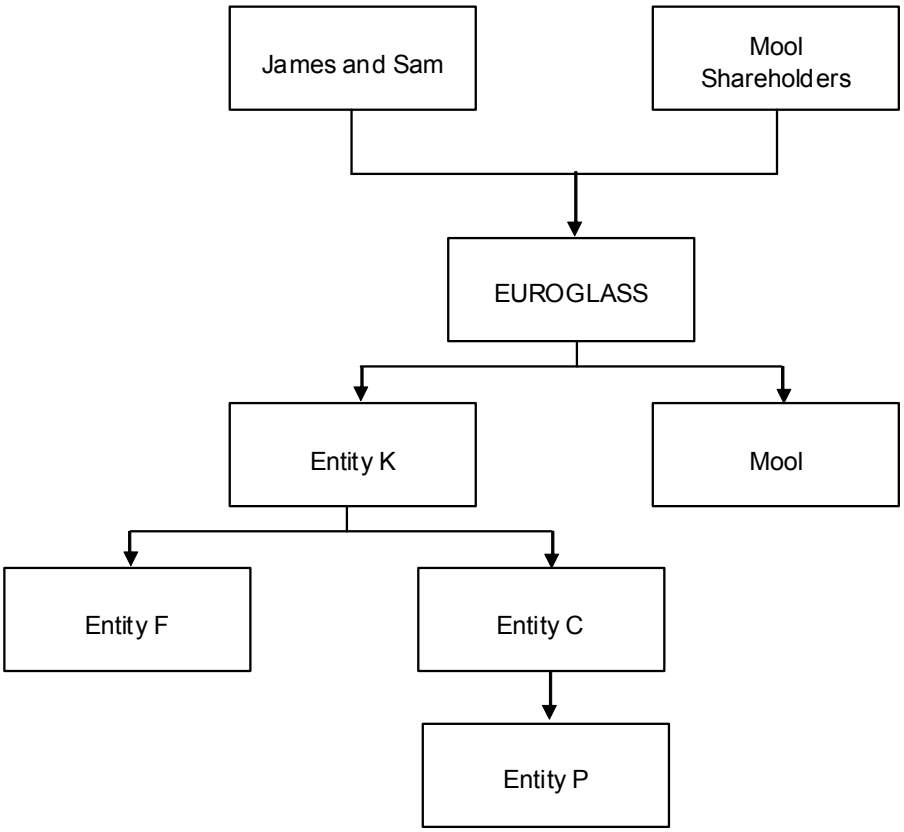
(b) Suggest any possible benefits that may arise from the revised structure.

Answer

Before



After



Benefits from the revised structure

The benefits are mainly strategic in nature:

- The revised/enlarged group has wider geographical coverage within the context of a growing European Community.
- Growth by acquisition is quicker than organic growth.
- The growth is financed by a share issue with no immediate cash requirement.
- The effects of economies of scale and 'synergy' may result in more efficient operations and increased profits.
- The formation of C and P into a sub-group will make any future sale or de-merger easier to effect.

CHAPTER 8

Foreign currency

Contents

IAS 21: The effects of changes in foreign exchange rates

- The scope of IAS 21
- The two main accounting issues
- Terms and definitions used in IAS 21: currency definitions
- Terms and definitions used in IAS 21: other definitions

1 IAS 21: *The effects of changes in foreign exchange rates*

1.1 The scope of IAS 21

Many businesses have transactions and investments that are denominated in a foreign currency.

- **Individual companies** often enter into transactions in a foreign currency. These transactions need to be translated into the company's own currency in order to record them in its ledger accounts. For example:
  - a US company may take out a loan from a French bank in euros and will record the loan in its ledger accounts in US dollars
  - a German company may sell goods to a Japanese company invoiced in yen and will record the sale and the trade receivable in euros in its ledger accounts.
- **Groups often contain overseas entities**. A parent company might own a foreign subsidiary or associate. This foreign entity will normally maintain its accounting records and prepare its financial statements in a currency that is different from the currency of the parent company and the group's consolidated accounts.
  - For example, if a Japanese company has a US subsidiary, the financial statements of the US subsidiary will be prepared in US dollars, but will need to be translated into yen for the purpose of preparing the group's consolidated financial statements.

The rules on accounting for foreign currency items are concerned with translating or converting items from one currency into another currency, at an appropriate rate of exchange between the currencies. The rules are mostly contained in IAS 21 *The effects of changes in foreign exchange rates*. The rules in IAS 21 can be divided into two areas:

- Transactions affecting individual entities. IAS 21 deals with the translation of these transactions when they occur and at subsequent dates when re-translation at a different exchange rate may be necessary.
- Foreign operations (subsidiaries, associates etc) which affect the consolidated financial statements. The rules in IAS 21 explain how to translate the financial statements of the foreign subsidiaries, associates or joint ventures. Once translated, the normal consolidation rules or equity accounting rules will apply.

One area that IAS 21 does not deal with is the translation of any transactions and balances that fall within the scope of IAS 39 on financial instruments. For example, if a company takes out a forward foreign exchange contract to hedge against foreign currency exposure, the accounting treatment is covered by the rules in IAS 39, because a forward contract is a financial instrument.

1.2 The two main accounting issues

Transactions and assets and liabilities in foreign currencies are translated or converted from the foreign currency into the currency of the reporting entity. The process of translation would be quite simple if exchange rates between currencies remained fixed. However, exchange rates are continually changing. The translated valuation of foreign currency assets or liabilities in the statement of financial position might therefore change if they are translated at different times.

The two main accounting issues when accounting for foreign currency items are:

- What exchange rate(s) should be used for translation?
- How to account for the gains or losses that arise when exchange rates change?

Before looking at these accounting rules in detail, it is important to understand the precise meaning of some key terms used in IAS 21.

1.3 Terms and definitions used in IAS 21: currency definitions

IAS 21 identifies three types of currency: the presentation currency, the functional currency and foreign currency.

Currency	Definition
Presentation currency	The currency in which the financial statements of an entity are presented
Functional currency	The currency of the primary economic environment in which an entity operates.
Foreign currency	A currency other than the functional currency of the entity

Presentation currency

An entity is permitted to present its financial statements in any currency. This reporting currency is often the same as the functional currency, but does not have to be.

Functional currency

When a reporting entity prepares its financial statements, it must identify its functional currency and prepare its financial statements in that currency. This rule applies to stand-alone entities, parent companies and foreign operations (such as a foreign subsidiary or a branch). When financial statements prepared in a functional

currency are translated into a different reporting currency, the translation of assets and liabilities must comply with the rules in IAS 21.

IAS 21 describes the functional currency as:

- The currency that mainly influences:
  - sales prices for goods and services
  - labour, material and other costs of providing goods or services.
- The currency in which funds are generated by issuing debt and equity
- The currency in which receipts from operating activities are usually retained.

The functional currency is not necessarily the currency of the country in which the entity operates or is based, as the next example shows.

Example

P is a UK-registered mining company whose shares are traded on the London Stock Exchange. Its operating activities take place in the gold and diamond mines of South Africa.

(a) What is the presentation currency of P?

(b) What is its functional currency?

(c) P bought specialised mining equipment from the US, invoiced in US dollars. What type of currency is the US dollar, using the IAS 21 definitions?

Answer

(a) The reporting currency (presentation currency) is sterling (UK pounds). This is a requirement of the UK financial markets regulator for UK listed companies.

(b) The functional currency is likely to be South African rands, even though the company is based in the UK. This is because its operating activities take place in South Africa and so the company will be economically dependent on the rand if the salaries of most of its employees, and most operating expenses and sales are in rands.

(c) The US dollars are 'foreign currency' for the purpose of preparing P's accounts.

IAS 21 requires P to prepare its financial statements in its functional currency (rands).

However, P is permitted to use sterling as its presentation currency. If it does use sterling as its presentation currency (which it will do, given the UK rules), the translation of assets and liabilities from rands to sterling must comply with the rules in IAS 21.

1.4 Terms and definitions used in IAS 21: other definitions

Exchange rate definitions

IAS 21 uses the following terms to describe which exchange rate should be used in the translation.

Term	Definition
Exchange rate	The rate of exchange between two currencies
Spot rate	The exchange rate at the date of the transaction
Closing rate	The spot exchange rate at the end of the reporting period

For example, suppose that on 16 November a German company buys goods from a US supplier, and the goods are priced in US dollars. The financial year of the company ends on 31 December, and at this date the goods have not yet been paid for.

- The spot rate is the euro/dollar exchange rate on 16 November, when the transaction occurred.
- The closing rate is the exchange rate at 31 December.

Other definitions

IAS 21 also includes some other terms and definitions.

Term	Definition
Foreign operation	This is a subsidiary, associate, joint venture or branch whose activities are conducted in a country or currency different from the functional currency of the reporting entity.
Net investment in a foreign operation	The amount of the reporting entity's interest in the net assets of a foreign operation.
Exchange difference	A difference resulting from translating the same assets, liabilities, income or expenses from one currency into another currency at different exchange rates. For example, if net assets of £200,000 are translated into US dollars, first at a rate of $1.75 = £1 and subsequently at a rate of $1.90 = £1, the exchange difference is the difference between the valuation at the two different rates.
Monetary items	Units of currency held, or assets and liabilities to be received or paid (in cash), in a fixed number of currency units. Examples of monetary items include cash itself, loans, trade payables, trade receivables and interest payable.

Non-monetary items are not defined by IAS 21, but they are items that are not monetary items. They include tangible non-current assets, investments in other companies, investment properties and deferred taxation (which is a notional amount of tax rather than an actual amount of tax payable.)

The individual entity: accounting rules

- Initial recognition: translation of transactions
- Reporting at the end of each reporting period
- Gain or loss arising on translation
- Reporting at the settlement of a transaction

2 The individual entity: accounting rules

An individual company may have transactions that are denominated in a foreign currency. These must be translated into the company's functional currency for the purpose of recording the transactions in its ledger accounts and preparing its financial statements.

These transactions may have to be translated on several occasions. When a transaction or asset or liability is translated on more than one occasion, it is:

- translated at the time that it is originally recognised, and
- re-translated at each subsequent occasion.

Re-translation may be required, after the transaction has been recognised initially:

- at the end of a financial year (end of a reporting period)
- when the transaction is settled, which may be either before or after the end of the financial year.

On each subsequent re-translation, an exchange difference will occur. This gives rise to a gain or loss on translation from the exchange difference.

2.1 Initial recognition: translation of transactions

On initial recognition, a transaction in a foreign currency must be translated at the **spot rate** on the date of the transaction.

If the company purchases goods on most days in the foreign currency, it might be administratively difficult to record every transaction at the actual spot rate. For practical reasons, IAS 21 therefore allows entities to use an **average rate** for a time period, provided that the exchange rate does not fluctuate significantly over the period. For example, an entity might use an average exchange rate for a week or a month for translating all the foreign currency-denominated transactions in that time period.

These rules apply when an entity:

- buys goods or services that will be paid for in another currency
- sells goods or services invoiced in another currency
- borrows or lends when the interest payments and repayments of principal are in another currency

- purchases or disposes of non-current assets in another currency, or
- receives dividends and other payments in another currency.

Example

A UK company has a financial year ending on 31 December. It buys goods from a supplier in France on 17 November 20X6 invoiced in euros €140,000. The French supplier is eventually paid in March 20X7.

Exchange rates over the period were as follows:

- 17 November 20X1 €1 = £0.70
- 31 December 20X1 €1 = £0.75
- Average for November €1 = £0.72

The purchase/inventory and the trade payable should be recorded initially by translating the transaction at the spot rate of €1 = £0.70. This gives a translated value of £98,000 for recording in the ledger accounts (€140,000 × 0.70).

For practical purposes, if the entity buys items in euros frequently, it may be able to use an average spot rate for a period, for all transactions during that period.

2.2 Reporting at the end of each reporting period

Transactions in a foreign currency

Transactions in a foreign currency may still 'exist' in the statement of financial position at the end of the financial period. They were recognised initially in the accounts at the spot rate on the date of the transaction. However exchange rates change over time and the exchange rate at the end of the reporting period will not be the same as the spot rate on the date of the transaction.

For example, there may be a trade receivable in the statement of financial position relating to a sale denominated in a foreign currency. The trade receivable would have been translated at the spot exchange rate on the transaction date. It is still a receivable in a foreign currency at the end of the reporting period.

An important accounting question is therefore: Should a different exchange rate now be used now to translate the asset into the functional currency of the entity, for the purpose of preparing the financial statements for the year?

Revaluations of non-current assets

A non-current asset in a foreign currency might be re-valued during a financial period. For example, a UK company might own an office property in the US. The cost of the office would have been translated at the spot rate when the property was originally purchased. However, it might subsequently be re-valued. The revaluation will almost certainly be in US dollars, and this re-valued amount will have to be translated into the functional currency of the entity (in this example, sterling).

- What exchange rate should be used to record the revaluation?
- What exchange rate should be used at the end of the reporting period, and at the end of any subsequent reporting period?

The rules

The rules in IAS 21 for reporting assets and liabilities at the end of a subsequent reporting period make a distinction between:

- monetary items, such as trade payables and trade receivables, and
- non-monetary items, such as non-current assets and inventory.

The rules are as follows, for entities preparing their individual financial statements:

Asset or liability	**Accounting treatment for the statement of financial position:**
Monetary items	Re-translate at the closing rate.
Non-monetary items carried at cost	No re-translation. The transaction is left at the original spot rate.
Non-monetary items carried at fair value	Re-translate at the exchange rate ruling at the date of the fair value adjustment.

2.3 Gain or loss arising on translation

Any subsequent re-translation after the initial recognition of a transaction will give rise to an exchange gain or loss if the exchange rate has changed since the initial transaction date.

The gain or loss is the difference between the original and re-translated value of the item.

- There is an exchange **gain** when an asset increases in value on re-translation, or when a liability falls in value.
- There is an exchange **loss** when an asset falls in value on re-translation, or when a liability increases in value.

A gain or loss arising on the re-translation of a monetary item should be recognised in profit or loss in the period that it arises.

When a gain or loss on a non-monetary item is recognised in other comprehensive income, any exchange rate gain or loss relating to it should also be included in other comprehensive income. For example when a gain or loss on revaluation of a non-current asset is reported as a gain in other comprehensive income, the related exchange difference is also recognised in other comprehensive income rather than in profit or loss for the period.

Example

A UK company borrowed US$900,000 on 3 June when the spot rate was $1.80 = £1. At 31 December the exchange rate was $1.90 = £1. An interest payment of $18,500 was made on 3 December when the spot exchange rate was $1.85. The loan is a monetary item, denominated in US dollars.

- The loan is recognised initially as £500,000 ($900,000/1.80).
- On 31 December, the loan is re-translated as £494,949 ($900,000/1.90). There is an exchange difference on retranslation of £5,151 (£500,000 – £494,949). As the liability has fallen in value, this represents an exchange gain. The loan is a monetary item; therefore the gain will be reported in profit or loss for the year.
- The interest payment of $18,500 is recognised at £10,000 ($18,500/1.85). This item is translated at the spot rate on the date of the transaction.

Example

A UK company bought a machine from a German supplier for €260,000 on 1 March when the exchange rate was €1.30 = £1. By 31 December, the end of the company's accounting year, the exchange rate was €1.20 = £1.

At 31 December, the UK company had not yet paid the German supplier any of the money that it owed for the machine.

At the year end

The machine is recognised initially at £200,000 (€260,000/1.30). As it is a non-monetary item, it will not be re-translated and there is no gain or loss.

However, the company purchased the machine on credit and had not settled the account payable by the year-end. The amount payable should be re-translated at the closing rate, because this is a monetary item. The payable would therefore be re-translated to £216,667 (= €260,000/1.20).

The re-translation will give rise to an exchange difference. In this example the re-translated amount of the liability is higher, and a loss of $16,667 should be reported in profit or loss for the year.

2.4 Reporting at the settlement of a transaction

The settlement of a foreign currency transaction involves a receipt or payment in foreign currency. Settlement in the foreign currency is made at the spot exchange rate that applies on that date. (Note: This chapter ignores the possibility of using a forward exchange contract to fix the exchange rate in advance: the accounting effects of forward contracts are explained in another chapter.)

The exchange rate at the settlement date may be:

- different from the spot rate on the date of the original transaction, and
- different from the closing exchange rate at the end of the previous reporting period (if there is a year-end between the original transaction and settlement).

A gain or loss on translation may therefore occur:

- at the end of a reporting period and in addition
- at settlement of the transaction.

For example, suppose that a UK company buys goods, payable in US dollars, from a US supplier on 10 December Year 1. Its year end is 31 December, and the company pays the supplier on 9 February Year 2.

In this situation:

- The purchase transaction will be recorded in sterling at the spot rate on 10 December Year 1.
- The trade payable will also be recorded in sterling at the spot rate on 10 December Year 1.
- The trade payable will be re-translated on 31 December at the year-end, because it is a monetary item. A gain or loss will arise on the re-translation, and this will be recognised in profit or loss for the year ending 31 December Year 1.
- The US supplier is paid on 9 February, and the cost of obtaining the dollars to make the payment will be the exchange rate available on 9 February, the settlement date.

If the cost of the settlement is different from the amount at which the transaction is recorded in the ledger accounts (the amount at which the payable was re-translated on 31 December Year 1), a further gain or loss will arise. This is the difference between the translated value of the liability in the ledger accounts and the actual cost of making the settlement. This settlement gain or loss should be included in profit or loss for the year ended 31 December Year 2.

Example

A UK company sells goods to a customer in Saudi Arabia for $72,000 on 12 September, when the exchange rate was $1.80 = £1. It received payment on 19 November, when the exchange rate was $2 = £1. The financial year-end is 31 December.

- The sale will be initially translated at the spot rate. This will give rise to revenue and receivables of £40,000 ($72,000/1.80).
- The receipt of the payment is recorded at £36,000 ($72,000/2.00).
- The receivable has fallen in value over the two months: it was initially recorded at £40,000 but at settlement it is only worth £36,000. The company has an exchange loss on settlement of £4,000. This is recognised in profit or loss for the year.

Example

A UK company buys goods from a US supplier for $30,000 on 30 November Year 1 when the spot exchange rate was $1.50. The company has a financial year that ends on 31 December. At 31 December Year 1, the exchange rate is $1.80 = £1. The payment for the goods is made on 16 March Year 2, when the exchange rate was $1.60 = £1.

- The transaction is recorded initially at £20,000 ($30,000/1.50).

  Debit Purchases £20,000

  Credit: Trade payables £20,000.

- If the purchased inventory is still held at the end of the reporting period on 31 December Year 1, it is not re-translated because inventory is a non-monetary item.
- However, the amount payable at 31 December Year 1 is re-translated to the closing rate, giving a revised balance of £16,667 ($30,000/1.80).
- The re-translated amount of the liability is lower; so there is a gain on the re-translation of £3,333. This gain is included in profit or loss for Year 1.

  Debit: Trade payables £3,333

  Credit: Profit or loss £3,333.

- The payment on 16 March Year 2 is recorded at the exchange rate on settlement date. The payment is therefore £18,750 ($30,000/1.60).

  Debit: Trade payables £16,667

  Credit: Cash £18,750

- There is a loss on settlement of £2,083 (£18,750 – £16,667), arising from the exchange difference between translating the foreign currency amount at the end of the previous reporting period and at the settlement date. This gain or loss from the exchange difference is included in profit or loss for Year 2.

The foreign operation: accounting rules

- Three stages in the consolidation process
- The translation stage
- The consolidation stage
- Consolidation example

3 The foreign operation: accounting rules

3.1 Three stages in the consolidation process

If a company has a foreign operation (such as a foreign subsidiary) that prepares its accounts in a functional currency that is different from the group's presentation currency, there are three stages in the accounting process, for the purpose of preparing consolidated financial statements (or including the foreign associate or joint venture in the financial statements of the reporting entity).

Stage	Description
Adjust and update	▪ Ensure that the individual financial statements of the foreign entity is correct and up-to-date. ▪ If any adjustments are required to correct the financial statements of th eforeign entity, these should be made in the statements of the foreign entity and in its own functional currency.
Translate	▪ The assets and liabilities of the foreign entity should be translated into the presentation currency of the parent company. (As explained earlier, the presentation currency of the parent company might be the same or might be different from its functional currency.) ▪ The rules for translation are explained below.
Consolidate	▪ After translation, all the financial statements are now in the same currency. ▪ Normal group accounting principles are now used to prepare the consolidated accounts of the group.

3.2 The translation stage

The rules set out below apply where the functional currency of the foreign entity is not a currency suffering from hyperinflation. (Hyperinflation is where the country's rate of inflation is very high. When there is hyperinflation, IAS 29 provides special accounting rules, which are described later.)

The normal rules for translation, contained in IAS 21, are as follows:

(1) **The statement of financial position**

- The assets and liabilities of the foreign operation, for inclusion in the consolidated statement of financial position, are translated at the **closing rate**. (Comparative figures for the previous year are translated at the same rate.)
- For foreign subsidiaries, this rule also applies to **purchased goodwill** arising on the acquisition of the subsidiary.

(2) **The statement of comprehensive income or income statement**

- Income and expenses for inclusion in the consolidated statement of comprehensive income or consolidated income statement are translated at the **spot rates** at the dates of each of the transactions.
- For practical reasons, **average rates** for a period may be used, if they provide a reasonable approximation of the spot rates when the transactions took place.

(3) **Exchange differences**

- All resulting exchange differences are recognised in other comprehensive income for the period and are credited (gain) or debited (loss) to a **separate reserve** within the equity section of the consolidated statement of financial position, and this reserve is maintained within equity until the foreign operation is eventually disposed of.
- Gains or losses are therefore reported as gains or losses in other comprehensive income and movements in the separate reserve, and not as a gain or loss in profit or loss and an increase or reduction in retained earnings.

The gain or loss on translation

The exchange differences on translation (see (3) above) result in a gain or loss. These gains or losses arise from a combination of two factors:

- Income and expense items are translated at the exchange rates ruling during the period, but assets and liabilities are translated at closing rates. The profit is therefore calculated at the actual exchange rates, but the accumulated profit in the consolidated statement of financial position is re-translated at the closing rate.
- The net assets of the subsidiary were translated at last year's closing rate at the end of the previous financial year. These net assets have now been retranslated and included in this year's statement of financial position at this year's closing rate.

IAS 21 states that these differences on translation are not recognised in profit or loss because changes in the exchange rates for these items have little or no effect on cash flows from operations. It would therefore be misleading to include them in profit or loss.

Example

A UK parent company has a US subsidiary, which is 100% owned. The following information is available about the subsidiary for the year to 31 December Year 5:

Opening net assets, 1 January	$20,000
Profit for the year	$10,000
Closing net assets, 31 December	$30,000

Dividends paid	$0

Relevant $/£ exchange rates are as follows:

1 January Year 5	$1.70 = £1
Average for the year	$1.80 = £1
31 December Year 5	$1.90 = £1

Required

Calculate the total gain or loss on translation for the year, analysing it between:

- the gain or loss on re-translating income and expenses
- the gain or loss on re-translating the opening net assets.

Answer

The entire profit for the year is included in accumulated profit at the end of the year, because no dividends were paid during the year.

Exchange difference: gain or (loss)		
On re-translating the opening net assets:	£	£
$20,000 at opening rate 1.70	11,765	
$20,000 at closing rate 1.90	10,526	
		(1,239)
On re-translating the profit for the year:		
$10,000 at average rate 1.80	5,556	
$10,000 at closing rate 1.90	5,263	
		(293)
Exchange loss arising		(1,532)

The exchange loss should be recognised in other comprehensive income for the year and taken to a separate reserve within equity in the consolidated statement of financial position.

3.3 The consolidation stage

After the translation stage, the financial statements of the overseas entity are in the presentation currency of the parent company.

The basic rule is that normal consolidation techniques can now be used. However, a foreign exchange reserve must be included in the consolidated statement of financial position for the cumulative exchange differences.

It is also necessary to comply with the requirements of IAS 21 for purchased goodwill and foreign subsidiaries.

Purchased goodwill and foreign subsidiaries

IAS 21 requires that goodwill and any fair value adjustments arising on the acquisition of a foreign subsidiary are to be treated as part of the assets and liabilities of the foreign subsidiary. The rules already described apply to these items.

This means that:

- Goodwill arising on the purchase of the foreign subsidiary (and also any fair value adjustments to the value of assets of the subsidiary) should be stated in the functional currency of the foreign subsidiary.
- The goodwill and fair value adjustments will therefore be translated each year at the **closing exchange rate**.

A gain or loss on translation will therefore arise (as described above for other assets and liabilities).

The effect of this rule is that goodwill and the acquisition of a foreign operation is re-stated over time because it is re-translated every year at the new closing exchange rate.

The rationale behind this accounting rule is that the amount paid for the investment in the subsidiary has been based on the expected future earnings stream. The goodwill relates to a business which operates in the economic environment of another country and should therefore be expressed in the functional currency of the foreign subsidiary.

Example

A UK holding company acquired 100% of the capital of a US subsidiary on 30 September Year 6 at a cost of $8 million. The fair value of the net assets of the subsidiary at that date was $3 million.

The holding company prepares financial statements at 31 December each year. The company uses the partial goodwill method to account for non-controlling interests, and no goodwill is attributed to NCI.

Relevant $/£ exchange rates are as follows:

- 30 September Year 6 $2.00 = £1
- 31 December Year 6 $1.90 = £1

Required

(a) Calculate the goodwill arising at the date of the acquisition, in £.

(b) Calculate the goodwill (in £) which will appear in the consolidated statement of financial position as at 31 December Year 6.

Answer

(a) Goodwill arising on acquisition

All elements of the calculation are initially translated at the spot rate of 2.00

	$	Rate	£
Cost of investment	8m	2.00	4.0m
Minus: Net assets acquired	3m	2.00	1.5m
Goodwill	5m	2.00	2.5m

(b) Goodwill at 31 December Year 6

The goodwill must be re-translated to the closing rate of 1.90 The goodwill is therefore re-valued to £2.632 million (= $5m / 1.90).

- An exchange gain of £0.132m (2.632m – 2.5m) has arisen on re-translation.
- This exchange gain is recognised in other comprehensive income and credited to the foreign exchange reserve within equity in the consolidated statement of financial position.

3.4 Consolidation example

The following example looks at the whole process of foreign currency consolidation, beginning with the translation of the foreign subsidiary's accounts and finishing with their consolidation into the parent group accounts.

Example

AB owns 75% of JK which is located in a different country. The currency of this country is the Florin (Fl). AB acquired its shares in JK on 1 May Year 6 for 240 million Florins when the retained earnings of JK were 160 million Florins. Their statements of financial position are shown below:

Statements of financial position at 30 April Year 7:

	AB	JK
	$m	Fl m
Tangible non-current assets	594	292
Investment in JK	48	-
Current assets	768	204
	1,410	496
Share capital	120	64
Share premium	100	40
Retained earnings	720	190
	940	294
Non-current liabilties	60	82
Current liabilities	410	120
	1,410	496

Notes:

(i) The fair value of JK's net assets at acquisition is the same as their carrying value.

(ii) JK operates with autonomy in its business operations.

(iii) AB uses the **partial goodwill method** to account for non-controlling interests, and NCI does not include an amount for goodwill.

(iv) The following exchange rates are relevant:

1 May Year 6	Fl 5.0 = $1
Average for the year	Fl 4.0 = $1
30 April Year 7	Fl 4.2 = $1

Prepare a consolidated statement of financial position at 30 April Year 7

Answer

There are a number of steps that need to be followed in consolidating a foreign currency operation.

Step 1
Deal with any adjustments to the accounts of the subsidiary and parent, e.g. inter-company trading transactions and inter-company loans. Apply the normal rules for dealing with these.

Step 2

When the financial statements of the subsidiary have been updated and adjusted as necessary, translate the subsidiary's accounts into the reporting currency (in this example translate from Florins into $).

Step 3

Calculate goodwill, consolidated reserves and non-controlling interest (the usual rules for preparing a consolidated statement of financial position apply).

Step 4

Consolidate the parent with the translated accounts of the subsidiary.

Answer

There are no adjustments to make in Step 1 so we can go straight to the translation in Step 2.

Step 2
The subsidiary's statement of financial position is translated at the closing rate.

JK Statement of financial position	Florins (m)	Exchange rate	$m
Non current assets			
Tangible assets	292	4.2	69.5
Current assets	204	4.2	48.5
	496		118.0
Share capital	64	4.2	15.2
Share premium	40	4.2	9.5
Retained earnings at acquisition	160	4.2	38.1
Net assets at acquisition	264		62.8
Reserves – post acquisition	30	4.2	7.1
	294		69.9
Non-current liabilties	82	4.2	19.5
Current liabilities	120	4.2	28.6
	496		118.0

Step 3

Workings for consolidation

1. Goodwill:

Goodwill must be calculated and included in the consolidated statement of financial position at the closing rate.

	Florins (m)	Rate	$m
Cost of investment	240	4.2	57.1
Less parent's share of net assets acquired			
75% × 264 million Florins	(198)	4.2	(47.1)
Goodwill at closing rate	42	4.2	10.0

We also have to deal with the exchange gain or loss on the parent's cost of investment.

In the goodwill calculation above, the cost of investment is translated at the closing rate. When JK was purchased, AB recorded the cost of investment at the rate at that date. The gain or loss on re-translation to the closing rate will be recognised in other comprehensive income and recorded in the reserves attributable to the parent entity.

	$m
Cost of investment at historical rate: 240 /5.0	48.0
Cost of investment at closing rate: 240 /4.2	57.1
Exchange gain	9.1

2. Non-controlling interest

In $m, NCI = 25% × 69.9 = 17.5

3. Consolidated reserves attributable to owners of AB

	$m
AB	720.0
JK: share of post acquisition profits: 75% × 7.1	5.3
Exchange gain (see above)	9.1
	734.4

AB

Consolidated statement of financial position as at 31 May Year 7

	$m
Non current assets	
Tangible assets (594 + 69.5)	663.5
Intangible assets: goodwill	10.0
Current assets (768 + 48.5)	816.5
Total assets	1,490.0
Equity and liabilities	
Equity attributable to owners of AB	
Share capital	120.0
Share premium	100.0
Retained earnings	734.4
	954.4
Non-controlling interests	17.5
Total equity	971.9
Non current liabilties (60 + 19.5)	79.5
Current liabilities (410 + 28.6)	438.6
	1,490.0

3.5 Exchange differences in other comprehensive income

Using the method of creating the consolidated statement of financial position shown in the previous example, you do not need to worry about exchange differences. By translating every balance in the subsidiary's statement of financial position at the closing rate, the exchange differences are automatically included in reserves.

However, you may be asked to calculate exchange differences arising for reporting in other comprehensive income and a separate equity reserve.

The easiest way to work out the exchange differences (excluding the gain or loss on re-translation of goodwill) is to create the accounting equation for the foreign subsidiary in its own currency. Once this is translated into the parent's currency it will not balance, and the exchange differences are the balancing figure. These are the exchange differences arising from:

- re-translating the opening net assets of the subsidiary at the closing rate, and
- re-translating the subsidiary's post-acquisition profit at the closing rate.

An example will be used to demonstrate the calculation.

Example

The same example that was used above will be used here, with the exception that the acquisition occurred one day earlier, at the end of the previous financial year.

AB owns 75% of JK which is located in a different country. The currency of this country is the Florin (Fl). AB acquired its shares in JK on 30 April Year 6 for 240 million Florins when the retained earnings of JK were 160 million Florins. The statement of financial position of JK as at 30 April Year 7 is shown below:

JK: Statement of financial position at 30 April Year 7:	
	Fl m
Tangible non-current assets	292
Current assets	204
	496
Share capital	64
Share premium	40
Retained earnings	190
	294
Non-current liabilties	82
Current liabilities	120
	496

Notes:

(1) AB uses the **partial goodwill method** to account for non-controlling interests, and NCI does not include an amount for goodwill.

(2) JK did not pay any dividends during the year.

(3) The following exchange rates are relevant:

30 April Year 6	Fl 5.0 = $1
Average for the year	Fl 4.0 = $1
30 April Year 7	Fl 4.2 = $1

At 30 April Year 6, the consolidated financial position of the AB Group would include the following items:

	Florins m	Exchange rate	$m
Cost of investment	240		
Parent's share of net assets of JK	198		
75% × (64 + 40 + 160) m			
Goodwill	42.0	5.0	8.4
Net assets of JK: (64 + 40 + 160) m	264.0	5.0	52.8
Non-controlling interests: 25% × 264m	66.0	5.0	13.2

During the year to 30 April Year 7, the post-acquisition profit of JK is 30 million Florins (= $190 million - $160 million) retained reserves.

The consolidated profit for the year is reported as $7.5 million (= $30 million at average rate 4.0). 75% of this is attributable to the parent company and 25% to the NCI.

	Florins (m)	Exchange rate	$m
Opening net assets of JK	264.0	5.0	52.8
Profit for the year	30.0	4.0	7.5
			60.3
Closing net assets	294.0	4.2	70.0
Exchange gain			9.7

This total exchange gain is 75% attributable to the parent entity ($7.3 million) and 25% to NCI ($2.4 million).

There is also an exchange gain or loss on the re-translation of goodwill (100% attributable to the parent).

	Florins (m)	Exchange rate	$m
Opening goodwill	42.0	5.0	8.4
Closing goodwill (no impairment)	42.0	4.2	10.0
Exchange gain			1.6

The change in the consolidated statement of financial position between 30 April Year 6 and 30 April Year 7 arising from the consolidation of JK's financial statements can be summarised as follows.

	Florins (m)	Exchange rate	$m
Goodwill	42.0	4.2	10.0
Closing net assets of JK	294.0	4.2	70.0
			80.0
Equity attributable to owners of AB			
Share of JK profit (75%)	22.5	4.0	5.6
Exchange gain on revaluation of goodwill			1.6
Other exchange gains (75% × 9.7)			7.3
Increase in reserves attributable to parent			14.5
Non-controlling interest (25% × 70)			17.5
			32.0

The difference between the net assets side and the equity side is $48 million, the cost of the investment of AB in JK.

The total exchange gain attributable to the owners of the parent entity is $8.9 million (1.6 + 7.3). This should be recognised in other comprehensive income for the year and credited to a separate reserve in equity.

The closing balance of NCI is $17.5 million, which is the opening balance for NCI (= $13.2 million) plus the NCI share of the recognised profit of JK for the year ($1.9 million, = 25% × $7.5 million) plus a 25% share of the exchange gains recognised in other comprehensive income, excluding the gain on goodwill (= 25% × $9.7 million) = $2.4 million).

	$m
Opening balance, NCI	13.2
Share of recognised profit for the year	1.9
Share of other comprehensive income	2.4
Closing balance, NCI	17.5

3.6 Disposal of a foreign subsidiary

Most of the accounting rules for the disposal of a foreign subsidiary, or for the partial disposal of a foreign subsidiary, are set out in IAS 27 (revised). Disposals are explained in another chapter.

However IAS 27 does not deal with the accounting treatment of the balance on the separate equity reserve account when a foreign subsidiary is disposed of. This matter is dealt with by IAS 21.

- When the entire investment in a foreign subsidiary is disposed of, the cumulative balance in the separate equity reserve (which represents amounts

previously recognised in other comprehensive income) should now be reclassified from equity to profit and loss.

- If there was a non-controlling interest in the subsidiary, the NCI is derecognised in the consolidated statement of financial position. Amounts previously recognised in other comprehensive income and attributed to NCI must not be reclassified and recognised in profit or loss of the reporting entity.
- When a proportion of an investment in a foreign subsidiary is disposed of, a proportionate share of the amounts previously recognised in other comprehensive income (the cumulative balance in the separate equity reserve) should now be reclassified from equity to profit or loss.

When income previously recognised as other comprehensive income is reclassified as a gain or loss to profit or loss as a re-classification adjustment, there must be an offsetting loss or gain in other comprehensive income, to avoid double-counting of the gain (or loss).

Example

A company held 100% of the equity of a subsidiary S, but sold the entire investment on 1 June when the carrying value of the net assets S and the purchased goodwill were $30 million. The consideration received from selling the shares was $37 million.

The company had previously recognised exchange gains of $2 million in other comprehensive income on its investment in S.

For the financial period when the disposal occurs, the company should recognise $9 million in profit or loss:

	$m
Consideration received from sale of shares	37.0
Carrying value of net assets of S	30.0
Gain	7.0
Exchange gain previously recognised in other comprehensive income (reclassification adjustment)	2.0
Total gain recognised in profit or loss	9.0

In other comprehensive income, negative income of $2 million should be recognised, to avoid double counting of the income previously recognised as other comprehensive income but now reclassified in profit or loss.

IAS 29: Hyperinflation

- The problem
- The treatment
- IFRIC Interpretation 7: Applying the Restatement Approach under IAS 29, Financial Reporting in Hyperinflationary Economies
- The future

4 IAS 29: *Hyperinflation*

4.1 The problem

When a country suffers from hyperinflation (a very high rate inflation), financial reporting in the local currency is not useful when normal accounting rules are applied. This is because the reported results for the year and financial position at the year-end will be misleading, due to significant changes in the real values of assets and liabilities over time.

IAS 29 deals with the translation of foreign currency items where the functional currency of an entity is the currency of a hyperinflationary economy. It requires a different approach to preparing financial statements when there is hyperinflation

Deciding whether or not hyperinflation exists is a matter of judgement, because IAS29 does not specify a rate of inflation above which hyperinflation exists and below which it does not exist.

Instead IAS29 suggests that hyperinflation normally occurs when any of the following conditions apply:

- The general population prefers to keep its wealth in non-current assets or in a stable currency.
- Goods and services are priced in terms of a stable currency rather than in the local currency.
- Sales and purchases on credit take place at prices that compensate for the expected inflationary effect.
- Interest rates, wages and prices are linked to a price index.
- The cumulative inflation rate over three year is approaching, or exceeds, 100%.

4.2 The treatment

In principle there are two possible treatments that could be used to eliminate the hyperinflationary effects.

- Possible method 1. Maintain the accounts in a stable currency as the functional currency
- Possible method 2. Re-state the financial statements using a price index

IAS 29 does not permit the use of the first method, as companies may select a stable currency of their choice and so there is potential for the financial statements to be 'manipulated'. IAS 21 is very clear that the functional currency is not one of choice, but the currency that the entity is most economically dependent on. Therefore it cannot be changed to overcome the problem of financial reporting when there is hyperinflation.

Therefore, the required treatment is method 2. When an entity is a foreign subsidiary in a country with hyperinflation, it is necessary to adjust the financial statements of the foreign entity to reflect current price levels at the end of the financial period end (as at the end of the reporting period). This adjustment takes place before translating the financial statements into the presentation currency of the group.

4.3 IFRIC Interpretation 7: Applying the Restatement Approach under IAS 29, Financial Reporting in Hyperinflationary Economies

IFRIC 7 contains guidance on an entity preparing financial statements under IAS 29 for the first time. When the entity operates in an economy where the functional currency becomes hyperinflationary, IAS 29 must be applied as if the economy had always been hyperinflationary. The restatement of non-monetary items measured at historical cost is shown in the opening statement of financial position of the earliest period presented in the financial statements. The restatement occurs from the date the assets were acquired and the liabilities incurred.

Deferred tax is restated in the opening statement of financial position and is measured after restating the carrying amounts of non-current assets.

4.4 The future

Recognising hyperinflation is extremely difficult in practice, and IAS 29 is only able to provide limited guidance. If the entity's financial statements are to be re-stated using a price index, the chosen index might be manipulated by the government and so using the index might give unreliable results.

IAS 29 has therefore been referred for a review and update to the standard-setting body in Argentina, a country that has had experience in the past with hyperinflation.

CHAPTER 9

Statements of cash flows

Contents

IAS 7 and statements of cash flows: revision

- The purpose of statements of cash flows
- The basic format of a statement of cash flows
- Cash flows from operating activities
- Cash flows from operating activities: the direct method
- Cash flows from operating activities: the indirect method
- Cash flows from investing activities
- Cash flows from financing activities
- Cash and cash equivalents

1 IAS 7 and statements of cash flows: revision

1.1 The purpose of statements of cash flows

IAS 7 *Statements of cash flows* requires an entity to prepare a statement of cash flows and to present it as a key financial statement.

Information relating to cash flows helps users of financial statements to assess:

- the ability of the entity to generate cash (and cash equivalents), and
- the needs of the entity for cash.

A statement of cash flows allows users of the financial statements to evaluate (1) the ability of the entity to generate cash flows and (2) the timing and certainty of those cash flows. This may influence the economic decisions taken by users.

A statement of cash flows is therefore required because it provides useful information that other financial statements do not provide. The purpose of the primary financial statements can be compared as follows:

Financial statement	Information provided
■ Statement of financial position	■ Financial position at the reporting date
■ Statement of comprehensive income	■ Financial performance in the period
■ Statement of changes in equity	■ Changes in components of equity in the period
■ Statement of cash flows	■ Liquidity: Generation of cash and use of cash (and cash equivalents) ■ Viability: Ability to survive ■ Adaptability: Ability to respond to change

The statement of cash flows provides information on the liquidity, viability and adaptability of the entity, which is not provided by the other financial statements.
A company might have high net assets and large profits, but these are not a guarantee of financial viability. If the entity makes sales on credit, but later cannot collect the amounts receivable that it is owed by customers, it may not have cash to spend on replacing the inventory it has sold, in order to make further sales.

Cash is the lifeblood of a business; the statement of cash flows therefore plays an important role in understanding the financial position of an entity.

1.2 The basic format of a statement of cash flows

You should already be familiar with the preparation of statements of cash flows for individual entities, from your earlier studies (although you might have called them 'cash flow statements' at the time). The basic rules are revised briefly here.

IAS 7 does not specify a required format for a statement of cash flows. However, it provides illustrative formats. It also states that cash flows should be presented under three headings:

- cash flows from operating activities
- cash flows from investing activities
- cash flows from financing activities.

Cash flows are itemised under each of these three headings, and the total cash flow is also shown for each heading. Together, they explain the total increase or decrease in cash and cash equivalents during the financial period.

Statements of cash flows, as their name indicates, report cash flows that have occurred during the period. Non-cash transactions are excluded. For example, if a company re-values an item of property or makes a bonus issue of shares, these transactions would not feature in the statement of cash flows because they do not involve a receipt or payment of cash.

The only non-cash items included in a statement of cash flows are adjustments to the profit before tax, when the indirect method is used to present cash flows from operating activities.

1.3 Cash flows from operating activities

Cash flow from operating activities can be presented using one of two methods:

- the direct method
- the indirect method.

1.4 Cash flows from operating activities: the direct method

The direct method shows the gross cash receipts or the gross cash payments for each major category of operational cash flows. These will include:

- cash receipts from the sale of goods and services

- cash payments to suppliers
- cash payments to and on behalf of employees.

However, the cash payments to suppliers and to (and on behalf of) employees may be combined as a single figure.

No distinction is made between cash flows that relate to the cost of sales, distribution costs and administrative expenses.

Example

An example of the direct method of presenting cash flows from operating activities is shown below.

Cash flows from operating activities	$000
Cash receipts from customers	22,000
Cash paid to suppliers	(7,000)
Cash paid to and on behalf of employees	(4,000)
Cash paid for other operating expenses	(2,000)
Cash generated from operations	9,000
Interest paid	(500)
Income taxes paid	(3,000)
Net cash from operating activities	5,500

The cash flows from operating activities have a sub-total for cash generated from operations. This sub-total is followed by interest payments and income tax payments (tax on profits).

Calculating cash receipts and cash payments

The **cash received from sales** can be calculated from the sales figure in the income statement/statement of comprehensive income and the opening and closing balances for trade receivables:

	$
Trade receivables at the beginning of the year	A
Sales in the year	B
	(A + B)
Trade receivables at the end of the year	C
Cash received from sales	(A + B – C)

Cash paid to suppliers can be calculated first by establishing purchases for the year. Purchases are: Opening inventory + Cost of sales – Closing inventory.

Payments to suppliers can then be calculated as: Opening trade payables + Purchases – Closing trade payables.

Similarly **payments for wages and salaries** can be calculated as:
Opening accrued wages and salaries + Wages and salaries expenses (in the income statement) – Closing accrued wages and salaries.

Interest payments and income tax payments

The amount of interest paid might not be the amount shown in profit and loss for interest charges. Similarly, the cash payments for tax might not be the same as the tax charge reported in profit and loss.

The amount of these payments can be calculated from figures in the opening and closing statements of financial position for the period, and the income statement (or profit and loss section of the statement of comprehensive income) for the period. The method of calculating the amount of tax paid is as follows:

	$
Liability for tax, beginning of the year	A
Taxation charge for the year	B
	(A + B)
Liability for tax, end of the year	C
Taxation paid in the year	(A + B – C)

The amount of interest paid in the year can be calculated in the same way, from the opening and closing liabilities for interest (accrued interest) in the statement of financial position and the figure for interest charges in profit or loss.

Example

A company had liabilities in its statement of financial position at the beginning and at the end of Year 1, as follows:

	Liability for interest charges	Liability for taxation
Beginning of Year 1	$54,000	$153,000
End of Year 1	$43,000	$181,000

During the year, interest charges reported in profit or loss were $82,000 and taxation on profits were $257,000. The amounts of interest payments and tax payments (cash flows) for inclusion in the statement of cash flows can be calculated as follows:

	Tax	Interest
	$	$
Liability at the beginning of the year	153,000	54,000
Taxation charge/interest charge for the year	257,000	82,000
	410,000	136,000
Liability at the end of the year	(181,000)	(43,000)
Tax paid/interest paid during the year	229,000	93,000

1.5 Cash flows from operating activities: the indirect method

The indirect method of presenting cash flows from operating activities is much more common in practice than the direct method. A statement of cash flows using the indirect method reports the same figure for 'Cash generated from operations' and the same figure for 'Cash flows from operating activities' as the direct method. The difference between the direct and the indirect methods is in the way that the figure for 'Cash generated from operations' is reached.

The indirect method starts with the reported profit before tax for the financial period, and then makes a number of adjustments to reach the figure for cash flows from operations. These adjustments to the figure for profit before tax are for all the non-cash items included in the profit or loss section of the statement of comprehensive income (the income statement). These non-cash items include the following:

- depreciation and amortisation charges (and impairment of assets)
- gains or losses on the disposal of non-current assets
- interest charges reported in profit or loss
- interest income and dividend income from investments
- changes in inventories
- changes in trade receivables (and prepayments)
- changes in trade payables (and accruals).

An example of the indirect method of presenting cash flows from operating activities is shown below.

Cash flows from operating activities	$000
Profit before taxation	9,140
Adjustments for:	
Depreciation	750
Gain on disposal of plant and machinery	(300)
Interest expense	460
Interest income	(150)
	9,900
Increase in trade and other receivables	(300)
Decrease in inventories	800
Increase in trade payables	400
Cash generated from operations	10,800
Interest paid	(500)
Tax on profits paid	(3,000)
Net cash from operating activities	7,300

Adjustment for depreciation and amortisation

Depreciation charges and amortisation charges are not cash flows. They are expenses charged against profit, but do not represent payments of cash. In order to derive a figure for cash flow from the figure for profit, charges for depreciation and amortisation must therefore be added back to the profit figure.

Adjustment for gains or losses on disposal of non-current assets

Gains or losses on the disposal of non-current assets are not cash flows. The gain or loss is calculated as the difference between:

- the net cash received from the disposal, and
- the carrying value (net book value) of the asset at the date of disposal.

The relevant cash flow is the net cash received from the sale. In the statement of cash flows, this is treated as a cash flow from investing activities, not a cash flow from operating activities.

To prepare a statement of cash flows using the indirect method, the gain or loss on disposal is shown as an adjustment in the calculation of operating cash flows.

- Deduct any gains on the disposal of non-current assets, or
- Add any losses on the disposal of non-current assets.

These adjustments remove the effect of the gain or loss on disposal (a non-cash item) from the operating profit.

Adjustment for interest charges in profit or loss

Because the accruals concept is applied in accounting, the amount of interest charges included in profit or loss might differ from the amount of interest actually paid in the year. It is therefore necessary in the statement of cash flows to:

- add back the interest charge in profit or loss, and
- deduct the interest actually paid (the cash payments of interest).

The indirect method of presenting a statement of cash flows therefore includes an adjustment for interest charges. The interest charge in profit or loss is added back as an adjustment. The actual amount of interest paid is deducted lower down in the statement (after 'Cash generated from operations').

Adjustment for interest received and dividends received from investments

If the profit before tax includes interest received or dividends received from investments, these should be deducted in calculating the cash generated from operations. Interest and dividend receipts are treated as cash flows from investing activities in the statement of cash flows, and so are shown in a different part of the statement.

Indirect method: adjustments for working capital

With the indirect method of presenting a statement of cash flows, adjustments should be made for changes in working capital during the year. 'Working capital' is defined here as:

- trade receivables and other receivables, plus prepayments
- inventory
- trade payables including accruals, excluding accrued interest and tax liabilities

When working capital increases, the cash flows from operations are less than the operating profit, by the amount of the increase.

Similarly, when working capital is reduced, the cash flows from operations are less than the operating profit, by the amount of the reduction.

When the indirect method is used to present cash flows from operating activities, adjustments are therefore needed for these working capital items, to get from 'profit' to 'cash flow'.

- If there is an increase in working capital, the amount of the increase is subtracted to get from 'profit' to 'cash flow'. Increases in receivables and inventory and reductions in trade payables are therefore deducted.
- If there is a reduction in working capital, the amount of the reduction is added to get from 'profit' to 'cash flow'. Reductions in receivables and inventory and increases in trade payables are therefore added.

The amount of the increase or decrease in each item is calculated by comparing the amounts in the opening and closing statements of financial position. (Note: with consolidated statements of cash flows, an adjustment has to be made when a subsidiary is acquired or disposed of in the year. This point is explained later.)

The basic rules are set out in the following table:

Statement of cash flows: adjustments to get from profit before tax to cash flow from operations		
Increase in trade and other receivables		Subtract
Increase in inventory		Subtract
Increase in trade payables	Add	
Decrease in trade and other receivables	Add	
Decrease in inventory	Add	
Decrease in trade payables		Subtract

Example

A company made an operating profit before tax of $107,000 in the year just ended. Depreciation and amortisation charges were $66,000. There was a gain of $35,000 on disposals of non-current assets and there were no interest charges. Values of working capital items at the beginning and end of the year were:

	Receivables	Inventory	Trade payables
Beginning of the year	$39,000	$22,000	$17,000
End of the year	$31,000	$45,000	$24,000

Taxation paid was $27,000.

Required

Calculate the amount of cash generated from operations, as it would be shown in a statement of cash flows using the indirect method.

Answer

	$	$
Cash flows from operating activities		
Profit before taxation	107,000	
Adjustments for:		
Depreciation and amortisation charges	66,000	
Gains on disposal of non-current assets	(35,000)	
	138,000	
Decrease in trade and other receivables	8,000	
Increase in inventories	(23,000)	
Increase in trade payables	7,000	
Cash generated from operations	130,000	
Taxation paid (tax on profits)	(27,000)	
Net cash flow from operating activities		103,000

1.6 Cash flows from investing activities

This is the second part of a statement of cash flows. It can include both inflows and outflows but only those cash outflows that result in the recognition of an asset are eligible for classification as investing activities.

Cash flows in this section of the statement of cash flows include the following:

- cash paid to purchase non-current assets (property, plant and equipment)
- cash received from the disposal of non-current assets
- cash paid to acquire a subsidiary

- cash received from the sale of shares in a subsidiary
- interest received from investments (cash received)
- dividends received from investments (cash received).

Cash flows arising from the acquisition or the disposal of a subsidiary are explained later.

Cash paid for the purchase of non-current assets

When there are no disposals or revaluations of non-current assets during the year, purchases of non-current assets (normally assumed to be the amount of cash paid for these purchases) may be calculated in either of the following ways:

Method 1	
Non-current assets at cost at the end of the year	A
Non-current assets at cost at the beginning of the year	(B)
Equals purchases of non-current assets during the year	A – B
(Assumed to be cash flows during the year)	
Method 2	
Non-current assets at carrying amount (net book value or NBV) at the end of the year	X
Minus: Non-current assets at carrying amount (NBV) at the beginning of the year	(Y)
Plus: The depreciation and amortisation charge for the year.	Z
	X + Z – Y

When there are disposals of non-current assets during the year, the purchases of non-current assets may be calculated as follows:

	$
Assets at cost at the end of the year	A
Assets at cost at the beginning of the year	B
	(A – B)
Disposals during the year: original asset cost	C
Purchases	A – B + C

Example

The property, plant and equipment of Entity P at the beginning and the end of its financial year were as follows:

	At cost	Accumulated depreciation	Net book value
	$	$	$
Beginning of the year	550,000	(125,000)	425,000
End of the year	680,000	(148,000)	532,000

During the year a vehicle was disposed of for a gain of $34,000. The original cost of this asset was $200,000.

The cash paid for plant and equipment in the year (purchases) may be calculated as follows:

	$
Assets at cost at the end of the year	680,000
Assets at cost at the beginning of the year	550,000
	130,000
Disposals during the year: original asset cost	200,000
Purchases	330,000

When there are revaluations during the year

When there are revaluations of non-current assets during the year, the purchases of non-current assets should be calculated as follows:

Purchases of property, plant and equipment	$
Property, plant and equipment:	
At cost or valuation, at the end of the year	A
At cost or valuation, at the beginning of the year	B
	A – B
Add: Cost/re-valued amount of assets disposed of in the year	C
Subtract: Any asset revaluation during the year	(D)
Purchases during the year	(A – B) + C – D

Cash from disposals of non-current assets

A statement of cash flows should include the net cash received from any disposals of non-current assets during the period. This might have to be calculated from the gain or loss on disposal and the carrying amount of the asset at the time of its disposal.

Disposal of property, plant and equipment	
Property, plant and equipment:	$
At cost (or re-valued amount at the time of disposal)	A
Accumulated depreciation, at the time of disposal	(B)
Net book value/carrying amount at the time of disposal	(A – B)
Gain or (loss) on disposal	C
Net disposal value (**assumed cash flow**)	(A – B) + or – C

If there is a gain on disposal, the net cash from the disposal is more than the carrying value.

If there is a loss on disposal, the net cash from the disposal is less than the carrying value.

Example

During an accounting period, an entity disposed of some equipment and made a gain on disposal of $15,000. The equipment originally cost $120,000 and at the time of its disposal, the accumulated depreciation on the equipment was $77,000.

What was the amount of cash obtained from the disposal of the asset?

Answer

Disposal of equipment	$
At cost	120,000
Accumulated depreciation, at the time of disposal	(77,000)
Carrying amount at the time of disposal	43,000
Gain on disposal	15,000
Net disposal value (assumed cash flow)	58,000

1.7 Cash flows from financing activities

The third part of a statement of cash flows, after cash flows from investing activities, is cash flows from financing activities. These cash flows include:

- cash proceeds from issuing new shares
- cash proceeds from a new loan or issuing new bonds
- cash paid to redeem shares or bonds
- cash paid to redeem a loan
- payment of finance lease obligations (reductions in liabilities to lessors)
- usually, dividends paid to shareholders (although these might be included as operating cash flows instead of financing cash flows).

Cash from new share issues

The cash raised from new share issues can be established by comparing the equity share capital and the share premium in the statements of financial position at the beginning and the end of the year.

	$
Share capital + Share premium at the end of the year	A
Share capital + Share premium at the beginning of the year	B
= Cash obtained from issuing new shares in the year	(A – B)

Example

The statements of financial position of Entity M at 1 January and 31 December Year 1 included the following items:

	1 January Year 1	31 December Year 1
	$	$
Equity shares of $1 each	440,000	660,000
Share premium	310,000	1,080,000

The cash obtained from issuing shares during the year is calculated as follows:

	$
Share capital + Share premium at the end of Year 1	1,740,000
Share capital + Share premium at the end of Year 1	750,000
= Cash obtained from issuing new shares in Year 1	990,000

Cash from new loans/cash used to repay loans

Cash from new loans or cash paid to redeem loans in the year can be calculated simply by looking at the difference between the liabilities for loans and bonds at the beginning and the end of the year.

- An increase in loans or bonds means there has been an inflow of cash.
- A reduction in loans or bonds means there has been a payment (outflow) of cash.

Remember to add any loans or bonds repayable within one year (current liability) to the loans or bonds repayable after more than one year (non-current liability) to get the total figure for loans or bonds.

	$
Loans at end of year (current and non-current liabilities)	A
Loans at beginning of year (current and non-current liabilities)	B
If A>B, cash inflow from loans in the year	(A – B)
If B>A, cash outflow to repay loans in the year	

The same calculation can be applied to bonds or loan stock that the company might have issued. Bonds and loan stock are long-term debt.

Example

The balance sheet of Entity M at 1 January and 31 December Year 1 included the following items:

	1 January Year 1	31 December Year 1
	$	$
Loans repayable within 12 months	650,000	370,000
Loans repayable after 12 months	2,600,000	2,750,000

The cash flows relating to loans during the year is calculated as follows.

	$
Loans outstanding at the end of Year 1	3,120,000
Loans outstanding at the beginning of Year 1	3,250,000
= Net loan repayments during the year (cash outflow)	130,000

1.8 Cash and cash equivalents

IAS 7 defines cash and cash equivalents as follows:

- Cash
  - Cash in hand (petty cash and other cash not in a bank account) plus 'demand deposits'
  - Demand deposits are deposits with a bank (or other financial institution) that can be withdrawn on demand. This should include bank balances in normal business bank accounts.
- Cash equivalents
  - Short-term, highly-liquid investments that are readily convertible into known amounts of cash and which are subject to an insignificant risk of changes in value
  - Examples include a bank deposit or a savings account where notice of withdrawal is required and short-term money market investments.

A statement of cash flows ends with the following items:

- The increase or decrease in cash and cash equivalents during the period. This is the sum of the cash flows from operating activities, investing activities and financing activities. It may be a positive or negative amount.
- A reconciliation between cash and cash equivalents and the beginning of the year and the cash and cash equivalents at the end of the year. An example is shown below.

	$000
Increase in cash and cash equivalents during the period	250
Cash and cash equivalents at the beginning of the period	110
Cash and cash equivalents at the end of the period	360

A note to the statement of cash flows is also required, showing the components of cash and cash equivalents at the end of the current year and the end of the previous year.

The note to the statement of cash flows might be presented as follows:

	Current year	**Previous year**
	$000	$000
Cash on hand and balances with banks	220	100
Bank overdraft	0	(20)
Short-term investments	140	30
	360	110

Consolidated statements of cash flows

- The special features of a consolidated statement of cash flows
- Illustrative format
- Exchange rate differences

2 Consolidated statements of cash flows

2.1 The special features of a consolidated statement of cash flows

A consolidated statement of cash flows is prepared largely from the consolidated statement of financial position, statement of comprehensive income (or income statement) and statement of changes in equity. The rules for preparing a group statement of cash flows are similar to the rules for a statement of cash flows for an individual entity.

However, there are additional items in a consolidated statement of cash flows that are not found in the statement of cash flows of an individual company. The most significant of these are cash flows (or adjustments to profit before tax) relating to:

- non-controlling interests
- associates
- and acquiring or disposing of subsidiaries during the year.

2.2 Illustrative format

It might be useful to look at the format of a consolidated statement of cash flows, to see where these items appear. The indirect method is used here to present the cash flows from operating activities.

Entity XYZ

Statement of cash flows for the year ended 31 December 20X7

	$000	$000
Cash flows from operating activities		
Profit before tax	440	
Adjustments for:		
Depreciation and amortisation charges	450	
Loss on disposal of plant and machinery	50	
Share of profit of associates and joint ventures	(100)	
Foreign exchange loss	40	
Investment income	(25)	
Interest expense	25	
	880	

Increase in trade and other receivables	(80)	
Increase in inventories	(60)	
Increase in trade payables	40	
Cash generated from operations	780	
Interest paid	(30)	
Income taxes paid	(200)	
Net cash from operating activities		550
Cash flows from investing activities		
Acquisition of subsidiary, net of cash acquired (note 1)	(450)	
Purchase of property, plant and equipment (note 2)	(220)	
Proceeds from the sale of equipment	30	
Interest received	25	
Dividends received from associates	45	
Net cash used in investing activities		(570)
Cash flows from financing activities		
Proceeds from the issue of share capital	500	
Proceeds from long-term loan	100	
Redemption of debt securities	(150)	
Payment of finance lease liabilities	(80)	
Dividends paid to non-controlling interests (NCI)	(70)	
Dividends paid to parent company shareholders	(200)	
Net cash inflow from financing activities		100
Net increase in cash and cash equivalents		80
Cash and cash equivalents at the beginning of the period (note 3)		150
Cash and cash equivalents at the end of the period (note 3)		230

Notes to the statement of cash flows

Note 1: Acquisition of subsidiary

During the year, the group acquired a subsidiary ABC. The fair value of assets acquired and liabilities assumed were as follows:

	$000
Cash	50
Inventories	90
Trade receivables	60
Property, plant and equipment	870
Trade payables	(70)
Long-term loan	(200)
Total purchase price	800
Minus cash of ABC	(50)
	750
Shares issued as part of the purchase price	300
Cash flow on acquisition net of cash acquired	450

Note 2: Property, plant and equipment

During the year, the group acquired property, plant and equipment with a total cost of $400,000, of which $180,000 was acquired by means of finance leases. Cash payments of $220,000 were made to acquire property, plant and equipment.

Note 3: Cash and cash equivalents

Cash and cash equivalents consist of cash in hand, bank balances, and money market investments. Cash and cash equivalents in the statement of financial position:

	20X7	**20X6**
	$000	$000
Cash in hand and balances with banks	120	110
Short-term investments	210	80
Cash and cash equivalents as previously reported	330	190
Effect of exchange rate changes	-	(40)
Cash and cash equivalents as re-stated	330	150

Note 4: Segment information

(This information is recommended by IAS 7, but is not a compulsory requirement).

	Segment 1	Segment 2	Total
	$000	$000	$000
Operating activities	550	250	800
Investing activities	(200)	(370)	(570)
Financing activities	60	40	100
	410	(80)	330

2.3 Exchange rate differences

A gain or loss arising from exchange rate differences is not a cash flow item. When the indirect method is used to present cash flows from operating activities, it is therefore necessary to make an adjustment to get from 'profit' to 'cash flow'.

- A loss arising from exchange rate differences (shown in the example above as a 'foreign exchange loss') must be added back.
- A gain arising from exchange rate differences must be subtracted.

Non-controlling interests and associates in the statement of cash flows

- Obtaining the required figures for cash flows
- Minority interests and the group cash flow statement
- Dividends paid to minority interests and foreign exchange adjustments
- Associates and the group cash flow statement
- Calculating dividends received from an associate

3 Non-controlling interests and associates in the statement of cash flows

3.1 Obtaining the required figures for cash flows

The cash flows and adjustments in a group statement of cash flows are obtained from the other group financial statements. You should expect an examination question to provide you with an opening and closing consolidated statement of financial position, together with the related consolidated income statement or statement of comprehensive income, and possibly a statement of changes in equity. Other relevant information may also be provided.

A group statement of cash flows reports the cash flows that affect the group's consolidated cash (and cash equivalents). Any transactions not affecting the group cash position should not be shown in the statement of cash flows , except (with the indirect method) where a non-cash item is presented as an adjustment to the profit before tax to calculate the 'Cash generated from operations'.

3.2 Non-controlling interests and the group statement of cash flows

Unless there is an acquisition or a disposal of a subsidiary during the year, the only cash flow relating to non-controlling interests is **the amount of dividends paid to the non-controlling interests by subsidiaries**.

This might have to be calculated as a balancing figure, using the following calculation:

	$
Non-controlling interest in group net assets at the beginning of the year	A
Non-controlling interest in profits after tax for the year	B
	A + B
Non-controlling interest in group net assets at the end of the year	(C)
Dividends paid to non-controlling interests (balancing figure)	A + B – C

The dividends paid to non-controlling interests by subsidiaries are usually included in the 'Cash flows from **financing activities**' part of the statement of cash flows. (This is the same part of the statement of cash flows where dividends paid to the parent company shareholders are usually shown.)

Example

The following information has been extracted from consolidated financial statements of P, a holding company which prepares accounts to 31 December. P has a subsidiary Q, for which a final dividend is declared before the end of the financial year.

	20X7	20X6
	$000	$000
Non-controlling interest in group net assets	1,510	1,380
Non-controlling interest in consolidated profit after taxation	250	470

What figure should appear in the consolidated statement of cash flows for the year to 31 December 20X7 for the dividends paid to non-controlling interests?

Under what heading will this figure appear in the group statement of cash flows?

Answer

	$000
Non-controlling interest in group net assets at the beginning of the year	1,380
Non-controlling interest in profits after tax for the year	250
	1,630
Non-controlling interest in group net assets at the end of the year	1,510
Dividends paid to non-controllinginterests (balancing figure)	120

The dividend paid of $120,000 will be disclosed as a cash flow from financing activities.

3.3 Dividends paid to non-controlling interests and foreign exchange adjustments

If there is a gain or loss on translation for a foreign subsidiary, the non-controlling interest has a share of this exchange gain or loss. This means that the amount shown as the non-controlling interest in the consolidated statement of financial position includes the non-controlling interest share of any foreign exchange gains or is after deducting any foreign exchange losses.

A gain or loss arising from exchange rate differences is not a cash flow, but it changes the amount for non-controlling interest in the consolidated statement of

financial position. When the figures for non-controlling interest in the opening and closing statements of financial position are used to calculate dividend payments to non-controlling interests, we must therefore remove the effect of exchange rate differences during the year.

The calculation of the dividends paid to the non-controlling interests should then be calculated as follows:

	$
Non-controlling interest in group net assets at the beginning of the year	A
Non-controlling interest in profits after tax for the year	B
Add non-controllinginterest share of foreign exchange gain (G), or **Subtract non-controlling interest share of foreign exchange loss (L)**	G or (L)
	A + B + G or – L
Non-controlling interest in group net assets at the end of the year	(C)
Dividends paid to non-controlling interests	A + B – C + G or – L

3.4 Associates and the group statement of cash flows

When a group has an interest in an associate entity, the consolidated statement of cash flows must show the cash flows that occur between the associate and the group. The consolidated statement of cash flows shows the effect on the group's cash position of transactions between the group and its associate**.**

The cash held by an associate is not included in the group's cash figure in the consolidated statement of financial position. This is because the equity method of accounting does not add the associate's cash to the cash of the holding company and subsidiaries. As far as cash flows are concerned, the associate is outside the group. (The same principles apply to other investments accounted for under the equity method, such as joint ventures accounted for by the equity method).

Share of profit (or loss) of an associate

In the consolidated statement of comprehensive income or the income statement, the group profit includes the group's share of the profits of associates. These profits are not a cash flow item. When the indirect method is used to present the cash flows from operating activities, an adjustment is therefore needed to get from 'profit' to 'cash flow'.

- The group's share of the profit of an associate must be deducted from profit.
- The group's share of the loss of an associate must be added to profit.

Cash flows involving associates

The cash flows that might occur between a group and an associate, for inclusion in the consolidated statement of cash flows are as follows:

- **Investing activities**
  - cash paid to acquire shares in an associate during the year
  - cash received from the disposal of shares in an associate during the year
  - dividends received from an associate during the year.
- **Financing activities**
  - cash paid as a new loan to or from an associate during the year
  - cash received as a repayment of a loan to or from an associate during the year.

Note that dividends received from an associate are shown as cash flows from investing activities; whereas dividends paid to non-controlling interests in subsidiaries are (usually) shown as cash flows from financing activities.

3.5 Calculating dividends received from an associate

In an examination, you may be required to calculate the dividends received from an associate, using information in the opening and closing consolidated statements of financial position and the consolidated statement of comprehensive income (profit and loss section) or consolidated income statement. The technique is similar to the calculation of dividends paid to non-controlling interests.

	$
Group investment in net assets of associate at the beginning of the year	A
Group share of associate's profits before tax	B
Group's share of associate's tax on profits	(C)
	A + B – C
Group investment in net assets of associate at the end of the year	(D)
Dividends received from associate in the year	A + B – C – D

Example

The following information has been extracted from the consolidated financial statements of P for the year ended 31 December 20X7. The group has neither purchased nor disposed of any investment during this period.

Group income statement

	$000	$000
Group operating profit		1,468
Share of operating profit of associate		244
		1,712
Tax on profit on ordinary activities:		
Income taxes: group	(648)	
Share of tax of associate	(108)	
		(756)
Profit on ordinary activities after tax		956

Group statement of financial position at 31 December

	20X7	20X6
	$000	$000
Investments in associated undertakings		
Share of net assets	932	912

Required

(a) What figure should appear in the group statement of cash flows for the year to 31 December 20X7 for the associate?

(b) Under which heading would you expect this figure to appear in the group statement of cash flows?

Answer

(a)

	$000
Group investment in net assets of associate at the beginning of the year	912
Group share of associate's profits before tax	244
Group's share of associate's tax on profits	(108)
	1,048
Group investment in net assets of associate at the end of the year	(932)
Dividends received from associate in the year	116

(b) The cash flow of $116,000 will be shown as a cash flow from investing activities in the group statement of cash flows.

Acquisitions and disposals of subsidiaries in the statement of cash flows

- Acquisition of a subsidiary in the statement of cash flows
- Note to the statement of cash flows on acquisitions
- Avoiding double counting when a subsidiary has been acquired
- Disposal of a subsidiary in the statement of cash flows

4 Acquisitions and disposals of subsidiaries in the statement of cash flows

4.1 Acquisition of a subsidiary in the statement of cash flows

When a subsidiary is acquired:

- the group gains control of the assets and liabilities of the subsidiary, which might include some cash and cash equivalents, and
- the group pays for its share of the subsidiary, and the purchase consideration might consist partly or entirely of cash.

In the group statement of cash flows, a single figure is shown (under the heading 'Cash flows from investing activities') for the net effect of the cash flows from acquiring the subsidiary. This net effect is:

	$
Cash element in the purchase consideration	A
Minus: Cash assets of the subsidiary at the acquisition date	B
Cash payment on acquisition of subsidiary, net of cash received	A – B

This net cash payment is the amount shown in the group statement of cash flows.

Example

Blue Group acquired 80% of the shares in Green Entity on 5 September 20X6, when the net assets of Green Entity were $800,000, including $25,000 in cash and cash equivalents. The purchase consideration was $700,000, consisting of $500,000 in new shares of Blue (the holding company) and $200,000 in cash.

The cash flow shown in the group statement of cash flows for the year to 31 December 20X6 is:

	$
Cash element in the purchase consideration	200,000
Minus: Cash assets of the subsidiary at the acquisition date	(25,000)
Cash payment on acquisition of subsidiary, net of cash received	175,000

Note that although only 80% of the shares in Green Entity have been acquired, the full $25,000 of cash held by the subsidiary is brought into the group statement of financial position at the acquisition date. The figure deducted from the cash in the purchase consideration is therefore 100% of the subsidiary's cash and cash equivalents acquired.

4.2 Note to the statement of cash flows on acquisitions

In an examination, it is useful to prepare a statement summarising the cash flow effects of an acquisition. This statement is actually required by IAS 7, and should be presented as a note to the statement of cash flows.

The statement should be presented as follows:

	$
Assets of the subsidiary at the acquisition date, at fair value (not yet including the purchased goodwill)	A
Liabilities of the subsidiary at the acquisition date	(L)
Net assets of the subsidiary at the acquisition date	A – L
Minus non-controlling interest in the subsidiary at this date (% Non-controlling interest × Net assets)	(M)
Add: Purchased goodwill	G
Fair value of net assets acquired	A – L – M + G
Satisfied by:	
New shares in holding company	S
Cash	C_1
Purchase consideration	S + C_1

The total purchase consideration equals the fair value of the net assets acquired.

The cash of the subsidiary at the acquisition date (C_2) is then deducted from the cash paid (C_1) to arrive at the figure that appears in the statement of cash flows for the 'Acquisition net of cash received'

Example

A typical note to the statement of cash flows, using illustrative figures, might appear as follows for a subsidiary in which 80% of the shares are acquired:

	$000
Net assets acquired:	
Cash	3
Trade receivables	85
Inventories	139
Property, plant and equipment	421
Trade payables	(68)

Bank loan	(100)
	480
Non-controlling interest (20% × 480)	(96)
	384
Purchased goodwill	76
Fair value of net assets acquired	460
Satisfied by:	
Issue of shares	152
Cash paid	308
	460

In the statement of cash flows itself, the cash payment on the acquisition of the subsidiary is not $308,000, because the cash flow is shown as the payment minus the cash held by the subsidiary at the acquisition date (which is cash brought into the group by acquiring the subsidiary). In this example, the cash brought into the group on acquisition, as a part of the net assets of the subsidiary, is $3,000. So the statement of cash flows will show the cash paid for the acquisition minus $3,000.

Extract from statement of cash flows

Investing activities

Acquisition of subsidiary net of cash received ($308,000 – $3,000)	$305,000

4.3 Avoiding double counting when a subsidiary has been acquired

When you are required to prepare a statement of cash flows in the examination, you will often have to calculate the cash flow from information in the opening and closing statements of financial position. If there is an acquisition during the year, it is important to make an adjustment to your calculation for the assets or liabilities in the subsidiary that were acquired. Unless you make this adjustment, the assets and liabilities in the subsidiary at the acquisition date will be counted twice and your calculations will be incorrect.

An adjustment will be needed for every item of asset or liability acquired, **except for** cash and cash equivalents.

Inventory, trade receivables, trade payables

When the indirect method is used to present cash flows from operating activities, the changes in receivables, inventory and trade payables are shown as adjustments to the profit figure, to get to a figure for cash flow.

When preparing a statement of cash flows for an individual company, the changes in these items are calculated by calculating the difference in the figure in the closing

statement of financial position and the corresponding value in the opening statement of financial position.

However, when a subsidiary has been acquired, the working capital brought into the group (receivables plus inventory minus trade payables of the acquired subsidiary) is paid for in the purchase price to acquire the subsidiary. As we have seen, this is treated as a separate item in the investing activities section of the statement of cash flows.

To avoid double counting of the effects of the working capital in the subsidiary at the acquisition date, we need to deduct from the value in the closing statement of financial position, **or** add to the value in the opening statement of financial position:

- the receivables in the net assets of the subsidiary acquired, as at the acquisition date
- the inventory in the net assets of the subsidiary acquired, as at the acquisition date, and
- the trade payables in the net assets of the subsidiary acquired, as at the acquisition date.

Example

D Group is preparing a group statement of cash flows for the year using the indirect method. In the group opening an closing statements of financial position, inventories were:

At the beginning of the year	$120,000
At the end of the year	$190,000

During the year, the group acquired a 75% interest in a new subsidiary, Entity S, which had inventories of $40,000 at the acquisition date.

Required

What figure should be shown in the group statement of cash flows as the adjustment for the increase or decrease in inventories?

Answer

	$
Group inventories at the beginning of the year	120,000
Add: Inventories acquired in the subsidiary	40,000
	160,000
Group inventories at the end of the year	190,000
Adjustment for increase in inventories	(30,000)

Inventories have increased by $30,000 after allowing for the $40,000 of inventories brought into the group when the subsidiary was purchased.

Purchases of non-current assets

When non-current assets are at carrying amount (net book value)

When non-current assets are shown at their carrying amount (net book value) and a subsidiary has been acquired during the year, purchases of non-current assets (assumed to be cash payments) are calculated as follows. (Figures have been included in the table for illustrative purposes.)

	$
Non-current assets at carrying amount, at the end of the year	290,000
Minus: Non-current assets acquired on acquisition of the subsidiary	(65,000)
	225,000
Net book value of disposals of non-current assets during the year	30,000
Depreciation charge for the year	40,000
	295,000
Non-current assets at carrying amount, at the beginning of the year	240,000
Cash paid to acquire non-current assets during the year	55,000

When non-current assets are at cost

When non-current assets are shown at cost and a subsidiary has been acquired during the year, purchases of non-current assets (assumed to be cash payments) are calculated as follows. (Again, figures have been included in the table for illustrative purposes.)

	$
Non-current assets at cost, at the end of the year	485,000
Non-current assets acquired on acquisition of the subsidiary	(90,000)
	395,000
Cost of disposals of non-current assets during the year	60,000
	455,000
Non-current assets at cost, at the beginning of the year	(400,000)
Cash paid to acquire non-current assets during the year	55,000

Other items

Similar principles can be applied to all other assets and liabilities to find the cash effect, for example to calculate loan repayments and repayments of leasing obligations

Example: calculating tax paid when a subsidiary has been acquired in the year

The Spot Group had the following items in its opening and closing group statements of financial position at the beginning and at the end of 20X6:

	At 1 January 20X6	At 31 December 20X6
	$000	$000
Current tax payable	250	325
Deferred tax (liability)	136	165

The Spot Group acquired a 60% holding in a subsidiary, Entity B, on 7 May 20X6. The total tax liability of Entity B at this date was $120,000. The total charge for taxation in the consolidated income statement of the Spot Group for the year to 31 December 20X6 was $950,000.

Required

What was the cash payment for taxation during the year, for inclusion on the group statement of cash flows?

Answer

The tax liability in the subsidiary when it was acquired should be deducted from the closing tax liability for the group (or added to the opening tax liability for the group) to avoid double counting.

	$000
Group tax liability at the beginning of the year	386
Tax liability acquired in the subsidiary	120
Group tax charge in the year	950
	1,456
Group tax at the end of the year (325 + 165)	490
Tax paid in the year	966

Note

To calculate the tax payment for the year, you should take the entire tax charge at the beginning and at the end of the year – both current tax and deferred tax.

Example: dividends paid to non-controlling interest when a subsidiary has been acquired

The Spot Group had the following items in its opening and closing group statements of financial position at the beginning and at the end of 20X6:

	At 1 January 20X6	At 31 December 20X6
	$000	$000
Non-controlling interest	350	415

The Spot Group acquired a 60% holding in a subsidiary, Entity B, on 7 May 20X6. The net assets of Entity B at this date were $800,000 at fair value. The profit attributable to non-controlling interests in the group's income statement for the year to 31 December 20X6 was $270,000.

Required

What dividends were paid to the non-controlling interests during the year to 31 December 20X6?

Answer

Again, to avoid double counting we need to:

- deduct the non-controlling interest acquired from the value for non-controlling interest in the closing consolidated statement of financial position, or
- (as shown below) add the non-controlling interest acquired to the non-controlling interest in the opening consolidated statement of financial position.

	$000
Non-controlling interest at the beginning of the year	350
Non-controlling interest acquired in the subsidiary (40% × 800)	320
Non-controlling interest share of profits for the year	270
	940
Non-controlling interest at the end of the year	415
Dividends paid to non-controlling interest during the year	525

The cash outflow will be shown as a cash flow from financing activities.

Example: adjustment for the impairment of goodwill

The Spot Group had the following items in its opening and closing group statements of financial position at the beginning and at the end of 20X6:

	At 1 January 20X6	At 31 December 20X6
	$000	$000
Goodwill	600	540

The Spot Group acquired a 60% holding in a subsidiary, Entity B, on 7 May 20X6. Purchased goodwill arising on the acquisition of Entity B was $110,000. The Spot Group uses the indirect method to present its group statement of cash flows.

Required

What is the impairment to goodwill for the year, and where would it appear in the group statement of cash flows?

Answer

The impairment of goodwill is a non-cash item that reduces profit. When the indirect method is used to present cash flows from operating activities, any impairment of assets during the year and charged against profit must be added back to the profit figure (in the same way that depreciation and amortisation charges are added back).

When a subsidiary is acquired during the year, the calculation of the impairment must allow for the purchased goodwill in the newly-acquired subsidiary. An adjustment is needed to avoid double-counting.

	$000
Goodwill at the beginning of the year	600
Goodwill acquired in the subsidiary	110
	710
Goodwill at the end of the year	540
Impairment	170

4.4 Disposal of a subsidiary in the statement of cash flows

The procedures for reporting the cash effect of disposals of subsidiaries in a group statement of cash flows are similar to those used for acquisitions, except that the process applies in reverse.

In the group statement of cash flows, the cash received from the disposal is the cash actually received from the disposal, minus any cash in the subsidiary at the disposal date.

A note to the statement of cash flows should show the details of the disposal, including the cash received from the sale minus the cash in the subsidiary at the disposal date.

Note

You should remember the assets and liabilities disposed of, and the non-controlling interest that leaves the group on the disposal, to avoid double counting the other cash flow items in the statement of cash flows.

Example

Entity D disposed of its 80% interest in the equity capital of Entity S for a cash sum of $550 million. The statement of financial position of Entity S at the date of disposal showed the following balances:

	$000
Tangible non current assets	500
Inventories	200
Trade receivables	300
Trade payables	(200)
Taxation (including deferred taxation)	(80)
Bank overdraft	(320)
	400

D acquired its interest in S at the date of incorporation of that company, so no goodwill arose.

Required

Prepare a statement summarising the effect of the disposal as a note to the consolidated statement of cash flows.

Answer

We know that the cash received from the sale of the shares in the subsidiary is $550,000. However, a note to the statement of cash flows should present the details of the net assets disposed of, the proceeds from the sale, and the profit or loss on disposal. The profit or loss is the difference between the value of the net assets disposed of and the proceeds from the sale. It is a balancing figure, in the same way that the purchased goodwill is the balancing figure in a similar note to the statement of cash flows when a subsidiary has been acquired.

In this example, the subsidiary had a bank overdraft when it was disposed of. The cash in the subsidiary at the date of disposal was therefore a negative amount. The group no longer has the bank overdraft, which means that its cash flow position improved by selling off the subsidiary.

In the statement of cash flows itself, the cash proceeds from the disposal of the subsidiary (net of cash 'lost') is the cash from the disposal proceeds plus the bank overdraft that is no longer in the group ($550,000 + $320,000 = $870,000).

	$000
Net assets disposed of:	
Tangible non current assets	500
Inventories	200
Trade receivables	300
Trade payables	(200)
Taxation	(80)
Bank overdraft	(320)
	400

Non-controlling interest (20% × 400)	(80)
	320
Profit on disposal	230
Proceeds	550
Satisfied by:	
Cash	550

Extract from the statement of cash flows

Investing activities	
Sale of subsidiary (550 + 320)	870

Example

Suppose that the group in the previous example uses the indirect method of computing the cash flow from operating activities. Inventories were $1,600,000 in the opening group statement of financial position at the beginning of the year and $1,500,000 in the closing group statement of financial position.

Required

What figure in respect of inventories would be used as an adjustment in calculating the cash flows from operating activities?

Answer

	$000
Group inventories at the beginning of the year	1,600
Inventories disposed of in the subsidiary	(200)
	1,400
Group inventories at the end of the year	1,500
Adjustment for increase in inventories	(100)

CHAPTER 10

Non-current assets

Contents

Property, plant and equipment

- Introduction
- Initial measurement: cost
- Initial measurement of cost: finance costs (IAS 23)
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- Cost of a non-current asset: subsequent expenditure
- Valuation after initial recognition
- Depreciation
- Disposals of non-current assets
- Assets held for sale

1 Property, plant and equipment

1.1 Introduction

The main accounting standard relating to the recognition and measurement of tangible non-current assets is IAS 16 *Property, plant and equipment*. However, the following accounting standards are also relevant.

- IAS 20 *Accounting for government grants and disclosure of government assistance*
- IAS 23 *Borrowing costs*
- IAS 36 *Impairment of assets*
- IAS 40 *Investment property*
- IAS 28 *Intangible assets*

All of these accounting standards will be familiar to you from your previous studies.

2 Property, plant and equipment

2.1 Initial measurement: cost

IAS 16: *Property, plant and equipment* defines property, plant and equipment (PPE) as assets that are to be used on a continuing basis in the company's activities to provide access to economic benefits.

As PPE, they must be tangible (they must have a physical existence); otherwise they would be classified as intangible assets. Common examples of PPE are land and buildings, plant and machinery, motor vehicles, and fixtures and fittings.

A tangible non-current asset should initially be measured at cost. Cost is not simply the purchase price of the asset. The cost should include the following items:

- Purchase costs, including import duties and non-refundable purchase taxes (for example, non-refundable value added tax: however, purchase taxes are not included in cost if they are refundable to the entity).
- Costs directly related to getting the asset ready for use, including:
  - professional fees (for example, the fees of architects or surveyors, and legal costs)
  - costs of site preparation (getting a site ready for installation; for example, the costs of levelling a factory floor before new machinery is installed)
  - installation costs
  - costs of testing the asset (for example, the costs of safety test flights for a new aeroplane).
- Dismantling costs. The initial estimate of the costs of dismantling and removing the asset at the end of its expected life, plus the costs of restoring the site after use when an obligation to incur these future costs arises at the time the asset is acquired.

Where the asset has been constructed by the entity, rather than purchased from an external supplier, the cost should also include the employee costs that directly relate to the construction and production overhead costs, but not administration and general overhead costs.

Dismantling costs

When a company acquires an asset it may have an obligation to dismantle the asset and restore the site once the asset reaches the end of its life. The obligation must be included in the cost of the asset, at the time that the asset is first recognised.

For example, a company that builds an oil rig in the sea may have an obligation to restore any damage to the sea-bed once it has finished drilling for oil. A cost for future site restoration work should be included in the cost of the oil rig, when the rig is initially recognised as an asset: this cost should be the present value of the estimated future costs. As a part of the cost of the asset, it will then be depreciated over the asset's life.

This treatment ensures that the restoration costs are matched to the associated income earned from the rig during the rig's useful life. (Unless the future restoration costs are capitalised and depreciated, the cost would eventually have to be accounted for as a 'one-off' item of expense at the end of the asset's life. This would be inconsistent with the accruals concept of accounting.)

Example

Entity H has incurred the following costs prior to bringing a machine into full production:

	$
Purchase price before trade rebate and tax	12,200
Trade rebate	600
Refundable purchase taxes	1,200
Architects' fees	700
Installation costs	100
Operating losses prior to achieving planned performance	250

Required

Calculate the amount at which the machine should be stated in the accounting records of Entity H in accordance with IAS 16.

Answer

The cost of the machine should be stated in the statement of financial position as:

	$
Purchase price less trade rebate (12,200 – 600)	11,600
Architects' fees	700
Installation costs	100
Total cost	12,400

For self-constructed assets (non-current assets that are constructed by the entity itself):

- internal profits and abnormal costs should be excluded from cost
- administrative expenses and other similar overheads should be excluded from cost
- interest costs incurred in the course of construction **might** be included, in accordance with IAS 23 *Borrowing costs* (see below).

1.3 Initial measurement of cost: borrowing costs (IAS 23)

In 2007, the IASB revised IAS 23: *Borrowing costs*. IAS 23 now requires an entity to capitalise borrowing costs directly attributable to the acquisition, construction or production of a qualifying asset as part of the cost of that asset. It is not permissible to recognise these borrowing costs immediately as an expense in profit or loss.

For example, if an entity takes out a loan to finance the construction of a new warehouse, the entity must capitalise the cost as part of the cost of the warehouse.

The borrowing costs, as part of the asset cost, will be 'expensed' to the income statement (profit or loss) over the expected life of the asset, as part of the annual depreciation charges.

The revised IAS 23 states that 'Borrowing costs that are directly attributable to the acquisition, construction or production of an asset are included in the cost of that asset. Such borrowing costs are capitalised as part of the cost of the asset when it is probable that they will result in future economic benefits to the entity and the cost can be measured reliably. Other borrowing costs are recognised as an expense in the period in which they are incurred.'

- Capitalisation of borrowing costs may only begin when work on bringing the asset into use has begun.
- Borrowing costs should not be capitalised during extended periods when active development is interrupted, unless there is just a temporary delay.
- Capitalisation of borrowing costs must cease once activities have reached the stage where the asset is available for use, even if the asset has not yet actually been brought into use.

Example

A company constructing a new warehouse takes out a loan to finance the construction, and the interest cost is $12,000 each month. The company should capitalise those interest costs incurred from the time that work on construction begins until the time that the warehouse is ready for use.

The cost of constructing an asset may be financed out of general company borrowings, rather than a specific loan. In this situation, it may be difficult to identify the borrowing costs linked to one particular asset. IAS 23 requires that in this situation, the borrowing costs attributable to the asset should be calculated by reference to the weighted average cost of interest across the range of borrowings.

1.4 Initial measurement of cost: government grants and IAS 20

The government may offer financial support to a company to assist with:

- subsidising general expenditure; for example, contributing to employee costs, to encourage a company to locate its operations in an area of high unemployment
- the acquisition or construction of an asset.

Assistance to an entity from the government, in the form of cash grants or in any other form of assistance, must be accounted for in the entity's financial statements.

IAS 20 *Accounting for government grants and disclosure of government assistance* requires that a government grant should only be recognised when there is reasonable confidence that the company will meet the conditions for receiving the grant. Therefore, there must be reasonable confidence that the money will be received.

Grants may be related to either:

- income: for example, a government may pay a cash grant towards the cost of re-training employees of an entity, so that they acquire new skills
- capital: for example, an entity may be given a government grant towards the cost of building a new asset, such as a factory in an area of high unemployment.

Government assistance may be in a form other than cash; for example the government may give land to an entity to build a new factory. Non-monetary items should be accounted for at fair value.

The general principle is to account for grants and assistance by matching the grant income to the related cost. Consider the following examples.

Example

A company receives a grant from a government department to assist it with a programme of staff re-training. The programme is expected to last for 18 months.

In this situation, the grant should be expensed to profit or loss over the same 18 month period as the associated re-training costs are incurred.

Example

A grant is paid to a company to allow it to settle its outstanding accounts payable and prevent it from going into liquidation.

As the expense of the purchase has already been incurred, the grant should be released to profit or loss in full in the period the grant is received.

Example

A company receives a grant of $300,000 towards the acquisition of a machine costing $500,000. The machine has a useful life of five years.

Once again, the grant should be matched against the associated cost. There are two acceptable accounting approaches in this situation.

- Option 1. Deduct the grant from the asset cost so that the asset is recorded at $200,000, being the net cost to the company.
- Option 2. Record the asset at its full cost of $500,000 and take the grant to the statement of financial position as deferred income. The deferred income is then released to profit and loss over the useful life of the asset. The effect is to reduce the depreciation charge.

Both approaches have the same effect on profit or loss and net assets.

- In the example above, if Option 1 is chosen and the asset has no residual value, the cost of the asset is recorded at $200,000 and there will be an annual depreciation charge of $40,000 for five years.
- If Option 1 is chosen, the cost of the asset is recorded at $500,000 and there will be an annual depreciation charge of $100,000 for five years. In addition, deferred income of $300,000 is recorded, and this will be released (as realised income) to profit and loss at the rate of $60,000 each year for five years. The net effect is to charge a net amount of $40,000 ($100,000 - $60,000) to profit or loss each year.

Note: problems with both methods of accounting

It can be argued that both of these approaches are theoretically unsound, because they are inconsistent with the principles in the IASB Framework.

- Deducting the grant from the cost of the asset is not in accordance with the principle of recognising asset at the 'cost' to the entity.
- Treating the grant as deferred income uses an element in the financial statements ('deferred income') that is not recognised in the IASB Framework.

The IASB has expressed its dissatisfaction with the treatment of government grants as a liability (deferred income) when no liability exists, but a revision to IAS 20 is not planned in the near future.

1.5 Cost of a non-current asset: subsequent expenditure

Any subsequent expenditure that is incurred on an existing non-current asset should be capitalised, provided that it can be shown that it enhances the economic benefits from the asset. For example, subsequent expenditure on an asset should be capitalised if it means that the asset's life has been extended, or its output increased, or the quality of its output has been improved, or operating costs have been reduced.

(If subsequent expenditure on an asset does not enhance future economic benefits, the expenditure should be treated as an expense as incurred. For example repairs and maintenance costs must be included as an expense in profit or loss.)

Where a part of an asset (a 'component') is replaced, the cost of the replacement should be capitalised and the net book value of the component replaced should be removed from the statement of financial position. This might include the cost of overhauling an asset.

Example

A shipping company is required to put its ships into dry dock every three years for an overhaul, at a cost of $300,000. The ships have a useful life of 20 years. A ship is purchased from a shipbuilder at a cost of $20 million.

When the ship is first acquired, $300,000 of the asset cost should be treated as a separate component and depreciated over three years. The rest of the cost of the ship ($19.7 million) should be depreciated over 20 years. By the end of the third year

an overhaul will be required. The cost of the overhaul is capitalised and added to the asset's cost. The cost ($300,000) and accumulated depreciation of the depreciated component is removed from the accounts.

Example

A building is constructed. The cost of the building includes the cost of the main construction work, plus the costs of air conditioning, the cost of elevators and the cost of wall partitions.

The cost of the building should be allocated between component elements, and each component element should be depreciated separately. For example, the cost of the elevators should be capitalised and depreciated over their expected useful life. When the elevators are replaced (whenever this actually happens), the cost of the new elevators should be capitalised and included in the cost of the building. The net book value of the old elevators should be taken out of the carrying value of the building and written off (unless they have a disposal value).

1.6 Valuation after initial recognition

After the initial recognition of non-current assets at cost, IAS 16 allows an entity to carry its non-current assets:

- at cost, using the cost model, or
- to revalue them to their fair value, using the revaluation model.

Fair value is normally open market value. If there is no reliable market value (for example, because the asset is specialised or because sales are rare), depreciated replacement cost can be used.

Valuation should normally be performed by a professionally qualified valuer. IAS16 does not prescribe a time interval between revaluations.

When the cost model is used, the depreciation of the asset is based on its cost, and the asset is carried in the statement of financial position at cost minus accumulated depreciation and any accumulated impairment.

When the revaluation model is used, the asset is re-valued from time to time, and recorded in the statement of financial position at this re-valued amount. If the re-valued amount is more than the carrying value of the asset at the time of the revaluation, there is a revaluation gain. If the re-valued amount is lower than the carrying amount, there is a revaluation loss.

- Any gain arising on revaluation is reported as other comprehensive income taken directly to equity, as a revaluation reserve and is not reported in profit or loss.
- Any loss on revaluation is included in profit or loss, as a loss in the period, unless the loss reverses a previous revaluation gain. In this case, the loss is reported in other comprehensive income and set off against the gain in the revaluation reserve, and is not reported through profit or loss.

If one item in a category of property, plant and equipment is re-valued, then the fair value of all other items in the same class must also be re-valued. A class would usually be defined as land and buildings, or machinery, or fixtures and fittings. Generally, companies choose to revalue land and buildings whilst using the cost model for all other classes of assets.

The revaluations must be kept up-to-date, but IAS 16 does not define any fixed intervals for revaluations. It simply requires that when the revaluation model is used, revaluations should be made sufficiently often to ensure that the carrying amount of the assets does not differ materially from their fair value.

Example

An asset was purchased for $500,000, and was believed to have a useful economic life of ten years and no residual value. At the end of year 8 the asset is re-valued and found to have a fair value of $150,000.

Required

Explain the accounting treatment of the revaluation and the subsequent depreciation of the asset.

Answer

At the date of revaluation, but before the revaluation is made, the asset is stated in the statement of financial position as follows:

	$000
Cost	500
Accumulated depreciation (500/10) × 8 years	(400)
Net book value	100

There are three elements to dealing with a revaluation:

- The asset cost must be adjusted to its re-valued amount
- The accumulated depreciation must be eliminated
- The increase in the carrying value of the asset is taken directly to the revaluation reserve in equity.

The double entry will therefore be as follows:

		$000	$000
CR	Asset valuation (500 – 150)		350
DR	Accumulated depreciation	400	
CR	Revaluation reserve		50

These adjustments will alter the carrying value of the asset to $150,000 (from $100,000), accumulated depreciation is $0 and the revaluation reserve for the asset is increased by $50,000.

Depreciation after revaluation

Depreciation charges after revaluation, for inclusion in profit or loss, must be based on the revised value (= re-valued amount).

In the example above, the $150,000 carrying value will be depreciated over its remaining life of two years, at $75,000 per year. This will be the depreciation charge each year in profit or loss.

An annual reserve transfer may be made each year from the revaluation reserve directly to accumulated profits, for the difference between depreciation based on historical cost and depreciation on the re-valued amount. This transfer is made direct between the reserves and is not reported in profit or loss:

	$
Depreciation based on historical cost ($500,000/10 years)	50,000
Depreciation based on the re-valued amount	75,000
Transfer from revaluation reserve to accumulated profit (for the excess depreciation charge)	25,000

In this example, the effect after two years is that the asset will be fully depreciated and the balance on the revaluation reserve for the asset will have been reduced to $0.

Revaluations using an index

An alternative way of expressing the change in the asset's value is to use a cost index or price index. Using the above example, and an index of 150 for the revaluation, the revaluation could instead be recorded as follows:

	Original Value	Index	Revalued
Cost	$500,000	150%	$750,000
Accumulated depreciation	$400,000	150%	$600,000
Net book value	$100,000	150%	$150,000

As the net book value has increased, it is assumed that the replacement cost of the asset has increased. The cost is therefore adjusted, together with the accumulated depreciation. The journal entry to record this adjustment should be:

		$	$
DR	Cost	250,000	
CR	Accumulated depreciation		200,000
CR	Revaluation reserve		50,000

Revaluation losses

A revaluation may indicate that an asset has dropped in value rather than increased. The accounting treatment is exactly the same as for the treatment of impairment. The accounting treatment of impairments is explained later.

1.7 Depreciation

Depreciation does not measure the change in the value of a non-current asset. It is simply an accounting method for allocating the cost of an asset to profit or loss over the asset's expected useful life. The depreciation charge has the effect of spreading the cost/fair value of the asset over the periods that will benefit from its use.

The depreciation charge for the year (whether based on cost or revalued amount) is recognised in profit or loss.

All tangible non-current assets must be depreciated. The only exception to this rule is land, which normally has an indefinite useful life (unless it is used in mining or similar industries).

Each significant part of an item of property, plant and equipment must be depreciated separately. This allows for assets that have two or more major components with differing useful lives and where different depreciation methods may be appropriate.

Accounting for depreciation should be familiar to you already. The following example may refresh your knowledge:

Example

An asset is purchased for £200,000 and is believed to have a useful life to the company of five years before it is scrapped for an expected £50,000.

Required

(a) Calculate the annual depreciation charge.

(b) At the start of the third year, the company restructures its operations and as a result the total asset life is believed to be only four years, with the residual value unchanged. Explain the impact on the depreciation expense.

Answer

(a) Annual depreciation:

$$\frac{\text{Cost less residual value}}{\text{Expected useful life}} = \frac{\$200,00 - \$50,000}{5 \text{ years}} = \$30,000 \text{ per year}$$

(b) If estimates are revised, the carrying value of the asset at the date of the new assessment should be written off over its remaining expected life, using the new estimates. The new remaining expected life is two years. The change in estimate is not applied retrospectively. A prior year adjustment must not be made when dealing with the revision of an estimate.

Net book value at the start of year 3 = \$200,000 – (2 years × \$30,000) = \$140,000

This net book value will be written off over the remaining useful life of 2 years.

$$\text{Revised depreciation} = \frac{\$140,000 - \$50,000}{2 \text{ years}} = \$45,000 \text{ per year}$$

Depreciation and components of non-current assets

A non-current asset may have several components (as explained earlier).

For example, a property has two elements, the **land** and the **buildings**. IAS 16 requires that the land and building element must be treated as separate assets.

- The land element is (usually) not depreciated as it has an indefinite useful life.
- The building must be depreciated, even if its value has increased, as it does have a finite useful life.
- However, if the expected residual value of a building is expected to equal or exceed the cost, then depreciation will be zero as there is no 'depreciable cost' to the company.

Some assets contain several components with very different useful lives. For example an aeroplane consists of the external structure, the avionics system, engine and cabin interior. Depreciation must therefore be calculated on each of these components over their individual useful lives, using their individual residual values.

1.8 Disposal of non-current assets

When a non-current asset is de-recognised, its carrying amount is removed from the statement of financial position. IAS 16 states that the carrying amount of an item of property, plant and equipment should be **derecognised** in the following circumstances:

- on disposal of the asset, or
- when no future economic benefits are expected to arise from its use or from its disposal.

The gain or loss on the disposal should be included in profit or loss in the period in which the disposal occurs.

The gain or loss on the disposal is calculated as:

	\$
Net disposal proceeds	X
Minus: Carrying amount	(X)
Gain/(loss) on disposal	X/(X)

IAS 16 does not allow the gain on disposal to be included in the revenue line of the statement of comprehensive income or income statement, but it does not specify where it should be shown. It simply states: 'The gain or loss arising from derecognition of an item of property, plant and equipment shall be included in profit when the item is derecognised…Gains shall not be classified as revenue.'

Disposal of a re-valued asset

On disposal of a re-valued asset it must be remembered that the revaluation gain has already been recognised in the revaluation reserve. Therefore the gain on disposal is calculated based on the re-valued carrying value.

If there is still a balance on the revaluation reserve relating to this asset, the balance in the revaluation reserve should be reduced to zero. This should be included in other comprehensive income for the period and there should be a direct transfer of the balance from the revaluation reserve to the accumulated profits reserve.

It is not permitted to release the revaluation reserve to profit or loss for the year in which the asset is disposed of. This practice is called 'recycling' and is not permitted by IAS 16.

Example

On 1 April Year 1, a company buys a machine, with an expected life of 20 years. By the end of 31 March Year 5, the carrying value is as follows:

	$
Cost	180,000
Accumulated depreciation (4 years × $9,000)	(36,000)
Net book value	144,000

The asset is re-valued to $200,000 on 1 April Year 5, resulting in a gain on revaluation. The gain of $56,000 ($200,000 – $144,000) is credited to the revaluation reserve on this date. On 1 April Year 7, the asset is sold for $229,000.

The financial year of the company ends on 31st March.

After the revaluation, annual depreciation is based on the re-valued amount of the asset ($200,000) and its remaining useful life (16 years). The annual depreciation charge is therefore $12,500, which is $3,500 higher than the depreciation charge based on the historical cost of the asset.

Required

How should the disposal be accounted for?

Answer

The disposal on 1 April Year 7 would be recorded as follows:

(a) **Carrying amount prior to disposal on 1 April Year 7**

	$
Machinery at valuation at 1 April Year 7	200,000
Accumulated depreciation ($200,000 /16 years) × 2 yrs	(25,000)
Net book value	175,000

(b) **Revaluation reserve**

On 1 April Year 5, when the asset was re-valued, the revaluation reserve was $56,000. The company is allowed to make a reserve transfer each year following revaluation for the amount of the additional depreciation arising from the revaluation.

The historical cost depreciation was $9,000 per annum, and the revised depreciation is $12,500. Therefore over the past two years since the revaluation, the entity will have transferred $3,500 each year from the revaluation reserve to accumulated profits, to offset the additional depreciation effect on the income statement.

The revaluation reserve at 1 April Year 7 is therefore $56,000 – (2 years × $3,500) = $49,000.

(c) **Profit on disposal –** included in profit or loss for year to 31 March Year 8.

	$
Sale proceeds	229,000
Minus: Net book value on disposal	(175,000)
Profit on disposal	54,000

(d) Other comprehensive income for year to 31 March Year 8 and transfer from revaluation reserve to retained earnings reserve on 1 April Year 7.

	Revaluation reserve	**Retained earnings**
	$	$
At 1 April Year 7	49,000	X
Transfer on disposal of non-current asset	(49,000)	49,000
At 31 March Year 8	0	Y

1.9 Assets held for sale

IFRS 5: *Non-current assets held for sale and discontinued operations* is based on the equivalent US standard. It provides special rules for the measurement and classification of assets that are 'held for sale'.

Held for sale

To be classified as 'held for sale', an asset or disposal group (a group of assets to be sold as a single transaction) must meet all of the following conditions:

- The asset(s) must be available for immediate sale.
- The sale must be considered **highly probable**. This means that:
  - senior management must be committed to the disposal plan
  - an active programme to find a buyer has begun
  - the asset is being marketed at a reasonable price, and
  - completion of the sale is anticipated in the next 12 months.
- An asset that is to be 'abandoned' rather than sold does not meet these conditions. So if a company plans to scrap an asset or just stop using it, then the normal rules of IAS 16 (for calculating a gain or loss on disposal) will apply.

Measurement of assets that are 'held for sale'

Assets held for sale should be measured at the **lower** of:

- carrying value (net book value), and
- fair value minus costs to sell (market price minus any disposal costs).

Once an asset is classified as held for sale and the reassessment of value has taken place, no future depreciation should be charged on the asset before it is sold.

Disclosures in the statement of financial position

Assets that are held for sale should be disclosed separately from other assets in the statement of financial position.

If it is a 'disposal group' that is held for sale, then the assets in the disposal group and the liabilities within the group should be separated, and the assets and liabilities held for sale should be shown separately from the other assets and liabilities in the statement of financial position.

Additional disclosures should be given in the notes to describe the asset(s) held for sale, the circumstances of the sale, the amount charged on the re-measurement, and the segment to which the asset(s) belong.

Investment property (IAS 40)

- Definition
- Measurement options

2 Investment property (IAS 40)

2.1 Definition

IAS 40: *Investment property* defines an investment property as land or buildings that are held (by its owner or by a lessee under a finance lease):

- to earn rental income, or
- as an investment that is expected to increase in capital value, or
- both for rental income and capital appreciation.

Property is **not** investment property in any of the following circumstances, and so in these circumstances property does not come within the scope of IAS 40:

- Property intended for sale in the ordinary course of business (for example, property of a house builder awaiting sale will be accounted for as inventory under IAS 2).
- Property being built for a third party. This is a construction contract under IAS 11.
- Property occupied by the owner (IAS 16) or owner occupied and awaiting disposal (IFRS 5).
- Property that is currently being constructed for use as an investment property. During the period of construction, the asset is accounted for under the rules of IAS 16.

Where an investment property is leased to a parent or subsidiary company, this does **not** qualify as an investment property in the **consolidated accounts**, because from the group's perspective it is not an external investment. However, it **is** treated as an investment property in the **individual accounts** of the lessor (the owner).

For a property held under an operating lease agreement, the company can choose on a property-by-property basis whether to recognise this as an investment property.

2.2 Measurement options

The investment property should initially be recorded at cost. In line with IAS 16, the cost should include any directly-related costs of acquiring the asset, such as legal fees and non-refundable taxes.

Where the property is held under a finance lease, it should be measured in accordance with IAS 17 at the **lower** of:

- its fair value, and
- the (discounted) present value of the expected future lease payments.

Once recognised, the company can select one of two accounting policies, which must be applied to all its investment properties:

- fair value model, or
- cost model.

Fair value model

If the fair value model is chosen, each investment property should be valued at fair value with the resulting gain or loss being recognised in profit or loss.

Fair value is defined as 'the price at which the property could be exchanged between knowledgeable and willing parties in an arm's length transaction'. This is the market price that the company could recover by selling the asset in an active market to a company outside the group. If an active market does not exist, the standard discusses various methods of approximating the fair value using, for example, prices in less active markets or discounted cash flow projections.

An investment property acquired under an operating lease requires further thought. The standard treatment under IAS 17 for an operating lease is to exclude the asset from the lessee's statement of financial position. However, if the company chooses to recognise this as an investment property under the fair value model (see above), then it is required to treat the lease as a finance lease and bring the asset into the statement of financial position in order to give it a fair value. This treatment is only possible if the company is using the fair value model for its investment property. Otherwise the standard accounting treatment for operating leases is required (and the asset stays out of the statement of financial position of the lessee).

Depreciation is never charged on investment properties under the fair value model.

Cost model

If the cost model is chosen by an entity for its investment property, the cost of the property is measured in accordance with the standard rules of IAS 16 *Property, plant and equipment*.

The cost model requires the investment property to be depreciated over its useful economic life, again in accordance with IAS 16 rules.

When investment property is measured at cost, the fair value must be disclosed in a note to the financial statements.

Intangible assets (IAS 38)

- Scope of IAS 38
- Recognition and measurement of intangible assets
- Sources of intangibles
- Research and development expenditure
- Amortisation of intangible assets

3 Intangible assets (IAS 38)

3.1 Scope of IAS 38

An **intangible asset** is an identifiable non-monetary asset without physical substance.

IAS 38 *Intangible assets* deals with accounting for intangibles such as patents, trademarks, licences, computer software, databases, broadcasting rights, non-competition agreements, customer contracts and customer relationships.

IAS 38 does **not** cover intangibles that are within the scope of another standard, for example:

- deferred tax assets (IAS 12)
- leases (IAS 17)
- assets arising from employee benefits (IAS 19)
- financial assets (IAS 39)
- goodwill acquired in a business combination (IFRS 3)
- non current intangible assets classified as held for sale (IFRS 5)
- mineral rights and expenditure on the exploration for, or development and extraction of, minerals, oil and natural gas (IFRS 6).

3.2 Recognition and measurement of intangible assets

An intangible asset must be recognised only when **three conditions are met**:

- the asset must be identifiable
- there must be probable future economic benefits from the asset and
- the measurement of the cost of the asset must be reliable.

All three conditions must be met before an intangible can be recognised in the financial statements.

- The asset must be **identifiable**:
  - it must capable of being separated or divided from the entity and sold, transferred, licensed, rented or exchanged (as a separate item), or
  - it arises from a contractual or other legal right.

- It must be probable that **expected future benefits** will flow to the entity from the asset.
- The cost of the asset can be **measured reliably**.

An intangible asset must initially be recorded at cost. In subsequent periods, the entity can choose from one of two valuation models:

- cost model, or
- revaluation model

If an intangible asset is accounted for using the revaluation model, all other intangible assets in its class must also be re-valued.

In practice, the revaluation model is rarely used for intangibles, because IAS 38 requires that revaluation to fair value should be determined by an active market. Given the unique characteristics of most intangible assets, an active market is unlikely to exist – except perhaps for intangibles such as taxi licenses, fishing licenses or production quotas.

3.3 Sources of intangibles

The recognition of intangible assets and measuring their cost can lead to some accounting problems.

Separate acquisition

When an intangible asset is purchased as a separate item, the accounting treatment is not controversial. The three requirements for recognition are always met. There is a separate and identifiable asset, and a recognisable purchase cost. There has been a transaction to acquire the intangible and so clearly it is expected that the transaction will generate future economic benefits.

Note: When an intangible asset is acquired by purchase, its cost can usually be measured reliably. The cost of a separately-acquired intangible, such as patent rights or rights to ownership of a trademark, should comprise:

- the purchase price, including import duties and non-refundable purchase tax, plus
- any directly attributable costs of preparing the asset for its intended use.

Acquisition as part of a business combination

An intangible asset may be acquired as part of the acquisition of a new subsidiary. As a result of a business combination, the acquirer may pay more than the sum of the fair value of the net assets of the subsidiary that is acquired. This may be because the acquirer is gaining access to the goodwill (reputation) of the acquired subsidiary, but it could also be to recognise the existence of intangibles that are not reflected in the statement of financial position of the acquired subsidiary.

Examples might include customer lists, orders waiting to be fulfilled, established customer relationships and non-competition agreements.

On acquisition of a subsidiary, these intangibles must be recognised separately from the purchased goodwill, but only if the asset's fair value can be measured reliably. (The requirement that the intangible should probably provide future economic benefits for recognition is always considered to be satisfied, because this probability will be reflected in the fair value measurement of the intangible.)

IAS 38 argues that the fair value of intangibles acquired in this way can normally be measured reliably. The only exception would be where the intangible arises from a legal right or a contractual right, and either:

- it is not separable (for example, it is a licence restricted to use by the entity only, so that it cannot be sold as a separate item), or
- it is separable, but there is no history or evidence of the exchange of similar assets (in other words, it is a unique licence whose value cannot be measured reliably).

Internally-generated intangible assets

Internally-generated goodwill **must not** be recognised as an asset. This is because it is not identifiable (it is not separable from the entity) and reliable measurement would not be possible.

However, development costs might be recognised as an internally-generated intangible asset. Development costs are incurred at the end of a research and development process, which happens in two phases:

- a research phase, and
- a development phase.

3.4 Research and development expenditure

Definitions

The term 'research and development' is commonly used to describe work on the innovation, design, development and testing of new products, processes and systems. IAS 38 makes a clear distinction between 'research' and 'development'.

- **Research** is defined as original and planned investigation undertaken to gain new scientific knowledge and understanding.
- **Development** is the application of research findings or other knowledge to a plan or design for the production of new or substantially improved products, processes, systems or services before the start of commercial production or use.

Accounting treatment of research costs

Expenditure on research should be recognised as an expense in profit or loss as it is incurred. Research costs cannot be an intangible asset. (Any property, plant and equipment used in research or on a research phase, such as laboratory equipment, could be capitalised in accordance with IAS 16 and depreciated. The depreciation charge is a revenue expense.)

Accounting treatment of development costs

Development costs should be recognised as an asset, **but only if all the following conditions** can be demonstrated:

- It is technically feasible to complete the development project.
- The entity intends to complete the development of the asset and then use or sell it.
- The asset that is being developed is capable of being used or sold.
- Future economic benefits can be generated. This might be proved by the existence of a market for the asset's output or the usefulness of the asset within the entity itself.
- Resources are available to complete the development project.
- The development expenditure can be measured reliably (for example, via costing records).

If any of these conditions are not met, the development expenditure should be recognised as a revenue expense in profit or loss, and cannot be treated as an intangible asset. Once such expenditure has been written off as an expense, it cannot subsequently be reinstated as an intangible asset (for example, if all the conditions are subsequently met for recognising the costs of the development work as an intangible asset). Development costs must be capitalised, but only development costs incurred after all the conditions for capitalisation as an intangible asset are met

Example

Entity Q has undertaken the following activities during Year 1:

(1) Training of sales staff at a cost of $50,000. Additional revenue as a result of training the staff to a higher level of skill is expected to be in the region of $500,000.

(2) Development of a new product. Total expenditure on development of the product has been $800,000. All of the conditions for recognising the development costs as an intangible asset have now been met. However, $200,000 of the $800,000 was spent before it became clear that the project was technically feasible, could be resourced and the developed product would be saleable and profitable.

Required

Consider how the above amounts will be dealt with in the financial statements of Entity Q for Year 1.

Answer

Training costs. These must be written off as an expense in profit or loss as incurred. The 'asset' (the training costs) is not controlled by Entity Q. The cost is controlled by the staff who could leave at any time.

Development costs. The $200,000 must be written off as an expense in profit or loss. The remaining $600,000 must be capitalised and recognised as an intangible asset (development costs).

Measurement of internally-generated intangibles

Intangible assets should be measured initially at their cost.

The cost of a purchased intangible asset is its purchase price.

The cost of an internally-generated intangible asset (such as development expenditure) is the expenditure incurred from the date when the asset first meets the recognition criteria. It should not include:

- selling, administrative and other general overheads
- training costs
- advertising expenditure.

Measurement after initial recognition

As with IAS 16 and tangible non-current assets, having recognised an intangible asset, the entity should then choose between:

- the cost model, or
- the revaluation model.

This is an accounting policy choice and the selected policy must be applied consistently across each class of intangible assets.

Under the **cost model**, assets are carried at cost minus any accumulated amortisation and any accumulated impairment losses. Costs that may be capitalised if they meet the above development criteria include:

- costs of materials and services used
- costs of employee benefits
- fees to register a legal right, and
- amortisation of patents and licenses that are used to generate the intangible asset.

Under the **revaluation model** assets are carried at fair value, minus any accumulated amortisation and any accumulated impairment losses. Fair value must be determined by reference to an **active market**. Revaluations must be carried out regularly, so that for any reporting period the carrying amount of the asset in the statement of financial position is not materially different from its fair value.

An active market is defined as one where:

- the items traded are homogenous
- willing buyers and sellers can be found at any time, and
- prices are available to the public.

If no such market exists for the intangible asset (and in practice, due to the unique nature of intangibles, it rarely will exist) then the cost model must be adopted.

Website development costs and software development costs

SIC Interpretation 32 *Intangible assets – website costs* considers the accounting treatment of development costs for a web site. The Interpretation states that the development by an entity of its own website for internal or external access is an internally-generated asset and should be accounted for in accordance with IAS 38. This means that capitalisation should only occur if the development meets the requirements for recognition listed above.

The most difficult item to 'prove' for the purpose of recognising the development cost as an asset is the requirement that it will generate future economic benefits from the website. A website that simply promotes and advertises its own products and services does not meet this requirement, so the costs of developing the website would have to be 'expensed' and written of to profit or loss as incurred. However a website that allows customers to place orders will generate future benefits and so the costs of its development should be capitalised.

If an entity has computer software that is essential to the operation of the computer hardware (for example the operating system on a computer) the software should be capitalised as part of the hardware cost in accordance with IAS 16. If the computer software is a stand-alone package, it should be accounted for in accordance with IAS 38.

3.5 Amortisation of intangible assets

An intangible asset, once recognised, should be amortised over its estimated useful life, unless this is believed to be indefinite. When determining the useful life, it is necessary to consider:

- the expected usage by the entity
- typical product life cycle for the asset
- technical, technological or commercial obsolescence
- the stability of the industry and changes in market demands
- expected actions by competitors/ potential competitors
- the level of maintenance to obtain future economic benefits
- the period of control over the asset and any legal limits on its use (i.e. expiry date of a patent agreement), and
- whether the useful life of the asset is dependent on the useful life of other assets.

Given the rate of change in technology, computer software and many other intangible assets are likely to have very short useful lives.

(Note: Purchased goodwill on the acquisition of a subsidiary is not amortised. However, it is subject to impairment.)

Example

A broadcasting licence is renewable every ten years, on condition that the entity provides a suitable level of service and complies with legislative requirements. The licence may be renewed indefinitely at little cost and has been renewed twice before. The current licence expires in five years and the entity intends to renew it indefinitely. Evidence supports their ability to do so.

Required

Outline an appropriate amortisation policy for this intangible, explaining what further information is required to support your decision.

Answer

The licence should not be amortised as it appears that the useful life is indefinite and so it is expected to contribute to the entity's cash flows indefinitely. As a result of not being amortised, an annual impairment review must be conducted.

Further information required to support this conclusion:

- Any difficulties renewing the licence in the past, which might indicate possible problems in the future.
- Any breach of service levels and legislative requirements which may jeopardise applications to renew in the future.
- Whether technology is expected to be replaced such that this licence is no longer required or appropriate.

Impairment of assets (IAS 36)

- Objective and scope of IAS 36
- Identifying that an asset may have impaired
- Measuring the recoverable amount
- Recording the impairment
- Cash generating units

4 Impairment of assets (IAS 36)

4.1 Objective and scope of IAS 36

The **objective** of IAS 36: *Impairment of assets* is to ensure that assets are 'carried' in the financial statements at **no more than** their recoverable amount.

The **recoverable amount** of an asset is defined as the higher of its:

- fair value minus costs to sell, and
- value in use.

Fair value less costs to sell is the amount obtainable from the sale of an asset in an arm's length transaction between knowledgeable, willing parties, less the costs of disposal.

Value in use is the present value of future cash flows from using an asset, including its eventual disposal.

IAS 36 applies to **all assets, except for**:

- inventories (IAS 2)
- deferred tax assets (IAS 12)
- assets arising on a pension scheme (IAS 19)
- financial instruments (IAS 39)
- investment property that is measured at fair value (IAS 40)
- biological assets measured at fair value (IAS 41)
- assets held for sale (IFRS 5).

IAS 36 **does** cover impairments of property, plant and equipment and intangible non-current assets, including purchased goodwill.

There are various stages in accounting for an impairment loss:

(1) Establish whether there is an indication of impairment.

(2) If so, assess the recoverable amount.

(3) Write down the affected asset (by the amount of the impairment) to its recoverable amount.

Each of these stages will be considered in turn.

4.2 Identifying that an asset may have impaired

An entity is required to assess at the end of each reporting period whether there is an indication that an asset may be impaired. If an indication of impairment is found, then work must continue to ascertain the recoverable amount of the asset.

In addition, a calculation of the recoverable amount must take place annually, regardless of any indications of impairment, for the following assets:

- goodwill
- intangible assets with a **indefinite** useful life
- an intangible asset not yet brought into use (development costs that have been capitalised, but where amortisation has not yet started).

Indicators of impairment

When assessing whether there is an indication of impairment, IAS 36 requires that, as a minimum, the following sources are considered:

Sources of information indicating impairment

External sources	Internal sources
▪ An unexpected decline in the asset's market value.	▪ Evidence that the asset is damaged or no longer of use to the entity.
▪ Significant changes in technology, markets, economic factors or laws and regulations that have an adverse effect on the company.	▪ There are plans to discontinue or restructure the operation for which the asset is currently used.
▪ An increase in interest rates, affecting the value in use of the asset.	▪ There is a reduction in the asset's expected remaining useful life.
▪ The company's net assets have a higher carrying value than the company's market capitalisation (which suggests that the assets are over-valued in the statement of financial position).	▪ There is evidence that the entity's expected performance is worse than expected.

4.3 Measuring the recoverable amount

An asset must be carried at no more than its recoverable amount. If the carrying value is higher than the recoverable amount, the asset has suffered impairment and must be written down. An asset is therefore carried in the statement of financial position at the lower of:

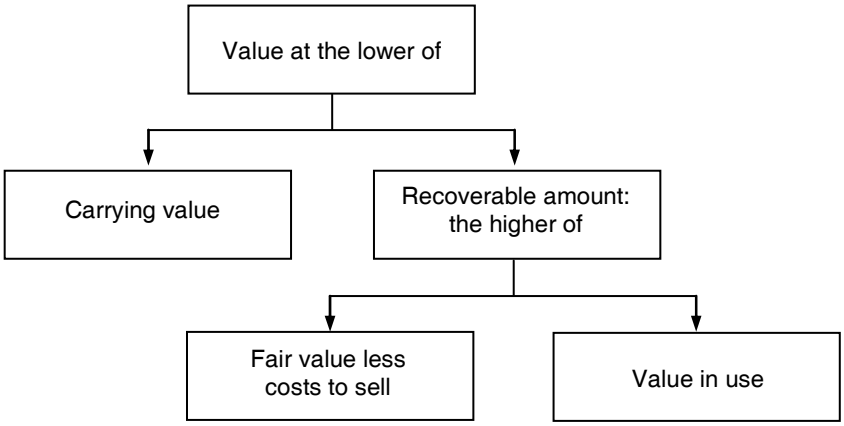
- its current carrying value, and
- its recoverable amount.

But what is the 'recoverable amount' of an asset?

Recoverable amount is the **higher** of:

- an asset's fair value minus costs to sell, and
- its value in use.

In summary:



Fair value minus costs to sell

Fair value is normally market value. If no active market exists, it may be possible to estimate the amount that the entity could obtain from the disposal.

Direct selling costs normally include legal costs and costs necessary to bring the asset into a condition to be sold. However, redundancy and similar costs (for example, where a business is reorganised following the disposal of an asset) are not direct selling costs.

In determining fair value, the following sources should be used in descending order:

(1) The price in a binding sales agreement between willing and unrelated parties.

(2) If (1) does not exist: the price at which someone is prepared to buy ('bid price') in an active market.

(3) If (1) and (2) do not exist: an approximate value based on the most recent price obtained in the market or based on other available information.

Value in use

Value in use is calculated by:

- estimating future cash flows from the use of the asset (including those from ultimate disposal)
- discounting them to present value.

Estimates of future cash flows should be based on reasonable and supportable assumptions that represent management's best estimate of the economic conditions that will exist over the remaining useful life of the asset.

The net present value is derived by discounting back the future operating cash flows at the risk-free market rate of interest.

Example

A company has a machine in its statement of financial position with a net book value of $300,000. The machine is used to manufacture the company's best-selling product range, but the entry of a new competitor to the market has severely affected sales. As a result, the company believes that the future sales of the product over the next three years will be only $150,000, $100,000 and $50,000. The asset will then be sold for $25,000. An offer has been received to buy the machine immediately for $240,000, but the company would have to pay shipping costs of $5,000.

The risk-free market rate of interest is 10%.

Market changes indicate that the asset may be impaired and so the recoverable amount for the asset must be calculated.

- Fair value minus costs to sell is $235,000 ($240,000 fair value minus $5,000 disposal costs)
- Value in use is the discounted future cash flows from keeping the asset. This is:

$$\frac{150,000}{1.1}+\frac{100,000}{1.1^2}+\frac{(50,000+25,000)}{1.1^3}=\$275,357$$

The recoverable amount is the higher of (1) value in use and (2) fair value minus costs to sell. In this example, this is $275,357 (the higher of $235,000 and $275,357).

The asset has a carrying value of $300,000, which is higher than the recoverable amount from using the asset. The asset should be valued at the lower of carrying value and recoverable amount. It must therefore be written down to the recoverable amount, and an impairment of $24,643 must be recorded. (Impairment = $300,000 – $275,357.)

4.4 Recording the impairment

The impairment loss should normally be recognised immediately in profit or loss.

However, if the impairment relates to a re-valued asset, it is treated as other comprehensive income and (as a downward revaluation) the impairment loss should be set against the revaluation reserve balance relating to that asset. If there is any excess impairment, this should be charged to profit or loss.

Following the recognition of the impairment, the future depreciation of the asset should be based on the revised carrying amount, minus the residual value, over the remaining useful life.

Example

The previous example is now continued.

The $300,000 carrying value for the machine is based on a revaluation that was made two years previously, which gave rise to a revaluation reserve of $20,000.

Required

Explain the accounting treatment for the $24,643 impairment loss.

Answer

The earlier revaluation gain on the asset, currently recorded in the revaluation reserve, is reversed before any loss is charged to profit or loss. The accounting treatment of the impairment loss is to:

- Treat the first $20,000 of the impairment as a downward revaluation, to eliminate the $20,000 for the asset in the revaluation reserve. This is reported as other comprehensive income for the financial year
- Write off the remaining $4,643 as an impairment loss in profit or loss for the financial year.

		$	$
DR	Revaluation reserve	20,000	
DR	Profit and loss (balancing figure)	4,643	
CR	Property, plant and equipment		24,643

Reversing an impairment loss

An impairment loss may be reversed when there is evidence that this has happened. Any reversal:

- must be justifiable, by reference to an improvement in the indicators of impairment, and
- should not lead to a carrying amount in excess of what the carrying amount of the asset would have been without the recognition of the original impairment loss.

A reversal should be:

- recognised immediately in profit or loss, unless
- the original impairment was reported as other comprehensive income and charged directly to the revaluation reserve, in which case the reversal should be reported as other comprehensive income and credited to the revaluation reserve.

Depreciation charges for future periods should be adjusted to allocate the asset's revised carrying amount, minus any residual value, over its remaining useful life.

An impairment loss that has arisen on goodwill **cannot** be reversed.

4.5 Cash generating units

In most situations, one asset is not capable of generating cash flows individually. Instead, assets are used together with other assets. When a group of assets together generate the cash flows, and they are called a 'cash generating unit' (CGU).

A **cash generating unit** is the smallest identifiable group of assets that generates cash outflows that are largely independent of those of other assets or groups of assets. For example, a CGU of a restaurant chain may be an individual restaurant.

An asset that is potentially impaired may be part of a larger group of assets which form a cash-generating unit. It may therefore not be possible to estimate the asset's recoverable amount in isolation from the other assets in the CGU.

This may be particularly relevant to goodwill. A CGU must include all assets that generate the cash flows, including goodwill. This is because goodwill does not generate cash flows independently, but it does contribute to the output of the company. Purchased goodwill on the acquisition of a subsidiary must therefore be allocated to one or more CGUs. A CGU (or collection of CGUs) to which goodwill is allocated for the purpose of impairment test cannot be larger than an operating segment, as defined by IFRS 8).

IAS 36 requires that goodwill should be reviewed for impairment **annually**, and the value of goodwill cannot be estimated in isolation. The assessment of impairment will have to take into consideration the entire CGU.

It may be possible to allocate goodwill across several cash-generating units. If allocation is not possible, the impairment review is carried out in two stages:

1 Carry out an impairment review on each of the cash generating units (excluding the goodwill) and recognise any impairment losses that have arisen.

2 Then carry out an impairment review for the entity as a whole, including the goodwill.

Allocating an impairment loss to assets in a cash-generating unit

When an impairment loss arises on a cash generating unit, the impairment loss is allocated across the assets of the cash-generating unit in the following order:

- first, to any individual assets that are obviously impaired
- next, to the goodwill allocated to the cash-generating unit
- next, to the other assets in the cash-generating unit, on a pro-rata basis.

However, the carrying amount of an asset cannot be reduced below the highest of:

- its fair value less costs to sell (if determinable)
- its value in use (if determinable), and
- zero.

Example

A cash-generating unit (CGU) consists of the following assets:

Asset	Carrying value
	$
Machine	300,000
Feeder	30,000
Packer	70,000
Share of factory space used (1/20 × $2 million)	100,000
License to produce the product range	50,000
Allocated goodwill (1/12 × $240,000)	20,000
Total carrying value of CGU	570,000

The recoverable amount of the CGU is $470,000, giving rise to an impairment loss of $100,000.

Required

Explain how the impairment will be allocated across the cash-generating unit.

Answer

Asset	Carrying value	Impairment write-down (see working)	Impaired value (see working)
	$	$	$
Machine	300,000	43,636	256,364
Feeder	30,000	4,364	25,636
Packer	70,000	10,182	59,818
Share of factory space	100,000	14,545	85,455
License	50,000	7,273	42,727
Allocated goodwill	20,000	20,000	0
Total carrying value of CGU	570,000	100,000	470,000

Working

The impairment is first allocated against the goodwill. The remaining $80,000 is apportioned across the other non-current assets in the cash-generating unit (CGU) according to their value.

	$
Impairment	80,000
Total non-current asset value (excluding goodwill)	550,000
Impairment per $1 of value	$0.145

In the above table, the impairment write-down for all assets except the goodwill is therefore $0.145 for each $1 carrying value of assets.

CHAPTER 11

Financial instruments

Contents

The nature of financial instruments and derivatives

- What is a financial instrument?
- The need for accounting standards on financial instruments
- Derivatives
- Embedded derivatives
- IFRIC Interpretation 9: Reassessment of embedded derivatives
- The accounting standards for financial instruments

1 The nature of financial instruments and derivatives

1.1 What is a financial instrument?

A financial instrument is a contract that gives rise to both:

- a financial asset in one entity, and
- a financial liability or equity instrument in another entity.

For example, a bank loan is a financial instrument. If a bank lends money to a company, the bank has a financial asset. The company that takes out the loan has a financial liability. Both parties are linked by way of a loan contract.

An investment in equity shares is also a financial instrument. If company A issues shares that are acquired by company B, company B has a financial asset (its investment in shares) and company A has equity. The two companies are linked by a contract (since the shares give rights to the shareholders).

Financial instruments include:

- cash
- shares
- loans
- debentures, and
- accounts receivable or accounts payable.

IAS 39 also includes 'contracts of financial guarantee' as financial instruments, unless they are dealt with as insurance contracts under IFRS 4. This would apply, for example, to a factoring arrangement in which the entity that transfers title to its receivables (to the factoring company) may give a guarantee for bad debts up to a specified maximum amount.

Financial derivatives and commodity derivatives are other important types of financial instrument.

1.2 The need for accounting standards on financial instruments

This chapter is concerned with long-term financial instruments. These are the subject of three accounting standards:

- IAS 32: *Financial instruments: Presentation*
- IAS 39: *Financial instruments: Recognition and measurement*
- IFRS 7: *Financial instruments: Disclosure*

IAS 32 and IAS 39 were updated as a result of a review of IASB accounting standards review and came into force in December 2005. IFRS 7 replaced the disclosure requirements of IAS 32 and became effective for financial statements beginning on or after 1 January 2007.

Since the 1980s, entities have made increasing use of many different kinds of sophisticated financial instruments. Part of the need for accounting standards arises from their complexity.

One problem is that some financial instruments (for example, convertible bonds) combine elements of equity and elements of debt finance. They might therefore be referred to as **compound financial instruments**. So should they be presented in the statement of financial position as equity, or as debt, or as a combination of debt and equity? If they are to be presented as a combination of debt and equity, how should the debt and the equity elements be separated?

Before IAS 32 and IAS 39 were developed, some entities deliberately chose unusual and complex forms of finance in order to make their long-term borrowings appear less than they really were, by treating the financial instruments as equity.

A further problem has been the use of **derivatives** (for example options, futures and forward contracts). A derivative is a financial instrument with the following characteristics:

- its value changes in response to changes in items such as a specified interest rate, financial instrument price or foreign exchange rate
- it requires no initial investment or very small initial investment
- it will be settled at a future date.

Entities use derivatives in order to manage risk. For example, an entity can protect itself from changes in foreign currency exchange rates by taking out a forward contract to buy or sell foreign currency at a fixed price on a future date.

Because the value of derivatives depends on movements in an underlying item, an entity with derivatives can be exposed to significant **risk and uncertainty**. Risk is the potential for large gains or losses. The financial performance and position of an entity can change significantly in a very short time.

However, derivatives have little or no cost. Even if they represent significant assets and liabilities they may not be recognised in a traditional historical cost statement of financial position or they may be recognised at an amount that does not reflect their

actual value). This means that users will not be aware of the true level of risk that the entity faces.

IAS 39 and IFRS 7 now require derivatives to be recognised in the statement of financial position and information about them to be disclosed in the financial statements.

1.3 Derivatives

A company can enter into a transaction involving a derivative for one of two reasons:

- to hedge against exposure to a particular risk, or
- to speculate, and hope to make a profit from favourable movements in rates or prices.

Hedging with derivatives

Derivatives can be used to obtain protection against exposure to the risk of an unfavourable movement in the market price of an item, such as the price of a commodity, an interest rate or a foreign exchange rate.

For example, a chocolate manufacturer may be worried that the price of cocoa might increase and if it does, it will affect his costs of production and operating profits. He could manage this risk by entering into a **forward contract** to fix now the price of his future purchases of cocoa. By fixing the price now for future purchases, the risk of an adverse movement in the market price of cocoa is removed.

This is described as 'hedging' the risk, or hedging the exposure to risk. The manufacturer is hedging his risk and guaranteeing his future purchase costs. The manufacturer may have arranged the forward contract with another party who believes that the market price of cocoa will drop below the fixed price in the contract, and so expects to make a profit by selling cocoa to the manufacturer at a higher price than he could sell in the market.

Speculation and the use of derivatives

Many derivatives are traded on exchanges, and so are easily available for buying and selling. Entities can buy or sell derivatives in order to set up speculative positions, so that a profit will be made from dealing in the derivatives provided that the market price of the 'underlying item' moves favourably.

For example, forward contracts in cocoa could be purchased by a company that has no interest in the cocoa itself, but just wants to gamble on future cocoa prices. The forward contracts would probably be exchange-traded forward contracts, known as commodity (cocoa) futures.

Speculating in derivatives may expose entities to huge risks, if expectations do not come true and the price of the underlying item moves the 'wrong way'. Occasionally, losses on derivatives positions can result in financial collapse of the company. A well-known example is the collapse of Barings Bank in 1995. This was

caused by one employee, Nick Leeson, who speculated in derivatives in the Japanese futures market, and made losses that were so large that they caused the bank to collapse. In the case of Barings, the losses from speculation were made by a bank, but non-bank companies are able to speculate with derivatives too, should they wish to do so.

Categories of derivatives

Derivatives can be classified into two broad categories:

- Forward arrangements
  - Forward contracts
  - Futures
  - Swaps
- Options

Forward arrangements

All forward arrangements have the same two characteristics:

- Both parties to the contract must honour the terms of the contract. For example, suppose that a chocolate manufacturer enters into a forward contract to buy a quantity of cocoa at a future date at a price that is fixed now by the contract. The company has entered into a contract that it must honour. If the market price of cocoa drops below the price in the forward contract, the manufacturer is obliged to take delivery at the agreed fixed price. He cannot buy at the lower market price instead.
- There is no initial payment by either party to enter into a forward arrangement, apart from normal transaction costs. In other words, there is no purchase price payable by one party to the other.

Forward contracts

A forward contract is a tailor-made contract to buy or sell a specified amount of a specified item (commodity or financial item) on a specified date at a specified price. For example a forward contract may be arranged by a UK company to buy US $127,000 in six months' time at a rate of $1.80 to £1, to settle a payment to a US supplier on that date. The UK company can arrange the exact amount of US dollars that it wants to buy and the exact date for settlement of the contract. 'Tailor-made' contracts are usually called 'over-the-counter' contracts.

Futures

These are very similar to forward contracts, except that they are traded on a specialist futures exchange. A key feature of a futures contract is that it is a standardised forward contract, with a fixed quantity of the item that is purchased or sold, and a fixed settlement date. For example, cocoa futures are traded on the CSCE exchange which prescribes future delivery months, locations, quantity and grade.

Swaps

A swap is an agreement between parties to exchange cash flows related to an underlying obligation. The most common type of swap is an interest rate swap. In an interest rate swap, two parties agree to exchange interest payments on the same notional amount of principal, at regular intervals over an agreed number of years. One party might pay interest to the other party at a variable or floating rate, and in return the other party may pay interest on the same principal at a fixed rate (a rate that is fixed by the swap agreement).

For example, a company with a fixed rate loan may be concerned that interest rates are about to fall, so it would like to swap from fixed interest rate obligations to a variable rate payment, in order to benefit from the expected lower rates. Based on these expectations, the company could a swap with a bank. In the swap it would agree to pay interest at a variable rate and receive interest at a fixed rate in return. The effect of the swap is to change the interest obligations of the company from a fixed rate (payment on the loan) to a variable rate (taking the loan and the swap payments together).

Note that the underlying obligation, the loan, remains in place. The change in interest payment obligations is achieved through the swap, which exists in addition to the loan.

Options

The holder of the option has entered into a contract that gives it the **right** but **not the obligation** to buy (call option) or sell (put option) a specified amount of a specified commodity at a specified price.

An option differs from a forward arrangement. An option offers its buyer/holder the **choice** to exercise his rights under the contract, but also has the choice not to enforce the contract terms. The seller of the option must fulfil the terms of the contract, but only if the option holder chooses to enforce them. Holding an option is therefore similar to an insurance policy: it is exercised if the market price moves adversely. As the option holder has a privileged status – deciding whether or not to enforce the contract terms – he is required to pay a sum of money (a premium) to the option seller. This premium is paid when the option is arranged, and non-refundable if the holder later decides not to exercise his rights under the option.

1.4 Embedded derivatives

Derivatives may be included in other types of contract. For example, a company may issue a loan with interest linked to the price of a commodity. Such a loan is a contract that combines a 'host contract' (the debt instrument) and a derivative on the price of a commodity. This is called an **embedded derivative**.

Companies are required to identify any embedded derivatives and account for them separately from their host contract, but only if the following conditions are met:

- The embedded feature meets the definition of a derivative.

- The combined contract is **not** measured at fair value, with changes in fair value recognised as profit or loss. If the combined contract is already accounted for at fair value (as for a derivative), there is no need to separate the two elements.
- The economic characteristics and risk features of the embedded derivative are not closely related to those of the host contract.

When these conditions are met, the embedded derivative is separated from the host contract and accounted for like any other derivative. The host contract is accounted for in accordance with the relevant accounting standard, separately from the derivative.

Example

A company invests in a convertible debt instrument costing $25,000. The fixed interest rate is 7%. At the end of ten years, the instrument can be converted into ordinary shares, at the option of the company. Otherwise, the capital of $25,000 will be repaid. The investment is classed as available-for-sale. The fair value of the equity option has been estimated as $3,250.

The embedded derivative is the option to convert the debt instrument into equity at the end of ten years. The host contract is the debt instrument. The embedded derivative must be separated from the host contract because the conditions listed above are met:

- There is an embedded derivative.
- The debt instrument is not measured at fair value, with changes in fair value recognised as profit or loss.
- The debt and equity do not have closely-related characteristics.

Since the fair value of the embedded derivative (the equity option) is $3,250, the transaction is recognised as follows:

	Debit	Credit
	$	$
Available-for-sale investment	21,750	
Derivative asset	3,250	
Cash		25,000

Subsequently, the available-for-sale investment and the derivative will be accounted for in different ways. (Accounting for financial instruments is explained later. It may be helpful to note that the derivative will be treated as a financial asset held at fair value, and the debt instrument will be accounted for as an 'available for sale' investment.)

1.5 IFRIC 9: *Reassessment of embedded derivatives*

IFRIC Interpretation 9 clarifies the treatment of embedded derivatives. IAS 39 requires an entity to determine whether the derivative needs to be separated from the host contract when first becoming party to the contract. IFRIC 9 details whether this should be reassessed during the life of the contract.

The consensus is that the embedded derivative is assessed when the entity first becomes party to the contract and reassessment is prohibited unless there is a significant change in the contract.

1.6 The accounting standards for financial instruments

It is important that users of financial statements should be aware of the nature of the financial instruments of an entity. In the case of derivatives, there is little or no cost involved in establishing a position in derivatives, but they can expose the company to very substantial financial risks. For example, normal forward contracts do not cost anything to arrange. It would be inappropriate to ignore the derivatives in the financial statements on the grounds that their original cost was nil or very small.

IAS 39: Recognition and measurement

- Recognition of financial instruments
- Initial measurement
- Classes of financial asset
- Classes of financial liability
- Subsequent measurement
- Subsequent measurement at fair value
- Subsequent measurement at amortised cost
- Trade receivables
- Impairment of financial instruments
- Derecognition

2 IAS 39: Recognition and measurement

2.1 Recognition of financial instruments

A financial asset or a financial liability should be recognised in the statement of financial position when the reporting entity becomes a party to the contractual provisions of the instrument.

This is different from the normal recognition criteria for an asset or a liability. The IASB's Framework states that an item should be recognised when there is a probable inflow or outflow of economic benefits.

The effect of this is that all financial assets and liabilities, including derivatives, are recognised in the statement of financial position, even if they have no cost.

For example, an entity takes out a forward contract to buy a specified amount of foreign currency at a fixed price on a future date. (This contract is a derivative.) The entity recognises the contract on the commitment date, instead of waiting until the foreign currency is actually purchased at the future date in the contract.

IAS 39 defines four classes of financial asset and two classes of financial liability and every financial instrument must be allocated to one of these classes on initial recognition.

2.2 Initial measurement

A financial instrument should initially be measured at cost. This is the fair value of the consideration given or received.

In the case of a forward arrangement, this will often be a zero cost, because nothing is paid to acquire the financial derivative, and there is no obvious gain or loss to either party from the transaction at the time that it is made.

It may seem odd that a financial instrument needs a recognised cost when it is $nil, but it is important to recognise these items in the accounting system, because their measurement will be re-assessed at the end of the next reporting period.

When a financial instrument is acquired, there will usually be transaction costs incurred in addition to any purchase cost. For example, transaction costs may include a broker's fees. The accounting treatment of these fees depends on the class of financial instrument.

Class of financial asset	Treatment
Fair value through profit or loss	The transaction cost is expensed and written off in full as an expense in profit and loss.
All other classes	The transaction cost is capitalised and included in the initial cost of the financial instrument.

2.3 Classes of financial asset

After initial recognition, financial assets are classified into four categories. The way in which they are measured depends on the category in which they are placed.

(1) **Financial assets at fair value through profit or loss**. These are financial assets held for onward sale in the short term, speculative derivatives, and any other financial assets that the entity chooses to include in this category.

A financial instrument is held for trading if it is:

- acquired principally for the purpose of selling or repurchasing it in the near future; and
- part of a portfolio of instruments that are managed together.

An entity can choose to treat other financial instruments as 'at fair value through profit or loss', provided that they meet certain criteria.

Equity instruments that do not have a quoted price in an active market cannot be included in this category.

(2) **Held to maturity investments**. These are financial assets with fixed payments and a fixed maturity that the entity seriously intends to hold until their maturity. An example is an investment in bonds issued by another entity, where there is no intention to sell the bonds on the market before their maturity.

Loan stock, redeemable preference shares and bonds issued by other entities would fall into this category, provided that the entity plans to hold the investment to the end of its term (for example, when it is redeemable). The entity must also expect to have sufficient cash or other resources available, so that it will not be forced to sell the investment before the end of its term.

(3) **Loans and receivables**. These are assets with fixed payments but are not quoted in an active market. They include regular bank loans and accounts

receivable (trade receivables). They are not expected to be sold in the near future.

This category could include loans made to other entities, trade receivables and investments in bonds and other forms of debt, provided that the other conditions are met.

(4) **Available-for-sale financial assets.** These are any other financial assets that do not fall into any of the three categories above. In addition, an entity can designate an asset as available-for-sale when it is first recognised.

2.4 Classes of financial liability

There are two categories of financial liabilities:

(1) **Financial liabilities at fair value through profit or loss**. These are financial liabilities, but with a definition similar to the corresponding category of financial assets – for example, speculative derivatives that create a liability.

(2) **Financial liabilities measured at amortised cost**. This category is for all remaining financial liabilities.

These categories of financial assets and liabilities do not affect the initial recognition of the financial instrument in the financial statements. However, they do affect the method of accounting for the financial instrument after initial recognition.

2.4 Subsequent measurement

Although financial instruments are initially recorded at cost, IAS 39 requires that the value of financial instruments should be re-assessed at each reporting date (the end of the reporting period or the settlement date for the financial instrument).

The method of re-assessing their value depends on the category of financial instrument.

When the carrying value of a financial instrument is re-assessed at fair value, there will be a difference between its previous carrying value and its new carrying value (new fair value). This difference is a gain or loss, which must be accounted for.

The method of accounting for the gain or loss on re-assessment of the carrying value also depends on the class to which the financial instrument belongs.

Class of instrument	Fair value	Amortised cost
Financial assets		
Assets at fair value through profit or loss	Re-value at fair value. Gain or loss to be taken to proft and loss (the income statement).	
Held to maturity		Value at amortised cost

Class of instrument	Fair value	Amortised cost
Loans and receivables		Value at amortised cost
Available-for-sale	Re-value at fair value. Gain or loss to be reported as other comprehensive income and taken directly to an equity reserve.	
Financial liabilities		
Liabilities at fair value through profit or loss	Re-value at fair value. Gain or loss to be taken to profit and loss (the income statement).	
Liabilities measured at amortised cost		Value at amortised cost

Valuation at amortised cost is explained later.

2.5 Subsequent measurement at fair value

When the value of a financial instrument is re-assessed at fair value, IAS 39 establishes a hierarchy to be used when deciding what is the fair value. The fair value of a financial instrument should be:

(1) Published price quoted in an active market

(2) If there is no active market:

- the price of the most recent transaction in a market
- otherwise a price obtained using a valuation technique, such as the Black Scholes pricing model for options pricing.

A fair value model re-assessment is used for two categories of financial assets:

- financial assets at fair value through profit or loss, and
- available-for-sale financial assets.

However, the resulting gain or loss on marking the investments to their market value is dealt with differently in each case:

- **Fair value through profit or loss –** The gain or loss is taken to profit and loss (the income statement) for the period.
- **Available-for-sale –** The gain or loss is reported as other comprehensive income in the statement of comprehensive income and taken to a separate reserve in equity. This reserve is then 'recycled' when the investment is sold. **Recycling** means that the cumulative gains or losses relating to this investment are removed from the reserve and taken to profit or loss as part of the gain or loss when the asset is eventually disposed of. Since the gain or loss has previously been reported in other comprehensive income, a reclassification adjustment is

required, in accordance with IAS1. The gain (or loss) recognised in profit or loss is offset by a matching loss (or gain) in other comprehensive income, to avoid double counting.

Example

- An investment is purchased for $30,000 plus 1% transaction costs on 1 April 20X6. It is classified as available for sale. At the end of the financial year, which is 31 March 20X7, the investment is re-valued to its fair value. This is $40,000. On 11 December 20X7 it is sold for $50,000.

- Initially, the investment will be recorded at cost at $30,300. This is the cost plus the capitalised transaction costs. At the end of the financial year (31 March 20X7) the investment is re-valued to its fair valued of $40,000. There is a gain of $9,700 ($40,000 – $30,300). This gain of $9,700 is included as other comprehensive income in the statement of comprehensive income for the year to 31 March 20X7, and is taken directly to an 'Available for sale reserve' in equity.

The company will need to keep a record of what each financial instrument contributes to this reserve, so that when it is eventually sold, the appropriate amount can be recycled.

The journal entry to record the disposal for the above example is as follows:

	$	$
DR Cash	50,000	
CR Investment		40,000
DR Available for sale reserve	9,700	
CR Profit or loss		19,700

The profit of $19,700 represents the gain on disposal of $10,000 ($50,000 – $40,000) plus the recycled profit from the available sale reserve of $9,700.

The $9,700 gain is reclassified from other comprehensive income in the previous year, and in the year to 31 March 20X8, profit or loss will include the realised gain of $9,700 (as shown above), but there should also be an offsetting reduction of $9,700 in other comprehensive income for the year, to prevent double-counting of the $9,700 in income.

2.6 Subsequent measurement at amortised cost

Some categories of financial asset (held to maturity investments and loans and receivables) are measured at amortised cost after their initial recognition. Amortised cost is calculated as follows for a financial asset:

- Amount initially recognised (initial cost of investment), plus
- Interest income recognised (using the effective rate), minus
- Amounts of interest actually received.

The effective rate is the internal rate of return implicit in the financial instrument.

Similarly, the amortised cost of a financial liability is calculated as:

- Amount initially recognised as a liability (initial cost), plus
- Interest expense recognised (using the effective rate), minus
- Amounts of interest actually paid.

The following example illustrates these terms and calculations.

Example

A bond with an issue value of $1 million will pay a coupon rate of 5% interest for two years, then 7% interest for two years. Interest is paid annually on the anniversary of the bond issue. The bond will be redeemed at par after four years.

The company that issued the bond uses the amortised cost method for its valuation.

- What is the effective rate?
- What is the amortised cost at the end of each year?

Answer

This financial instrument is called a 'stepped bond', because the interest payment increases (goes up a step) over the life of the bond. The effective rate is the rate that matches the amount raised from the bond issue (or, in the case of an investment in a bond, its original cost) with the discounted future cash flows from the bond. It is the discount rate that, when applied to the future interest and redemption cash flows, will give a net present value of zero. (It is the internal rate of return on the bond.)

In this example, the effective interest rate is 5.942%. (Workings are not shown.)

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

The outstanding balance at the end of a period is the opening balance plus the interest charge at the effective rate, minus the actual interest payments in the period.

Year	Bond value brought forward	Interest at 5.942%	Cash paid	Bond value carried forward
1	1,000,000	59,424	(50,000)	1,009,424
2	1,009,424	59,983	(50,000)	1,019,407
3	1,019,407	60,577	(70,000)	1,009,984
4	1,009,984	60,016	(70,000)	1,000,000
		240,000	240,000	

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

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

This treatment of the interest costs prevents companies from issuing instruments with step payments to manipulate their income statements from one year to another.

If this bond was classified by its holder as a held-to-maturity investment, the calculations would be the same. However, the interest calculated for each period would be income in profit or loss, since the bond is a financial asset. This should be deducted from the value of the asset and the amount of cash actually received should be added. At the redemption date for the bonds investment, its amortised cost/value will be the amount receivable from the company when the bonds are redeemed.

Example

X purchased a loan on 1 January 20X5 and classified it as 'held to maturity'. The financial year of X ends on 31 December.

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

Required

(a) Calculate the income for X each year.

(b) Show how this income will be allocated over the three years and calculate the amortised cost that will appear in the statement of financial position in years 1 - 3.

Answer

(a) The total income from the loan consists of:

- annual interest at the coupon rate, plus
- $2 million premium on the redemption of the loan

This equates to an effective rate of 11.67% (the IRR). This constant rate will be applied to the outstanding balance each year in order to calculate the interest income to be recognised in profit and loss.

(b) The amount recognised as income in profit or loss each year is based on the effective rate of return, but the cash actually paid is based on the coupon rate of 10%. The difference is treated as an adjustment to the carrying value of the investment in the statement of financial position, which is the amortised cost of the asset. This is calculated as follows:

Year	Asset value brought forward	Interest at 11.67%	Cash paid	Asset value carried forward
20X5	48.00m	5.60m	(5m)	48.06m
20X6	48.60m	5.65m	(5m)	49.25m
20X7	49.25m	5.75m	(5m)	50.00m
		17m	15m	

2.7 Trade receivables

Trade receivables belong to the category 'loans and receivables' under IAS 39. Initially, they are valued at fair value, which is the invoiced amount. Because they are short-term receivables, they are not discounted to present value, and do not have an effective interest rate.

However they have to be assessed for impairment at the end of each reporting period, and will be impaired if the value of the expected cash flows is less than the carrying amount. The assessment for trade receivables may be on an individual or a group basis.

The traditional methods of calculating 'bad debt provisions' (such as a percentage of receivables more than 60 days overdue) are unlikely to produce a correct figure for the present value of the future cash flows, and making 'general provisions' does not comply with the methodology set out in IAS 39.

IAS 39 states that the carrying amount of the asset should be reduced, either directly or through the use of an 'allowance account'. The amount of the loss should be included in the income statement.

This means that an allowance for impairment losses on trade receivables (doubtful debts) remains possible. However, this impairment loss must be determined in a more logical and systematic way than has often been used in the past.

2.8 Impairment of financial instruments

Impairment of most non-current assets is covered by IAS 36, but impairment of financial instruments is dealt with by IAS 39. An entity must assess for evidence of impairment at the end of each reporting period.

A financial asset is impaired if its carrying amount exceeds it estimated recoverable amount. For financial assets carried at amortised cost, estimated recoverable amount is the present value of estimated future cash flows from the asset.
Indicators of impairment might include:

- financial difficulties of the issuer – indicating that interest may not be received by a holder of bonds of the issuer
- default by the borrower on interest payments
- disappearance of an active market for the investment
- a significant continued decline in value.

Practically, it can be difficult to differentiate between a temporary decline that will reverse and a more permanent impairment. For example, a default on an interest payment is not a certain indication of permanent impairment of the investment. The borrower may have defaulted on a single interest payment in one month, and it may just be a few days late with the payment. Alternatively the loan may be fully secured, so that there is no risk of impairment even in the event of a serious default.

Accounting treatment of impairment

Any impairment loss is charged to profit or loss (the income statement).

- If the investment is classed as 'fair value through profit or loss', this will happen automatically as part of the fair value accounting process.
- If the investment is carried at amortised cost, the impairment loss is recognised in profit or loss, either by writing off the loss directly or through the use of an allowance account (such as an allowance for irrecoverable debts).
- If the investment is classed as 'available-for-sale', and if some decline in value has already been recognised directly in other comprehensive income (and directly in equity) the previously-recorded loss is removed from the equity reserve and the full impairment loss is recognised in profit or loss (the income statement).

Example

A company has invested in a bond earning a coupon rate of interest of 4% and redeemable at par after three more years. The asset is carried at amortised cost, and when it was first acquired, the effective interest rate was 5%.

There is now objective evidence to believe that at maturity, the bond will repay only $60 in every $100 of capital. As a result of this development, the asset is impaired.

The impairment in a financial asset measured at amortised cost is calculated by comparing:

- the current valuation of the asset assuming no impairment (discounted value of future cash flows, assuming these are paid in full, discounted at the effective interest rate for the financial asset), and
- the current valuation of the asset, calculated by discounting the cash flows that are now expected from the asset at the same effective rate of interest.

The difference is an impairment loss, which is recognised in profit or loss.

For example, suppose that the 4% bond would have had a value of $104,000 with no impairment, but as a result of the impairment, the present value of expected future cash flows is now only $67,000. An impairment loss of $37,000 should be recognised in profit or loss.

Example

A company has invested in a bond that is classifies as 'available for sale'. The original acquisition cost was $250,000 but a decline in value of $20,000 has been recognised in other comprehensive income. It is now recognised that the asset is impaired and its value is only $200,000.

The $20,000 of decline in value previously recognised in other comprehensive income should be recognised in profit or loss. To do this there should be a transfer from equity reserve to profit or loss of $20,000, and an additional loss of $30,000 should be recognised, to make a total impairment loss of $50,000 recognised in profit or loss.

2.9 Derecognition

Derecognition is the removal of a previously recognised financial asset or financial liability from an entity's statement of financial position.

Derecognition of a financial liability

A financial liability (or a part of a financial liability) is derecognised when, and only when, it is extinguished.

This is when the obligation specified in the contract is discharged or cancelled or expires.

Derecognition of a financial asset

Most transactions involving derecognition of a financial asset are straightforward. However, financial assets may be subject to complicated transactions where some of the risks and rewards that attach to an asset are retained but some are passed on. IAS 39 contains complex guidance designed to meet the challenge posed by complex transactions.

The guidance is structured so that a transaction involving a financial asset is subject to a series of tests to establish whether the asset should be derecognised. These tests can be framed as a series of questions.

1 Have the contractual rights to cash flows of the financial asset expired?
   - If the answer is "yes" – derecognise the financial asset
   - If the answer is "no" – ask the next question

2 Has the asset been transferred to another party?
   - If the answer is "no" – the asset is retained
   - If the answer is "yes" – ask the next question

3 Have substantially all of the risks and rewards of ownership passed?
   - If the answer is "yes" – derecognise the financial asset
   - If the answer is "no" – the asset is retained

- If the answer is "the risks and rewards are neither passed nor retained (i.e. some are passed but some kept)" – ask the next question

4 Has the asset has been transferred in a way such that risks and rewards of ownership have neither passed nor been retained but control has been lost.

- If the answer is "yes" – derecognise the financial asset
- If the answer is "no" – the asset is retained

Most transactions being considered involve the receipt of cash.

- Transactions where the asset is derecognised may lead to the recognition of a profit or loss on disposal.
- Transactions where the asset is not derecognised lead to the recognition of a liability for the cash received.

Example

ABC sells collects $10,000 that it is owed by a customer.

1 Have the contractual rights to cash flows of the financial asset expired?

Yes – Derecognise the asset

Dr	Cash		$10,000	
	Cr	Receivable		$10,000

Example

ABC sells $100,000 of its accounts receivables to a factor and receives an 80% advance immediately. The factor charges a fee of $8,000 for the service.

The debts are factored without recourse and a balancing payment of $12,000 will be paid by the factor 30 days after the receivables are factored.

Answer

1 Have the contractual rights to cash flows of the financial asset expired?

- No – ask the next question

2 Has the asset been transferred to another party?

- Yes (for 80% of it)

3 Have substantially all of the risks and rewards of ownership passed?

- The receivables are factored without recourse so ABC has passed on the risks and rewards of ownership.
- ABC must derecognise the asset transferred.

Dr	Cash		$80,000	
	Cr	Receivables		$80,000

In addition ABC has given part of the receivable to the factor as a fee:

Dr	P&L		$8,000	
	Cr	Receivables		$8,000

Example

ABC sells $100,000 of its accounts receivables to a factor and receives an 80% advance immediately. The factor charges a fee of $8,000 for the service.

The debts are factored with recourse and a further advance of 12% will be received by the seller if the customer pays on time.

Answer

1 Have the contractual rights to cash flows of the financial asset expired?

- No – ask the next question

2 Has the asset been transferred to another party?

- Yes (for 80% of it)

3 Have substantially all of the risks and rewards of ownership passed?

- the debt is factored with recourse so the bad debt risk stays with ABC. In addition, ABC has access to future rewards as further sums are receivable if the customers pay on time.
- As ABC has kept the future risks and rewards relating to the $80,000, this element of the receivable is not derecognised.

Dr	Cash		$80,000	
	Cr	Liability		$80,000

Being receipt of cash from factor – This liability is reduced as the factor collects the cash.

Dr	Liability		$X	
	Cr	Receivable		$X

In addition ABC has given part of the receivable to the factor as a fee:

Dr	P&L		$8,000	
	Cr	Receivables		$8,000

ED 2009/3: Derecognition

Many commentators have complained that IAS 39 rules for the derecognition of financial assets are difficult to understand and apply in practice.

The IASB has published an ED to improve and simplify the requirements as to when financial assets should be derecognised. The ED proposes a new derecognition model for financial assets to replace the existing rules in IAS 39 and introduce new disclosure requirements in IFRS 7.

IAS 39: Hedge accounting

- What is hedging?
- The principles of hedge accounting
- Fair value hedge
- Cash flow hedge
- Hedges of a net investment in a foreign operation

3 IAS 39: Hedge accounting

3.1 What is hedging?

Hedging is the process of entering into a transaction in order to reduce risk. Companies may use derivatives to establish 'positions', so that gains or losses from holding the position in derivatives will offset losses or gains on the related item that is being hedged.

For example, a UK company may have a liability to pay a US supplier $200,000 in three months' time. The company is exposed to the risk that the US dollar will increase in value against the British pound in the next three months, so that the payment in dollars will become more expensive (in pounds). A hedge can be created for this exposure to foreign exchange risk by making a forward contract to buy $200,000 in three months' time, at a rate of exchange that is fixed now by the contract. This is an example of hedging: the exposure to risk has been removed by the forward contract.

The logic of accounting for hedging should be that if a position is hedged, then any gains on the underlying instrument that are reported in profit and loss (the income statement) should be offset by matching losses on the hedging position in derivatives, which should also be reported in the income statement.

Similarly, any losses on the underlying instrument that are reported in the income statement should be offset by matching gains on the hedging position in derivatives, which should also be reported in the income statement.

However, without special rules to account for hedging, the financial statements may not reflect the offsetting of the risk and the economic reality of hedging. The following example demonstrates the problem.

Example

A company has an investment of 500 shares in XYZ which cost $5,000 on 1 July Year 1 and which it has classified as 'available for sale'. It is concerned that the price may drop whilst the investment is being held and so buys a put option on 1 July Year 1. As the put option is a derivative, it should be classified as 'fair value through profit or loss'.

Suppose that the put option does not expire before the end of the financial year on 31 December. At that date, the value of the financial instruments is re-assessed, and the fair value of the investment has fallen to $4,500 but the value of the put option has risen to $500.

	Investment	Put option
Cost at 1 July Year 1	$5,000	$0
Fair value at 31 December Year 1	$4,500	$500

Here, there is a perfect hedge (100% effective). The gain in the value of the put option (the hedging instrument) exactly offsets the loss in value of the investment being hedged.

Using the 'normal' measurement rules:

- The $500 fall in the value of the investment (the hedged item) would be reported as other comprehensive income and taken to an 'available for sale' reserve in equity, whilst
- The increase of $500 in the value of the put option (the hedging instrument) would be taken to profit or loss (the income statement).

As a result, there would be a reported realised profit of $500 for the year, when the logical profit on the hedging position should be $nil.

The accounting treatment of the item and the instrument is not symmetrical and so fails to reflect the elimination of the risk achieved by the hedge.

3.2 The principles of hedge accounting

Hedge accounting provides special rules that allow the matching of the gain or loss on the derivatives position with the loss or gain on the hedged item. This reduces volatility in the statement of financial position and the income statement, and so is very attractive to the preparers of accounts.

The special rules for accounting for hedging can only be used where very stringent conditions are met:

- The derivative must be designated as a hedging instrument.
- The hedge must be expected to be highly effective (almost fully offset).
- The hedge must be regularly assessed and found to be highly effective.
  - Highly effective is where the change in the value of the hedging instrument (derivative) relative to the change in the item that is being hedged is in the range 80% - 125%.
- Formal documentation must be prepared to describe
  - the hedging instrument
  - the hedged item
  - the hedged risk
  - the method of testing effectiveness
  - the type of hedge.

Under IAS 39, hedge accounting is a 'privilege' and is not an automatic right. Where the conditions for using hedge accounting are met, the method of hedge accounting to be used depends on the type of hedge. IAS 39 identifies three types of hedging relationship:

- fair value hedge
- cash flow hedge
- hedge of a net investment in a foreign entity (accounted for as a cash flow hedge).

3.3 Fair value hedge

A fair value hedge is a hedge against the risk of a **change in the fair value of an asset or liability**. For example, oil held in inventory could be hedged with an oil forward contract to hedge the exposure to a risk of a fall in oil sales prices. Or the risk of a change in the fair value of a fixed rate debt owed by a company could be hedged using an interest rate swap.

Accounting treatment of fair value hedges

Accounting for a fair value hedge is as follows:

- The gain or loss on the hedging instrument (the derivative) is taken to profit or loss, as normal.
- The loss or gain from re-assessing the value of the hedged item at fair value is also taken to profit or loss, to offset the gain or loss on the derivatives position.

In the previous example of company XYZ, the gain on the put option (hedging instrument) of $500 is taken to profit or loss. The corresponding loss on the investment (hedged item) is also taken to profit or loss. There is no loss or gain overall, because the risk has been hedged in full and is 100% perfect.

3.4 Cash flow hedge

A cash flow hedge is a hedge against the risk of changes in cash flows relating to a recognised asset or liability or an anticipated purchase or sale. For example, floating rate debt issued by a company might be hedged using an interest rate swap to manage increases in interest rates. Or future US dollar sales of airline seats by a UK company might be hedged by a US$/£ forward contracts to manage changes in exchange rates. These are hedges relating to future cash flows from interest payments or foreign exchange receipts.

Accounting treatment of cash flow hedges

Accounting for a cash flow hedge is as follows:

- The change in the fair value of the hedging instrument is analysed into 'effective' and 'ineffective' elements.
- The 'effective' portion is recognised in other comprehensive income (directly in equity).

- The 'ineffective' portion is recognised in profit or loss.
- The amount recognised in other comprehensive income is subsequently released to the income statement (profit or loss) as a reclassification adjustment in the same period as the hedged forecast cash flows affect profit or loss.

Note: The statement of comprehensive income and reclassification adjustments are explained in Chapter 16 if you are not yet familiar with them.

Example

Entity X is based in France. It expects to sell $1,000 of airline seats for cash in six months' time. The current spot rate is €1 = $1. It sells the future dollar receipts forward to fix the amount to be received in euros and to provide a hedge against the risk of a fall in the value of the dollar against the euro.

At inception, the anticipated future sale is not recorded in the accounts, and the derivative (the forward contract) has an initial value of zero.

Re-assessment at the end of the reporting period

Three months later, at the end of the reporting period, the fair value of the forward contract is re-assessed. The contract is now a financial asset with a value of €80. The change in expected cash flows in euros from the forecast seat sales has fallen by €75, from €1,000 to €925.

The hedge is highly effective, because the change in the value of the forward contract (+ €80) closely matches the change in the value of the forecast sales receipts (– €75). The hedge is 93.75% effective (75/80). Alternatively, this could be expressed as 106.67% (80/75). It is within the range 80% to 125%.

Assuming the company has designated and documented the hedge, hedge accounting can be used.

The derivative has generated a gain of €80. This must be split into 'effective' and 'ineffective'.

- The 'effective' gain is the amount of the gain that matches the fall in value in the hedged item. In this example, this is €75.
- The 'ineffective' gain is the surplus gain. This arises as a speculative element in the hedged position. In this example it is €80 - €75 = €5.

The effective gain is treated as other comprehensive income and transferred directly to equity. The ineffective element of €5 is reported as a gain in the income statement (profit or loss) for the period.

	€	€
DR Derivative	80	
CR Equity reserve		75
CR Income statement		5

At settlement

At the end of six months, suppose that the forward contract is settled with a gain of €103. The airline seats are sold, but the proceeds in euros are €905, not the €925 estimated at the end of the reporting period: – a further drop of €20.

Between the end of the previous reporting period and settlement date for the forward contract, the derivative has generated a further gain of €23 (€103 – €80). This must be split into effective and ineffective:

- Effective = €20 (€ 925 – € 905, which is the loss on the euro receipts)
- Ineffective = €3 (the balance, €23 – €20).

When the cash flows from the seat sales occur, the 'effective' gains on the derivative, currently held in the equity reserve, can be released to profit or loss. (Note: The effective gain previously reported as other comprehensive income must also be reported as a reclassification adjustment in other comprehensive income.) In this way the gain on the effective part of the hedge offsets the 'loss' in actual cash flows (the lower sales revenue now shown in profit).

The income from the sales is €905. (The accumulated reserve created by the effective gains is €95 (€75 in the previous financial year and €20 in the current year). The release of the €95 to profit or loss means that the total income from the seat sales and the effective hedged gains is €1,000. This was the amount of income that was 'hedged' by the original forward contract.

The hedge accounting has offset the loss on the underlying position (cash receipts) with gains on the derivatives position.

Summary

	Cash	Derivative (asset)	Equity reserve/other compre-hensive income	Income statement (profit or loss)
End of reporting period		+ 80	+ 75	+ 5
After the reporting period: next year				
Fair value change		+ 23	+ 20	+ 3
Sale of seats	+ 905			+ 905
Transfer from equity: reclassification adjustment			- 95	+ 95
Settle forward contract	+ 103	- 103		
	+ 1,008	0	0	+ 1,008

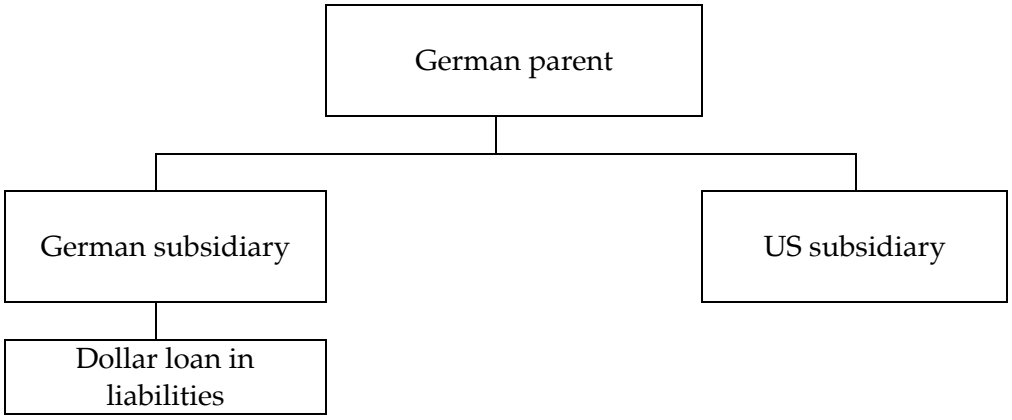
The income statement includes €1,000 revenue that the company 'locked into' with the hedging position, plus the gain of €8 (€5 + €3) on the ineffective part of the hedge (= the speculative element of the derivative).

3.5 Hedges of a net investment in a foreign operation

A previous chapter explained the accounting treatment, for consolidation purposes, of an investment in a foreign subsidiary or other foreign operation. The net assets of the foreign subsidiary are translated at the end of each financial year, and any foreign exchange differences are recognised in other comprehensive income (until the foreign subsidiary is disposed of, when the cumulative profit or loss is thenre-classified from 'equity' to profit or loss).

IAS39 allows hedge accounting for an investment in a foreign subsidiary. An entity may designate an eligible hedging instrument for a net investment in a foreign subsidiary, provided that the hedging instrument is equal to or less than the value of the net assets in the foreign subsidiary.

For example, suppose that a German company has a US subsidiary and a German subsidiary, and the German subsidiary has a US dollar loan as a liability. If the German parent chooses to use hedge accounting, the US dollar loan in its German subsidiary can be accounted for as a hedge for the parent company's net investment in the US subsidiary, provided that the size of the dollar loan is not larger than the net investment in the US subsidiary.



- In the absence of hedge accounting, any gain or loss arising on the translation of the currency loan would be reported in profit or loss for the German subsidiary, and so in profit or loss for the group. Any gain or loss arising from the net investment in the US subsidiary would be reported in other comprehensive income.
- With hedge accounting, any gain or loss arising on the translation of the currency loan would be recognised in other comprehensive income and included within the foreign exchange differences arising on translation. The gain or loss on the hedge would offset the loss or gain on the translation of the net assets of the subsidiary.

Following some uncertainty about the rules on hedging a net investment in a foreign currency, IFRIC16 was issued in 2008. The clarifications provided by IFRIC 16 were as follows.

- Hedge accounting may be applied only to foreign exchange differences arising between the functional currency of the foreign subsidiary and the functional

currency of the parent company, not the presentational currency of the parent 9if this is different).

- The hedging instrument may be held within any entity in the group provided that the conditions for hedge accounting are met in terms of the designation, documentation and effectiveness of hedging requirements of IAS39.
- When a foreign subsidiary is disposed of and hedge accounting has been used, the amount reclassified from the foreign translation reserve ('equity') to profit or loss should be the cumulative gain or loss on the hedging instrument.

IAS 32: Presentation

- Liability or equity?
- Compound instruments
- Other presentation issues

4 IAS 32: Presentation

4.1 Liability or equity?

Financial instruments **issued** by a company must be classified as either liabilities or equity. This classification should be based on the substance of the contract, rather than the legal form.

A **financial liability** is any liability where the issuer has a contractual obligation:

- to deliver cash or another financial asset to another entity, or
- to exchange financial instruments with another entity on potentially unfavourable terms.

The owner of an equity instrument is entitled to receive a dividend, but the company does not have a contractual obligation to make the payment. So equity does not meet the above definition of a financial liability.

An **equity instrument** is defined as any contract that offers the residual interest in the assets of the company after deducting all of the liabilities.

Returns on financial instruments

Returns on financial instruments are reported differently, depending on whether the instrument is a liability or equity. The classification of the financial instrument determines the treatment of the interest, dividends, gains and losses.

- Interest expense, dividend payments, gains and losses relating to a **financial liability** are recognised in the **income statement**.
- **Distributions to equity** holders are debited to equity and shown in the **statement of changes in equity**.

Example

Given the definitions above, how would preference shares and their dividend payments most likely to be classified, and why?

Answer

Preference shares must be classified as either equity or debt, according to their substance. Most preference shares are closer in substance to debt as they have the following characteristics:

- a fixed dividend
- no rights to participate in any surplus on winding up the entity.

The return on a preference share must be classified as dividends or interest in accordance with the classification of the instrument. Hence the dividend payments on most preference shares will be disclosed as interest expense in profit and loss.

4.2 Compound instruments

A compound instrument is a financial instrument, issued by a company that cannot be classified as simply a liability or as equity, because it contains elements of both debt and equity. An example of a compound instrument is a convertible bond. The company issues a bond that can be converted into equity in the future or redeemed for cash. Initially, it is a liability, but it has a call option on the company's equity embedded within it.

Typically, a convertible bond pays a rate of interest that is lower than the market rate for a non-convertible bond (a 'straight bond') with the same risk profile. This is because the terms of the conversion normally allow the bondholder to convert the bond into shares at a rate that is lower than the market price.

Split accounting for compound instruments

On initial recognition of compound instrument, the credit entry for the financial instrument must be split into the two component parts, equity and liability.

To do this, the following steps are necessary:

(1) Step 1. Derive the fair value of the liability

(2) Step 2. Calculate the equity component as the difference between the total amount for the instrument and the fair value of the liability.

(3) Any transaction costs incurred by issuing the instrument should be allocated to each component, the liability and equity, according to the split in value above.

Example

A company issues a convertible bond. The details are as follows:

Number of bonds issued	2,000
Nominal value per unit	$1,000
Annual interest rate	5%
Market rate at date of issue	9%
Issue date	1st January 20X5
Redemption dates	31st December 20X7
Terms of conversion	6 $1 shares per $10 nominal value of bond

The cash proceeds of the issue are $2 million. (So debit Cash $2 million.)
The credit entry for the financial instrument must be split into its liability and equity components. The process starts by deriving a fair value for the liability, on the assumption that the bond has no conversion rights, and is a 'straight' fixed rate bond that will be redeemed at par at maturity.

If the company had sold a bond with identical features but with no conversion rights, how much could it have been sold for? To answer this question, it is necessary to recognise that the fair value of a bond is simply the present value of the future cash flows that the bond will generate, discounted at the market rate of interest, which in this example is 9%.

31st December	**Cash ($)**	**Discount factor 9%**	**Present value ($)**
20X5 - interest	100,000	0.9174	91,743
20X6 - interest	100,000	0.8417	84,168
20X7 - interest	100,000	0.7722	77,218
20X7 - principal	2,000,000	0.7722	1,544,367
Fair value of bond			1,797,496
Value of equity (balance)			202,504
Proceeds from issue of bond			2,000,000

On issue, the bond will therefore be recorded as follows:

		$	$
DR	Cash	2,000,000	
CR	Liability		1,797,496
CR	Equity - option proceeds		202,504

As a financial instrument, the liability element of the bond to an entity that holds the bond (the investing entity) must be classified as either 'financial liability at fair value through profit or loss' or 'financial liability measured at amortised cost'. IAS 39 restricts which financial liabilities can be designated as 'fair value through profit or loss'.

This classification is not allowed for an entity's own issued debt. Therefore, the financial liability for the entity that issued the bond must be classed as a 'financial liability measured at amortised cost' - and carried at amortised cost in the statement of financial position.

Under the amortised cost model the value of the liability element in the statement of financial position each year is as follows:

	Brought forward	9% effective interest	Interest: cash payment	Carried forward
	$	$	$	$
20X5	1,797,496	161,775	(100,000)	1,859,271
20X6	1,859,271	167,334	(100,000)	1,926,605
20X7	1,926,605	173,395	(100,000)	2,000,000

If all the bond holders convert on 31st December 20X7:

- 1,200,000 new shares will be issued ($2,000,000 nominal value of the bonds × 6 shares per $10 of bonds)
- The nominal value of the shares will be $1,200,000 (1,200,000 shares at $1).

		$	$
DR	Bond	2,000,000	
DR	Equity - option proceeds	202,504	
CR	Share capital		1,200,000
CR	Share premium		1,002,504

4.3 Other presentation issues

Transactions in own equity

When a company whose shares are traded on the stock market buys back some of its shares, they are called 'treasury shares'. The company might then hold on to the shares until it uses them for a particular purpose, such as awarding shares to employees in a share grant scheme. The accounting treatment of treasury shares is that they should be deducted from equity. Any gain or loss on such transactions are other comprehensive income and should be taken directly to equity, and should not be reported in profit and loss.

IAS 32 requires that the amount of treasury shares held should be disclosed separately, either:

- on the face of the statement of financial position as a deduction from share capital, or
- offset against share capital and disclosed in the notes to the accounts.

Offsetting

A financial asset and a financial liability may be offset and shown net in the statement of financial position when and only when two conditions are met.

- Condition 1: The company has a legal right to set off the amounts.
- Condition 2: The company intends either to settle the amounts net, or to sell the asset and use the proceeds to immediately settle the liability.

In the past, companies were able to offset a credit balance and overdraft balance with the same bank where they have the bank's permission (legal right). This allows them then to disclose only the net position (asset or liability) in the statement of financial position.

The inclusion of Condition 2 in IAS 39 put an end to this practice of offsetting. Simply having a legal right to set off a cash balance in one account with an overdraft in another is insufficient for offsetting to be allowed. The company must additionally show **intent** to settle the balances net, and this is likely to be rare in practice. Consequently, cash balances in the bank and bank overdrafts will probably be reported separately in the statement of financial position, and will not be 'netted off' against each other.

IFRS 7: Disclosure

- Objectives of IFRS 7
- Significance of financial instruments for financial position and performance
- Nature and extent of risks arising from financial instruments
- Discussion Paper: Reducing Complexity in Reporting Financial Instruments

5 IFRS 7: Disclosure

5.1 Objectives of IFRS 7

All companies are exposed to various types of financial risk. Some risks are obvious from looking at the statement of financial position. For example, a loan requiring repayment in the next year is reported as a current liability, and users of the financial statements can assess the risk that the company will be unable to repay the loan.

However, there are often many other risks that a company faces that are not apparent from the financial statements. For example if a significant volume of a company's sales are made overseas, there is exposure to the risk of exchange rate movements.

Example

A UK company has an investment of units purchased in a German company's floating rate silver-linked bond. The bond pays interest on the capital, and part of the interest payment represents bonus interest linked to movements in the price of silver.

There are several financial risks that this company faces with respect to this investment.

- It is a floating rate bond. So if market interest rates for bonds decrease, the interest income from the bonds will fall.
- Interest is paid in euros. For a UK company there is a foreign exchange risk associated with changes in the value of the euro. If the euro falls in value against the British pound, the value of the income to a UK investor will fall.
- A bonus is linked to movements in the price of silver. So there is exposure to changes in the price of silver.
- There is default risk. The German company may default on payments of interest or on repayment of the principal when the bond reaches its redemption date.

IFRS 7 requires that an entity should disclose information that enables users of the financial statements to 'evaluate the significance of financial instruments' for the entity's financial position and financial performance.

There are two main parts to IFRS 7:

- A section on the disclosure of 'the significance of financial instruments' for the entity's financial position and financial performance
- A section on disclosures of the nature and extent of risks arising from financial instruments.

5.2 Significance of financial instruments for financial position and performance

Statement of financial position disclosures

The carrying amounts of financial instruments must be shown, either in the statement of financial position or in a note to the financial statements, for each class of financial instrument:

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

Other disclosures relating to the statement of financial position are also required. These include the following:

- **Collateral**. A note should disclose the amount of financial assets that the entity has pledged as collateral for liabilities or contingent liabilities.
- **Allowance account for credit losses**. When financial assets (such as trade receivables) are impaired by credit losses and the impairment is recorded in a separate account (such as an allowance account for irrecoverable trade receivables), the entity should provide a reconciliation of changes in the account during the period, for each class of financial assets.
- **Defaults and breaches**. For loans **payable**, the entity should disclose details of any defaults during the period in the loan payments, or any other breaches in the loan conditions.

Statement of comprehensive income disclosures

An entity must disclose the following items either I the statement of comprehensive income or in notes to the financial statements:

- Net gains or losses on financial assets or financial liabilities at fair value through profit or loss.
- Net gains or losses on available-for-sale financial assets, showing separately:
  - The gain or loss recognised in other comprehensive income (and so directly in equity) during the period, and
  - The amount removed from equity and reclassified from equity to profit and loss (the income statement) in the period.

- Net gains or losses on held-to-maturity investments.
- Net gains or losses on loans and receivables.
- Net gains or losses on financial liabilities measured at amortised cost.
- Total interest income and total interest expense, calculated using the effective interest method, for financial assets or liabilities that are not at fair value through profit or loss.
- Fee income and expenses arising from financial assets or liabilities that are not at fair value through profit or loss.
- The amount of any impairment loss for each class of financial asset.

Other disclosures

IFRS 7 also requires other disclosures. These include the following:

- Information relating to **hedge accounting**, for cash flow hedges, fair value hedges and hedges of net investments in foreign operations. The disclosures should include a description of each type of hedge, a description of the financial instruments designated as hedging instruments and their fair values at the reporting date, and the nature of the risks being hedged.
- With some exceptions, for each class of financial asset and financial liability, an entity must disclose the fair value of the assets or liabilities in a way that permits the fair value to be compared with the carrying amount for that class. (An important exception is where the carrying amount is a reasonable approximation of fair value, which should normally be the case for short-term receivables and payables.)

5.3 Nature and extent of risks arising from financial instruments

IFRS 7 also requires that an entity should disclose information that enables users of its financial statements to evaluate the nature and extent of the risks arising from its financial instruments.

These risks typically include, but are not restricted to:

- credit risk
- liquidity risk, and
- market risk.

For each category of risk, the entity should provide both quantitative and qualitative information about the risks.

- **Qualitative disclosures**. For each type of risk, there should be disclosures of the exposures to risk and how they arise; and the objectives policies and processes for managing the risk and the methods used to measure the risk.
- **Quantitative disclosures**. For each type of risk, the entity should also disclose summary quantitative data about its exposures at the end of the reporting period. This disclosure should be based on information presented to the entity's senior management, such as the board of directors or chief executive officer.

Credit risk

Credit risk is the risk that someone who owes money (a trade receivable, a borrower, a bond issuer, and so on) will not pay. An entity is required to disclose the following information about credit risk exposures:

- A best estimate of the entity's maximum exposure to credit risk at the end of the reporting period and a description of any collateral held.
- For each class of financial assets, a disclosure of assets where payment is 'past due' or the asset has been impaired.

Liquidity risk

Liquidity risk is the risk that the entity will not have access to sufficient cash to meet its payment obligations when these are due. IFRS 7 requires disclosure of:

- A maturity analysis for financial liabilities, showing when the contractual liabilities fall due for payment
- A description of how the entity manages the liquidity risk that arises from this maturity profile of payments.

Market risk

Market risk is the risk of losses that might occur from changes in the value of financial instruments due to changes in:

- exchange rates,
- interest rates, or
- market prices.

An entity should provide a sensitivity analysis for each type of market risk to which it is exposed at the end of the reporting period. The sensitivity analysis should show how profit or loss would have been affected by a change in the market risk variable (interest rate, exchange rate, market price of an item) that might have been reasonably possible at that date.

Alternatively, an entity can provide sensitivity analysis in a different form, where it uses a different model for analysis of sensitivity, such as a value at risk (VaR) model. (These models are commonly used by banks.)

ED 2009/7: Classification and measurment

- Introduction
- IFRS 9 – Key features

6 ED 2009/7: Financial instruments: Classification and measurement (Now IFRS 9)

6.1 Introduction

Many users of financial statements and other interested parties have told the IASB that the requirements in IAS 39 are difficult to understand, apply and interpret and have urged the IASB to develop a new, less complex standard for financial reporting for financial instruments.

The IASB are addressing this issue in several parts which will ultimately result in a standard (IFRS 9) which will replace IAS 39 in its entirety. The different projects include:

- *Classification and measurement* – this resulted in the issue of ED 2009/7: Classification and measurement which in turn resulted in the issue of IFRS 9. IFRS 9 currently only contains sections on classification and measurement of financial assets but further sections will be added in the future.
- *Impairment* – ED released in 2009. This is not on the list of examinable documents.
- *Hedge accounting* – ED is expected in 2010
- *Derecognition* – ED 2009/3 in issue

6.2 IFRS 9 – Key features

IFRS 9 contains simplified rules on accounting for financial assets.

A financial asset must be measured at amortised cost if both of the following conditions are met:

- the asset is held within a business model whose objective is to hold assets in order to collect contractual cash flows.
- the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

All other financial assets are to be carried at fair value through P&L or OCI.

There is no need to separate embedded derivatives from financial assets.
IFRS 9 must be applied to accounting periods beginning on or after 1st January 2013 but earlier application is allowed.

CHAPTER 12

Leases and substance over form

Contents

Substance over form

- The problem: finance not reported in the statement of financial position
- Examples of previous 'abuses' in this area

1 Substance over form

1.1 The problem: finance not reported in the statement of financial position

The IASB Framework states information should reflect the substance of a transaction to be reliable.

The **substance of a transaction** is its commercial effect. Normally this is the same as its legal form but for complex transactions, this may not be the case. The general principle that results from The IASB Framework is that where the legal form of the transaction does not reflect its substance, the legal form should be set aside in order to reflect substance. This is known as substance over form accounting.

In the past, companies have designed transactions so that by accounting for the legal form of the transaction they were able to avoid showing a liability in the statement of financial position. This is sometimes called '**off balance sheet financing**'. Some companies used it to improve the 'look' of the statement of financial position.

By keeping a liability out of the statement of financial position, companies would be able to show lower financial gearing (and so lower financial risk). This should make it easier for the company to raise new debt at lower interest rates.

Assets might also be reduced by 'off balance sheet' schemes to keep assets out of the statement of financial position, because this will generate a higher return on capital employed for the company (by reducing assets and capital employed).

1.2 Examples of previous 'abuses' in this area

The need to account for 'substance over form' has been made apparent in the past by some dubious accounting practices by some companies.

Controlled non-subsidiaries

Prior to IAS 27 *Consolidated and separate financial statements*, some parent companies deliberately set up entities that did not meet the definition of a subsidiary entity, even though the entity was controlled by them. This meant that the parent entity could avoid consolidation of the 'subsidiary' within its group accounts. This meant that the assets and liabilities of the subsidiary would be excluded from the consolidated group accounts. This could be useful for parent companies wishing to 'hide' certain assets or liabilities.

(This is why IAS 27 changed the definition of a subsidiary. IAS 27 now defines a subsidiary by looking at control. This is considered in more detail in the chapters on consolidated accounts.)

Leasing

Prior to IAS 17 *Leases*, assets leased under a finance lease agreement remained as an asset in the lessor's financial statements, even though the risks and rewards attached to that asset had been transferred to the lessee. IAS 17 recognises that although legal title may not have passed to the lessee, the economic reality is that the risks and rewards from ownership have passed to the lessee. The leased asset should therefore be reported as a non-current asset in the lessee's financial statements and not in the lessor's.

Interest expense

Prior to IAS 39 interest might have been recognised on a cash basis. For example if a company entered into a five year zero coupon bond they might not have recognised any interest over the life of the bond.

1.3 Substance over form in IFRS

There is no IAS or IFRS that deals in general with accounting for the substance of transactions. However, guidance based on substance appears in many standards including:

IAS 17: Leases
- Lease classification
- Finance lease accounting
- Sale and leaseback transactions

IAS 18: Revenue
- Recognition criteria
- Sale and repurchase

IAS 27: Consolidated and separate financial statements
- Definition of subsidiary

IAS 32
- Classification of equity and liabilities

IAS 39: Financial instruments: Recognition and measurement
- Effective interest rate
- Derecognition of financial assets
- Hedge accounting
- Separation of embedded derivatives

Recognising and derecognising assets and liabilities

- Determining the substance of a transaction
- Assets and liabilities
- Recognition of an asset or liability
- Derecognition of an asset or liability

2 Recognising and derecognising assets and liabilities

2.1 Determining the substance of a transaction

In many instances the substance and the legal form of a transaction or event are exactly the same. However in other cases they may not be. The substance of a transaction may be different from its legal form if it has any of the following features:

- separation of the legal title to an asset from the ability to enjoy the rewards and benefits of the asset and exposure to the risks of the asset
- a transaction which is linked to others in such a way that the commercial substance cannot be understood without reference to all the transactions
- the inclusion of an option within a transaction whose terms make it highly likely that the option will be exercised (for example, an option to purchase the asset at a future date).

2.2 Assets and liabilities

The key issue in deciding how to account for a transaction is whether an asset or a liability should be recognised in the statement of financial position.

The following definitions, from the **IASB Framework**, are relevant.

An **asset** is a resource:

- controlled by the entity
- as a result of past events
- from which economic benefits are expected to flow to the entity.

A **liability** is:

- a present obligation
- arising from past events
- the settlement of which is expected to result in an outflow of economic benefits.

Note that IAS 39 contains specific guidance on the recognition and derecognition of financial assets and liabilities.

2.3 Recognition of an asset or liability

An item should only be **recognised** in the financial statements if:

- it meets the definition of an asset or liability
- there is sufficient evidence of its existence, and
- it can be measured at a monetary amount with sufficient reliability.

2.4 Derecognition of an asset or liability

An entity should cease to recognise an item in the financial statements ('**de-recognition**') if there has been a transfer to someone else of:

- all significant access to benefits, and
- the exposure to the risks inherent in those benefits.

The guidelines on substance over form, and on the recognition and de-recognition of assets will now be considered within the context of specific business transactions.

Examples of specific transactions

- Consignment inventory
- Sale and repurchase agreements
- Guidance in other standards

3 Examples of specific transactions

3.1 Consignment inventory

Consignment inventory is inventory held by one party but legally owned by another. For example, a car manufacturer may allow a car dealer to hold some inventory in the dealer's showrooms, in order to attract customers. The dealer then pays for the cars when they are sold, or possibly after a specified period of time has passed. During this time the dealer may be able to return the cars to the manufacturer, or the manufacturer may be allowed to demand the return of cars that have been supplied.

The question to answer here is: Who should record the inventory – the manufacturer or the dealer?

Consignment agreements will have different terms and conditions. However, applying the general principles of substance over form, the inventory should be recognised as an asset by the party who has the risks and rewards.

Example

Z Cars, a car dealer buys cars from Car Maker Company (CMC) on the following terms:

- Legal title passes either on sale of a car to the public or when a car is used as a demonstration model.
- The car is paid for when legal title passes. The price charged to the dealer is the price at the original date of delivery.
- Z Cars is charged interest at 5% on cost during the period from delivery to payment.
- Z Cars has the right to return the cars to CMC at any time, but given its record of successful selling, this rarely happens.

Required

Z Cars has 20 cars in its showroom at the end of a reporting period. Explain the accounting treatment by applying the principles of substance over form.

Answer

Although legal title does not transfer until the car is used as a demonstration model or is sold to a customer of the dealer, the accounting treatment is determined by the substance of the transaction. It is necessary to establish who has the risks and rewards attaching to the cars at the time of delivery to Z Cars.

From the information given there are a number of indicators that suggest that Z Cars bears the risks and rewards:

- The price is based on the manufacturer's price at the delivery date. This means that the manufacturer is unable to pass on any subsequent price changes, and so the cars become an asset of Z Cars at the date of delivery. This is a reward of ownership for Z Cars.
- Z Cars bears the risk of slow-selling of the cars, as there is a 5% interest charge based on the time taken to sell the cars. Interest cost on inventory is a risk of ownership for Z Cars.

An argument against the idea that Z Cars is the 'owner in substance' of the cars is that Z Cars can return cars to CMC at any time, and so has no risk of obsolescence. However, given that this rarely happens in practice, it seems that on balance Z Cars should record the purchase and the inventory at the date of delivery.

This also means that CMC should record a sale when cars are delivered to Z Cars, and will not include the cars in its own inventory.

3.2 Sale and repurchase agreements

A sale and repurchase agreement is an agreement between two parties A and B, in which A sells goods to B at one price and at the same time agrees to buy back the goods at a future date, usually at a higher price. The question this time is whether the initial sale is a genuine sale transaction, or whether the sale and repurchase agreement really disguises a short-term loan.

Example

A whiskey distiller sells inventory to a bank two weeks before the year end for $300,000. The company has the option to repurchase the whiskey at any time at cost plus 10% interest.

Although legally a sale has been made, the transaction appears unusual. Why would a bank want to purchase whiskey? Clearly the whiskey distiller will want the whiskey returned in the future so that it can honour commitments to its 'real' customers.

The substance of the transaction appears to be that the distiller obtains a secured loan from the bank when it sells the inventory. The distiller has 'sold' the inventory to the bank in order to raise some short-term finance. It will 'repurchase' the inventory in the future and pay back the loan plus 10% financing costs.

Therefore in this example, a sale should not be recorded. Instead the distiller should establish a liability (loan) in its statement of financial position. The future repurchase will be accounted for by cancelling the liability.

Accounting for leases

- Revision of accounting for finance and operating leases
- Accounting for a finance lease
- Accounting for an operating lease
- Sale and leaseback transactions
- Termination of a lease
- Tax variation clauses
- Evaluating the substance of transactions involving a lease
- IFRIC Interpretation 4: Deciding whether an arrangement contains a lease
- DP 2009/1: Leases

4 Accounting for leases

4.1 Revision of accounting for finance and operating leases

A lease is a contract between two parties where the owner of an asset (the 'lessor') allows the other party (the 'lessee') to use the asset for an agreed period of time, in return for a series of payments. Sometimes, at the end of the lease, legal title to the asset is transferred to the lessee. In other situations, the leased asset is returned to the lessor, who may then arrange a new lease with a different lessee or might scrap the asset.

During the term of the lease, the legal ownership to the asset belongs to the lessor, but with many leases it is the lessee who has most of the risks and benefits from most of the rewards. For example an airline company might lease a new aircraft for a ten-year period from a lessor: the lessee will get most of the economic benefits from use of the aircraft and will also bear most of the risks (such as costs of maintenance and repair, costs of insurance and so on).

However, before the issue of IAS 17, the lessee would not have recorded the asset (or a liability to the lessor) in its statement of financial position. It would simply have recorded the lease payments as expenses (on an accruals basis) in profit or loss.

IAS 17 was the first IAS to introduce the concept of substance over form in financial reporting.

Classification of leases: finance and operating leases

IAS 17 divides leases into two types:

- finance leases
- operating leases.

A lease is a **finance lease** if it transfers the majority of the risks and rewards relating to the ownership of the asset to the lessee. If this is not so, then it is an operating lease.

The distinction between a finance lease and an operating lease is based on the substance of the transaction, and IAS 17 suggests that the following terms in a lease agreement are indicators of a finance lease arrangement:

- Legal title to the asset transfers to the lessee at the end of the lease.
- The lessee has the option to buy the asset for less than fair value, and it seems reasonably likely when the contract is made that the option will be taken.
- The term of the lease agreement covers most of the asset's useful life.
- At the start of the lease, the present value of the future lease payments amounts to at least substantially all of the fair value of the asset.
- The leased asset is highly specialised, so only the lessee can use it.
- If the lessee cancels the lease, he must compensate the lessor for his losses.
- Gains or losses from a change in the expected residual value of the leased asset are borne by the lessee.
- After the first period of the lease term has ended, the lessee may continue the lease for a secondary period at a very low rent.

With a finance lease, the substance of the transaction is that the lessee is the effective owner of the asset even though legally the asset is owned by the lessor. With an operating lease, the lessor is the effective owner as well as the legal owner.

Land and buildings

When a lease includes land and buildings, an entity must assesses the classification of each element as a finance or an operating lease separately.

Until recently IAS 17 contained guidance that meant that on most occasions the lease of land would be an operating lease. In some jurisdictions there are very long leases of property, for example 999 years. Some users and preparers pointed out an entity with a lease of this kind is in substance, in the same situation that it would have been if it had bought the asset. The IASB has recently removed the guidance referred to above so that long leases can now be classified as finance leases.

4.2 Accounting for a finance lease

The lessee's accounts

At the start of the lease, the lessee should recognise the leased asset as a non-current asset, valued at the lower of:

- the fair value of the asset, and
- the present value of the minimum lease payments under the terms of the lease agreement.

There is a matching liability to the lessor (divided between the amount of the liability repayable within 12 months and a long-term liability).

The asset should be depreciated over the shorter of:

- the term of the lease, and
- the asset's expected useful life.

In each financial period, the charges to the income statement relating to the finance lease are:

- a depreciation charge, and
- a finance charge.

The lease payments each year are divided into:

- a finance charge, and
- a partial repayment of the obligation to the lessor.

The total finance charge over the term of the lease is the difference between:

- the total minimum payments under the lease agreement, and
- the 'cost' of the asset (the lower of fair value and the present value of the minimum lease payments).

This total finance charge is allocated to each year of the lease in such away that there is a constant rate of interest chargeable on the remaining obligation to the lessor. (Two methods may be used to allocate the total finance charge between the years of the lease: the actuarial method and the sum-of-the-digits method.)

By the end of the term of the lease, the obligation to the lessor will be reduced to zero.

Example

ABC Company needs a new machine for its business. The fair value to buy the machine outright is $260,000 but instead it enters into a 20-year finance lease on 1 January 20X0. Payment terms are $16,000 every six months, payable in arrears, commencing 30 June 20X0. The interest rate implicit in the lease is 11.9% per year, which equates to 5.4% every six months.

The company's financial year ends on 31 December.

Required

Calculate the asset value, lease obligation and finance charge up to 31 December 20X1.

Answer

The asset is capitalised at $260,000 and a liability for a lease creditor is established for an equal amount. The asset should be depreciated.

The total finance charge over the 20 years of the lease will be:

	$
Total of minimum lease payments (40 payments × $16,000)	640,000
'Cost' of the asset (fair value)	260,000
Total finance charge over 20 years	380,000

The interest rate in the lease is 5.4% every six months. The finance charge will be calculated every six months at this six-monthly rate of 5.4% (since lease payments are every six months).

The finance charge and the reduction in the obligation to the lessor, for the first two years of the lease, are calculated as follows:

Six months to end of:	Obligation to the lessor: Balance b/f	Finance charge at 5.4% for six months	Total lease payment	Reduction in obligation to lessor	Balance carried forward
June 20X0	260,000	14,040	(16,000)	1,960	258,040
December 20X0	258,040	13,934	(16,000)	2,066	255,974
June 20X1	255,974	13,823	(16,000)	2,177	253,797
December 20X1	253,797	13,705	(16,000)	2,295	251,502

The total finance charge for the year to 31 December 20X0 is $27,974 ($14,040 + $13,934).

The total finance charge for the year to 31 December 20X1 is $27,528 ($13,823 + $13,705).

The lessor's accounts

Accounting by the lessor should be the 'mirror image' of the lessee.

- The lessor should remove the asset from its statement of financial position.
- Instead, there should be a 'lease receivable' as an asset. The value of the lease receivable is the sum of:
  - the present value of the payments receivable under the terms of the lease, plus
  - the present value of the residual value/disposal value of the asset at the end of the lease (on the assumption that the lessor will receive this as income).

The payments received from the lessee are divided into:

- finance income, and
- a partial repayment of the 'lease receivable' by the lessee.

The total finance income over the term of the lease is the difference between:

- the total receipts under the lease agreement, and
- the original value of the 'lease receivable'.

This total finance income is allocated to each year of the lease in such a way that there is a constant rate of return on the remaining receivable from the lessee. (Two methods may be used to allocate the total finance income between the years of the lease: the actuarial method and the sum-of-the-digits method.)

At the end of the lease term the lease receivable is reduced to zero.

When the lessor is also the manufacturer or dealer

A lessor is often a finance company, which buys the asset from the manufacturer and then leases it to the lessee. Sometimes the manufacturer itself might be the lessor. If the asset is leased by the manufacturer or supplier of the item, then different rules apply.

The lessor has two streams of revenue if it is also the manufacturer or dealer:

- the sales revenue and profit that would have been made on an outright sale, and
- the finance income over the lease term.

The sale of the asset. The sales revenue that should be recognised is the lower of:

- the fair value of the asset; and
- the present value of the future lease receipts, discounted at a commercial rate of interest.

(The reason for this rule about the sales price is to prevent companies from manipulating their profit by offering a low rate of interest on the lease but increasing the sales price of the asset.)

The cost of sale is the cost (or carrying amount) of the asset sold, minus the present value of any residual value. The profit on the sale is recognised in the financial period when the lease agreement begins.

Finance income. The total finance income over the period of the lease is the difference between the total lease payments and the sale price of the asset. This is allocated between the financial periods using the 'normal' rules to provide a constant return.

4.3 Accounting for an operating lease

The lessee's accounts

An operating lease is accounted for in a different way from a finance lease. The leased asset is not owned 'in substance' by the lessee. The lease arrangement is similar to a rental agreement for the hire of the asset.

IAS 17 states that the total payments made by the lessee under an operating lease should be charged to profit or loss, and apportioned between financial periods on a

straight-line basis. (If another rational basis is more appropriate then that may be used.)

Any difference between amounts charged to profit or loss for a financial period and amounts of lease rental actually paid during the period will result in an accrual or prepayment in the statement of financial position.

Lease incentives offered by the lessor, such as payment 'holidays', should also be spread over the life of the lease on a straight-line basis.

Example

Under a four-year operating lease agreement, Entity F pays a non-returnable deposit of $50,000 and then four years' rental of $50,000 per annum on the first day of each year.

Required

(a) Calculate the annual charge to profit or loss for each of the four years in the accounts of Entity F.

(b) Calculate the balance in its statement of financial position at the end of Year 1 and at the end of Year 2.

Answer

(a) Total lease payments = $50,000 + ($50,000 × 4 years) = $250,000

Annual charge for the lease in profit or loss = $250,000/4 years = $62,500.

Statement of financial position at end of Year 1	$
Paid in Year 1 ($50,000 + $50,000)	100,000
Charged to the income statement	(62,500)
Prepayment at end of Year 1 (asset in statement of financial position)	37,500

Statement of financial position at end of Year 2	$
Balance b/f from Year 1 (prepayment)	37,500
Paid in Year 2	50,000
	87,500
Charged to the income statement	(62,500)
Prepayment at end of Year 2 (asset in statement of financial position)	25,000

Example

XYZ enters into an operating lease of a building on 1 January 20X1. The lease is for 20 years at a rental of $200,000 per annum with the first year being rent free.

Required

Calculate the lease expense to be recorded each year.

Answer

The total lease payments will be $3.8 m (19 payments × $200,000). These are charged evenly to profit or loss over the lease term.

This results in a charge of $190,000 per year ($3.8 m/20 years)

At the end of year 1, an accrual of $190,000 will appear in the statement of financial position, since no payment is due until year 2.

The lessor's accounts

Because the lessor has **not** transferred the risks and rewards of ownership of the physical asset to the lessee, the lessor shows the leased asset as a non-current asset in its statement of financial position.

The asset will be shown in an appropriate category of **property, plant and equipment** at its carrying value (cost/valuation minus accumulated depreciation).

The lessor's annual statement of comprehensive income (profit or loss) should include, in respect of the leased asset:

- depreciation on the asset as a charge, and
- rental income (as for the lessee, this is usually calculated on a straight-line basis).

Any differences between income recognised and amounts received should be recorded as deferred or accrued income.

Lease incentives provided by the lessor should also be spread over the life of the lease on a straight line basis.

Operating leases: incentives

When a new operating lease is negotiated or an existing operating lease is re-negotiated, the lessor may offer incentives t the lessee to persuade the lessee to enter into the lease agreement. An example is an up-front cash payment to the lessee. Another (mentioned earlier) might be a 'payment holiday' in which the lessee is not required to make the first one or two lease payments.

SIC Interpretation 15 ('Operating Leases: Incentives') states that all such incentives should be recognised as part of the net consideration agreed for the use of the asset by the lessee.

- The lessor should recognise the incentives as a reduction of rental income over the term of the lease, normally on a straight-line basis.
- The lessee should recognise the incentives as a reduction of rental expense over the term of the lease, normally on a straight-line basis.

4.4 Sale and leaseback transactions

Sale and leaseback transactions involve one entity selling an asset, normally to a bank or finance company, and then immediately leasing it back. The main purpose is to allow the entity to release cash that is 'tied up' in the asset, whilst retaining use of the asset.

For example, a company may own an office building that it uses for its administrative operations. It may decide to sell and lease back the building, to raise cash. By selling the building, it raises cash. By leasing back the building, it retains the use of the building for its operational activities.
The leaseback could be arranged either as a finance lease or an operating lease, and this will affect the accounting treatment of the transaction.

Sale and finance leaseback (finance lease)

There are two stages, the disposal (sale) and the finance leaseback.

- **The sale**. On disposal, the asset should be removed from the seller's statement of financial position.
- Any surplus from the sale in excess of the carrying amount should be deferred and amortised over the life of the lease.
- **The leaseback**. The normal finance lease rules are then applied, to reintroduce the asset to the statement of financial position of the lessee at its fair value, and to establish a leasing obligation.

It could be argued that by accounting for a sale and finance leaseback in this way, the substance of the transaction has not been shown correctly. The asset was sold and then immediately leased back under a finance lease, which means that the owner never lost the risks and rewards from holding the asset. Is it therefore appropriate to remove the asset from the statement of financial position (step 1 above) and then reintroduce it immediately at a different value (fair value)?

This accounting treatment (in IAS 17) leads to the value of the asset being increased in the statement of financial position, because its carrying value is removed and replaced by its fair value, which is likely to be higher. Would another treatment better reflect the substance of the transaction?

An alternative accounting treatment might be to consider the lease as a finance arrangement, providing a loan that is secured on the asset. As there is no 'sale', there should be no profit or loss on disposal, and the asset should stay at its carrying value.

Example

In 20X6 a company sold an asset and leased it back under a finance lease. The asset had a carrying value of $70,000 and was sold for its market value of $120,000. At the date of sale it had a remaining life of five years and was leased back for the whole of this period at a rental of $28,000 per annum in arrears.

Option 1: Treat as a genuine sale (IAS 17)

	Debit	Credit
The sale	$	$
DR Cash	120,000	
CR Asset		70,000
CR Deferred income		50,000

	Debit	Credit
The leaseback		
DR Asset	120,000	
CR Lease obligation		120,000

Option 2: Treat as a secured loan (a potential alternative)

No sale is recorded.

	$	$
DR Cash	120,000	
CR Lease obligation		120,000

Both methods would show the same calculation of the repayment of the lease obligation, but each method gives a different asset value. In option 1 the asset is re-stated to its fair value (which will lead to higher depreciation charges). The higher depreciation charges will be offset by the release of the deferred income over the lease term.

Sale and operating leaseback (operating lease)

Again, there are two stages to the transaction, the sale and the operating leaseback. The substance and the legal form of the transaction are the same. The asset has been sold and the risks and rewards have been permanently transferred as the leaseback is an operating lease in nature.

On sale, the asset should be removed from the seller's statement of financial position.

- The gain or loss on disposal should be recognised in profit or loss. (See below for details of how the gain is calculated.)
- The normal operating lease rules are then applied to account for the rental payments.

IAS 17 outlines three treatments for accounting for the profit on the sale of the asset, depending on whether the asset was sold for its fair value, for less than fair value or for more than fair value.

- Sale at fair value. If the asset is sold at fair value, the gain or loss on disposal is recognised immediately in profit or loss.
- Sale at less than fair value. Similarly, if the asset is sold at less than fair value, the gain or loss on disposal is recognised immediately in profit or loss.
- However, if the sale is at less than fair value but in addition the lease rental payments are at below the fair market cost, the loss on disposal should not be recognised immediately, but deferred and then released to profit or loss over the expected period of use (the lease period).
- Sale at more than fair value. If the asset is sold at more than fair value, the normal gain or loss on disposal (based on fair value) is recognised immediately in profit or loss. The excess profit however should be deferred and released to profit or loss over the expected period of use (the lease period).

Example

In early 20X7 a company sold an asset for $1.5 million and leased it back under a five-year operating lease. The asset had a carrying value of $1 million and a remaining useful life of ten years.

Answer

If the asset was sold at fair value

	$	$
DR Cash	1,500,000	
CR Asset		1,000,000
CR Income statement		500,000

If the fair value at the date of sale was $1.2 million

	$	$
DR Cash	1,500,000	
CR Asset		1,000,000
CR Income statement (Normal profit: this is $1.2m – $1m)		200,000
CR Deferred income (Excess profit: this is $1.5m – $1.2m)		300,000

Note: The deferred income will be released to profit or loss over the lease term of 5 years.

4.5 Termination of a lease

A lease agreement is a contract to lease an asset for a fixed term. Some leases allow the lessee the option to extend the lease for a secondary period at a reduced rent as the lessor may find it difficult to find another lessee for the second-hand asset.

But what if the lessee decides to terminate the lease agreement?

- Termination might take place at the end of the main lease term, and the asset returned to the lessor.
- Alternatively, the lessee may decide to terminate the main lease early.

Finance leases – the lessee

Termination at the end of the lease

The lessee may be required to guarantee the residual value of the asset at the end of the lease. So if it is in poor condition and the residual value is less than originally expected, the lessor will demand an additional payment for the shortfall.

Early termination

If the lessee decides to terminate the lease before the end of the agreed lease term the lessor will normally charge a termination fee to compensate for the lost rentals. Once the asset has been returned it will be removed from the lessee's statement of financial position. Any difference between the outstanding lease obligation (liability) in the statement of financial position and the termination payment will be treated as a loss on the asset disposal.

Finance leases – the lessor

The lease receivable will be removed from the lessor's statement of financial position when the asset is returned. Any difference between the lease receivable and the termination payment will be treated as a gain on the lease termination, and credited to profit or loss.

Operating leases

The termination payment is treated as an expense in the income statement (profit or loss) of the lessee. The termination receipt is treated as income in the accounts of the lessor.

4.6 Tax variation clauses

The rentals charged by a lessor will take account of several factors, in order to generate a target profit. The factors to consider are the lease period, the expected residual value of the asset, the tax charged on the income and the capital allowances (tax-allowable depreciation) that the lessor will receive on the asset.

The estimates of tax payments and tax benefits (capital allowances) will be based on the tax rates in force at the start of the lease. If the tax rates change, the lessor may find that he does not achieve the expected return. Therefore he may insert a tax variation clause into the lease contract. The effect of this is to adjust the rental payments over the remainder of the lease so that the lessor is protected against any changes in tax rules or tax rates.

Whilst the lessor's profit is unaffected (because the lessor will simply be covering his extra costs), the lessee's finance charge will increase. This increase in the finance charge should be spread over the remaining life of the lease.

4.7 Evaluating the substance of transactions involving a lease

Some transactions involving leases can be quite complex. There might well be a series of structured transactions, one or more of which involves a lease. A problem is to decide how to account for these linked transactions.

SIC Interpretation 27 states that when there is a series of linked structured transactions involving a lease and the overall economic effect (the substance of the transactions) cannot be understood without reference to the series of transactions as a whole, it should be accounted for as a single transaction.

One example is where an Entity X sells an asset to another entity, Entity Y and leases the same asset back. Entity Y also agrees to sell back the asset to the lessee at a predetermined price at the end of the lease period. The overall effect is that the arrangements provide Entity B with a yield of LIBOR plus 1.5% over the term of the lease. (The substance of the transaction is that Entity X is borrowing from Entity Y in the form of a secured loan with interest at LIBOR plus 1.5%.)

4.8 IFRIC 4: Deciding whether an arrangement contains a lease

An entity might enter into a contractual agreement, or a series of related transactions, which does not include a lease in its legal form. However the nature of the transaction could mean that in economic substance, it does include an arrangement that is effectively a lease and as such should be accounted for in accordance with the requirements of IAS 17.

IFRIC Interpretation 4 offers guidance on deciding whether an arrangement or transaction does contain an arrangement that, in substance if not in legal form, is a lease. According to IFRIC 4, there are two key issues to consider in deciding whether a lease arrangement does exist in these circumstances:

- Fulfilment of the agreement by the supplier of the goods or services should be dependent on the use of a specific asset or assets ('the asset').
- The arrangement should convey the right to the purchaser of the goods or services to use the asset.

Fulfilment of the agreement is dependent on use of a specific asset

If a supplier undertakes to supply a quantity of goods or services to a purchaser, but the agreement does not specify the use of a specific asset to supply the goods or services, a lease does not exist. An exception is where it would not be economically feasible or practicable for the supplier to provide the goods or services through the use of alternative assets, so that a specific asset would have to be used to fulfil the supplier's commitments.

The arrangement conveys a right to use the asset

A lease exists in substance when an arrangement gives the purchaser the right to control the use of the underlying asset. The right to control the use of the asset exists when the buyer obtains or controls more than an insignificant amount of the output from the asset and has the right to direct others to operate the asset or controls access to the asset.

Alternatively the right to use an asset exists when it is unlikely that other customers will take more than an insignificant amount of output from the asset and in addition the price that the purchaser will pay for output from the asset is neither a fixed price nor the existing market price at the time of delivery of the output to the purchaser.

Example

Some illustrative examples accompany IFRIC 4. One is described here.

A production company arranges with a supplier for the supply of gas to its manufacturing operation for a specified period of time. The supplier builds a facility next to the manufacturer's plant to produce and supply the gas required. The supplier retains ownership and control over the facility.

The facility is specifically identified in the contractual agreement. The supplier has a contractual right to supply gas from the facility to other customers, but the facility has the capacity only to supply the purchaser and the supplier has no plans to expand the facility. The supplier is responsible for maintenance and repairs of the facility and is contractually required to supply a minimum quantity of gas. The purchaser will pay a fixed charge per month plus a variable charge based on actual gas production taken, and the variable charge is a percentage amount of the supplier's variable costs.

In this example, a lease does exist in substance, and should be accounted for as such buy the supplier and by the purchaser. An asset is identified in the agreement and fulfilment of the agreement is dependent on the asset. The purchaser has the effective right to use the asset because effectively the asset has been built to meet the specific needs of the purchaser. It is most unlikely that any other customer will buy more than an insignificant amount of output from the asset, and the price paid by the purchaser is not a fixed price or the current market price for gas at the time of delivery.

4.9 DP 2009/1: Leases

This is a part of a joint project between the IASB and FASB.

Existing lease accounting standards require lessees to classify their lease contracts as either finance leases or operating leases. Finance leases are defined as those leases that transfer to the lessee substantially all the risks and rewards incidental to ownership of the leased asset. All other leases are operating leases.

Criticisms of the existing accounting model

Operating leases give rise to assets and liabilities which both meet the definitions and satisfy the recognition criteria in "The Framework" but these are not recognised in the financial statements of lessees. Many users routinely adjust the recognised amounts in an attempt to recognise those assets and liabilities and reflect the effect of lease contracts in profit or loss.

Operating leases are a source of unrecognised financing that can be difficult for users to understand.

The existence of two different accounting models for leases means that similar transactions can be accounted for very differently. This reduces comparability for users.

The two different accounting models provide opportunities to structure transactions so as to achieve a particular lease classification and thus a particular impact in the financial statements.

Example

The following example was used earlier to illustrate accounting for a finance lease:

ABC Company needs a new machine for its business. The fair value to buy the machine outright is $260,000 but instead it enters into a 20-year finance lease on 1 January 20X0. Payment terms are $16,000 every six months, payable in arrears, commencing 30 June 20X0. The interest rate implicit in the lease is 5.4%.

The company's financial year ends on 31st December.

Analysis

It was shown earlier that if the lease is a finance lease:

- the total finance charge for the year to 31 December 20X0 is $27,974
- the total finance charge for the year to 31 December 20X1 is $27,528.

In addition, the lessee must charge depreciation on the asset, which may be $13,000 each year ($260,000/20 years).

If the company had classified the lease as an operating lease, the only entry in the financial statements would be the $32,000 rental expense in profit or loss. So in the first two years of the lease (and for several years after that), the charge to profit or loss will be less than it would be for a finance lease.

In addition, the lessee has no asset and no liability to a lessor in its statement of financial position. Clearly, accounting for the lease as an operating lease is much more preferable than accounting for the lease as a finance lease.

Tentative proposals

The discussion paper sets out a series of proposals for discussion. These are described as tentative decisions. (This phrase simply means that the boards have not come to firm conclusions yet).

The proposals include the following.

The distinction between finance leases and operating leases should be replaced by a new accounting model for leases that results in the lessee recognising:

- an asset representing its right to use the leased item for the lease term (the 'right-of-use' asset); and
- a liability for its obligation to pay rentals.

The lessee's obligation to pay rentals should be measured initially at the present value of the lease payments discounted using the lessee's incremental borrowing rate. Subsequent measurement would be on an amortised cost basis.

The lessee's right-of-use asset should be measured initially at cost. Cost equals the present value of the lease payments discounted using the lessee's incremental borrowing rate. The asset should then be amortised over the shorter of the lease term and the economic life of the leased item.

CHAPTER 13

Reporting requirements for listed companies

Contents

IFRS 8: Operating segments

- Scope of IFRS 8
- Operating segments

1 IFRS 8: Operating segments

1.1 Scope of IFRS 8

Many companies operate in several different industries (or 'product markets') or diversify their operations across several geographical locations. A consequence of diversification is that companies are exposed to different rates of profitability, different growth prospects and different amounts of risk for each separate 'segment' of their operations.

IFRS 8 *Operating segments* was issued in 2006 and replaced IAS 14 *Segment reporting*. The reason for the replacement of IAS 14 was the harmonisation project between the US and the IASB.

IFRS 8 recommends the US approach to identifying operating segments. This is based on a management approach that is linked to the company's internal financial reporting system, and so it is much less subjective than the previous standard (IAS14).

Objective of IFRS 8

IFRS 8 requires quoted companies to disclose information about their different operating segments, in order to allow users of the financial statements to gain a better understanding of the company's financial position and performance.

Users are able to use the information about the main segments of the company's operations to carry out ratio analysis, identify trends and make predictions about the future. Without segment information, good performance in some segments may 'hide' very poor performance in another segment, and the user of the financial statements will not see the true position of the company.

Segment reporting is required for any entity whose debt or equity is **quoted** on a public securities market (stock market) and also entities that are in the process of becoming quoted. If an entity includes some segment information in the annual report that doesn't comply with IFRS 8, it cannot call it 'segmental information.'

1.2 Operating segments

IFRS 8 defines an operating segment as a component of an entity:

- that engages in business activities from which it earns revenues and incurs expenses
- whose operating results are regularly reviewed by the entity's chief operating decision maker to make decisions about resources to be allocated to the segment and assess its performance, and
- for which discrete financial information is available.

Not every part of an entity is necessarily an operating segment. For example a corporate head office may not earn revenue and would not be an operating segment.

The standard requires a segment to have its results reviewed by the chief operating decision maker. The reason for this part of the definition of an operating segment is to ensure that an entity reports segments that are used by management of the entity to monitor the business.

Aggregation of segments

Two or more operating segments may be aggregated into a single operating segment if they have similar economic characteristics, and the segments are similar in each of the following respects:

- the nature of the products and services
- the nature of the production process
- the type or class of customer for their products and services
- the methods used to distribute their products or provide their services, and
- if applicable, the nature of the regulatory environment, for example, banking insurance or public utilities.

Quantitative thresholds

An entity must report separately information about an operating segment that meets any of the following quantitative thresholds:

- its reported revenue, including external sales and intersegment sales is 10% or more of the combined internal and external revenue of all operating segments
- its reported profit is 10% or more of the greater of the combined profit of all segments that did not report a loss and the combined reporting loss of all segments that reported a loss
- its assets are 10% or more of the combined assets of all operating segments

Reportable segments

An entity must report separately information about each operating segment that:

- has been identified in accordance with the definition of an operating segment shown above

- or is aggregated with another segment
- or exceeds the quantitative thresholds.

If the total external revenue reported by operating segments constitutes less than 75% of the entity's total revenue, then additional operating segments must be identified as reporting segments, even if they do not meet the criteria, until 75% of revenue is included in reportable segments.

Example

The following information relates to Oakwood, a quoted company with five divisions of operation:

	Wood sales	Furniture sales	Veneer sales	Waste sales	Other sales	Total
	$m	$m	$m	$m	$m	$m
Revenue from external customers	220	256	62	55	57	650
Inter segment revenue	38	2	-	5	3	48
Reported profit	54	45	12	9	10	130
Total assets	4,900	4,100	200	400	600	10,200

Which of the business divisions are reportable segments under IFRS 8 *Operating segments?*

Answer

IFRS 8 states that a segment is reportable if it meets any of the following criteria:

- its internal and external revenue is more than 10% of the total entity internal and external revenue.
- its reported profit is 10% or more of the greater of the combined profit of all segments that did not report a loss.
- its assets are 10% or more of the combined assets of all operating segments.

From the table above, only the Wood and Furniture department sales have more than 10% of revenue, assets and profit and meet the requirements for an operating segment. The other three divisions do not meet the criteria: none of them pass the 10% test for assets, profit or revenue.

Additionally IFRS 8 states that if total external revenue reported by operating segments constitutes less than 75% of the entity's revenue then additional operating segments must be identified as reporting segments, until 75% of revenue is included in reportable segments

The total external revenue of Wood and Furniture is $476m and the total entity revenue is $650m, which means that the revenue covered by reporting these two segments is only 73%. This does not meet the criteria so we must add another

operating segment to be able to report on 75% of revenue. It doesn't matter that any of the other entities do not meet the original segment criteria.

In this case, we can add on any of the other segments to achieve the 75% target. If we add in Veneer sales, this gives total sales of $538m, which is 83% of the sales revenue of $650m. This is satisfactory for the segmental report.

Disclosure

IFRS 8 states that an entity must disclose information so that users of the financial statements can evaluate the nature and financial effects of the business activities in which it engages and the economic environments in which it operates.

The information that is to be disclosed is:

- a measure of profit or loss for each reportable segment
- a measure of total assets liabilities for each reportable segment if such an amount is reported regularly to the chief operating decision maker
- information about the following items if they are specified and included in the measure of segment profit that is reported to the chief operating decision maker:
  - revenues from external customers
  - revenues from transactions with other operating segments of the same entity
  - interest revenue
  - interest expense
  - depreciation and amortisation
  - material items of income and expense in accordance with IAS 1
  - the entity's interest in the profit or loss of associates and joint ventures accounted for by the equity method
  - income tax expense or income
  - material non-cash items other than depreciation and amortisation.
- the amount of investment in associates and joint ventures accounted for by the equity method and the amounts of additions to non current assets (excluding financial instruments, deferred tax assets, post employment benefit assets and rights arising under insurance contracts), providing these amounts are included in segment assets.

Additionally, the following reconciliations are required:

- reconciliation of the totals of segment revenues to the entity's revenue
- reconciliation of the total of reported segment profits or losses to the entity's profit before tax and discontinued operations
- reconciliation of the total of the assets of the reportable segments to the entity's assets
- reconciliation of the total of the liabilities of the reportable segments to the entity's liabilities (but only if segment liabilities are reported)
- reconciliation of the total of the assets of the other material items to the entity's corresponding items.

Also, the factors used to identify the entity's reportable segments, including the basis of organisation, (i.e. whether the entity is organised around different products and services or geographical area), and the types of products and service from which the reportable segments derive their income must all be disclosed.

Measurement

IFRS 8 requires that the amount of each segment item reported shall be the measure reported to the chief operating decision maker for the purposes of making decisions about allocating resources to the segment and assessing its performance. This is based on the internal structure of how division of the entity report their results to the chief operating decision maker. Any adjustments and eliminations made in preparing an entity's financial statements shall be included in determining segment results only if they are included in the measure of the segment's results used by the chief operating decision maker.

The minimum amount the entity must disclose is:

- The basis of accounting for any transactions between reportable segments
- The nature of any differences between the measurement of the reportable segments' profit or loss before tax and the entity's profit or loss, for example, the allocation of centrally incurred costs.
- The nature of any differences between the measurement of the reportable segments' assets and the assets of the entity.
- The nature of any differences between the measurement of the reportable segments' liabilities and the liabilities of the entity.
- The nature of any changes from prior periods in measurement methods used to determine segment profit or loss and the effect on profit or loss from those changes.
- The nature of asymmetrical allocations to reportable segments. For example, a reportable segment may be charged the depreciation expense for a particular asset but the depreciable asset might not have been allocated to the segment.

Entity wide disclosures

The reporting entity must also make the following disclosures in the financial statements, even if it only has one reportable segment:

- Revenue from external customers for each product and service or each group of similar products and services.
- Revenue from external customers attributed to the entity's country of domicile and attributed to all foreign countries in total where revenue is made.
- Non-current assets located in the country of domicile and located in all foreign countries in total where the entity holds assets
- If revenue from any customer is more than 10% of total revenue then it must be disclosed along with the total of revenues from these customers and the identity of the segment reporting the revenue.

IAS 33: Earnings per share

- Introduction and scope
- Basic earnings per share
- Basic earnings per share and a bonus issue of shares
- Basic earnings per share and a rights issue
- Diluted earnings per share
- Dealing with multiple dilutions
- Diluted losses
- ED: Simplifying Earnings per Share

2 IAS 33: Earnings per share

2.1 Introduction and scope

Earnings per share (EPS) is a key ratio used by investors to assess the performance of a company. It provides a measure of the profit attributable to each ordinary shareholder during the year. The EPS for both this year and the previous year must be disclosed in the annual financial statements.

The disclosure should be made in the statement of comprehensive income, unless it presents the components of profit or loss in a separate income statement, in which case the EPS information should be disclosed in the income statement.

Basic EPS should be calculated by dividing the net profit or loss for the period attributable to ordinary shareholders by the weighted average number of ordinary shares outstanding during the period.

IAS 33 **Earnings per share** applies to entities whose ordinary shares are publicly traded and by entities that are in the process of issuing ordinary shares in a public market. EPS is therefore usually calculated from consolidated accounts.

This is not a key standard for the exam, so you will need to know this in outline. Any questions set are likely to be testing adjustments that affect the earnings figure which in turns affects the EPS.

2.2 Basic earnings per share

IAS 33 specifies how earnings per share should be calculated. This is to ensure that measurements of EPS by different entities can be properly compared with each other.

$$\text{Earnings per share} = \frac{\text{Earnings}}{\text{Number of ordinary shares in issue}}$$

Earnings are the profit (or loss) after tax from continuing operations that are attributable to the ordinary equity shareholders. With consolidated accounts, earnings are the profits after tax from continuing operations that are attributable to ordinary equity shareholders of the parent company (excluding the profit attributable to non-controlling interests).

Preference dividends are deducted in arriving at the profit attributable to ordinary equity shareholders. Preference dividends should normally only be deducted from profit after tax to calculate a figure for earnings if they have already been declared by the end of the financial year. This is because the company does not have an obligation to pay the dividend unless it is declared. However, there is an exception in the case of dividends on 'cumulative preference shares'. When a company has cumulative preference shares, the dividend that should be paid must be deducted from profit after tax to calculate earnings, even if it has not yet been formally declared. This is because if no dividend is declared, the entitlement of the shareholders to their dividend remains. There is an obligation on the company to pay the dividend, and this carries forward to the next financial year, until the dividend is eventually paid.

Number of ordinary shares in issue. This is the weighted average number of ordinary shares during the period. Calculating the number of shares in issue can be fairly complicated.

When shares are issued during the financial year **at a full market price**, the number of shares is a weighted average number of shares in issue during the year. This can be calculated as follows:

Number of shares at the beginning of the year, plus	A
Number of shares issued at full market price during the year	B
× [Number of months in the year after the share issue /12]	
Weighted average number of shares in the year	A + B

Example

A company issued 20,000 ordinary shares at their market price of $5 per share on 1 July 20X7. Its share capital prior to the issue was 200,000 and its profits after tax were $50,000 for the year to December 20X6 and $70,000 for the year to 31 December 20X7.

The shares were issued at full market price.

The earnings per share in each year are calculated as follows:

20X6: EPS = $50,000/200,000 shares = $0.25

20X7: Weighted average number of shares = 200,000 + (20,000 × 6/12) = 210,000

EPS = $70,000/210,000 shares = $0.33.

Partly-paid shares

The EPS is based on the number of fully-paid ordinary shares. Sometimes shares are issued with the money collected in stages, so if there are any shares which are not fully paid up by the end of the reporting period, then the equivalent number of fully paid shares must be established for use in the formula.

Example

At 1 January 20X7 a company had 100,000 $1 shares in issue, of which 800,000 are fully paid up. The rest of the shares in issue were paid up to $0.75.

The remaining $0.25 on the partly-paid shares was collected on 30 June 20X7.

The weighted average number of shares in 20X7 is calculated as follows:

Fully paid		
1 January to 31 December – fully paid up		800,000
Partly paid		
1 January to 30 June – paid up to 75c: 200,000 × 75c × 6/12	=	75,000
1 July to 31 December – fully paid-up: 200,000 × $1 × 6/12	=	100,000
Weighted average number of ordinary shares for EPS calculation		975,000

2.3 Basic earnings per share and a bonus issue of shares

A company may make a free issue of shares to its existing shareholders. This is called a bonus issue, scrip issue or capitalisation issue. The issue does not bring any new cash into the company and so cannot be expected to increase the total earnings.

The problem for calculating EPS when there has been a bonus issue in the period is that it distorts the comparison of EPS in the current year with the EPS in the previous year (for which a comparative figure is shown in the statement of comprehensive income or income statement). So to ensure that the bonus issue does not distort the comparison of EPS in the current year and previous year:

- the EPS for the current year is calculated as if the bonus issue took place at the start of the year, and
- the previous year's EPS is also re-stated as though the bonus shares had been in existence throughout the whole of that year too.

Example

A company has a share capital of 400,000 ordinary shares, when it decides to make a bonus issue of 1 for 4 on 1 April 20X6. Its profits for the year to 31 December 20X5 were $60,000 and its profits for the year to 31 December 20X6 were $65,000.

The EPS originally calculated in the financial statements for 20X5 was:
= $60,000/400,000 shares = $0.15.

After the bonus issue in 20X6, when the company issues another 100,000 shares (1/4 × 400,000) there are 500,000 shares. To calculate the EPS for 20X6, it is assumed that all these shares were in issue for the full year.

EPS for 20X6 = \$65,000/500,000 shares = \$0.13.

The EPS in 20X5 was \$0.15 and the EPS in 20X6 is \$0.13. This comparison would suggest that the EPS has gone down, and the company has therefore performed worse in 20X6. This is clearly not true: total earnings have gone up. The only difference between 20X5 and 20X6 is that the company issued some free shares.

To make the EPS for 20X6 and 20X5 properly comparable, we have to adjust the EPS for 20X5 for the purpose of making the comparison in the 20X6 financial statements, assuming that 500,00 shares were in issue throughput 20X5 as well as 20X6.

Re-stated EPS for 20X5 = \$60,000/500,000 shares = \$0.12.

Alternatively, to calculate the re-stated EPS for the previous year the original EPS in 20X5 of 15p can be adjusted by the 'bonus fraction' to recognise that 400,000 shares have now become 500,000 shares.

$$\text{Original EPS } \$0.15 \times \frac{\text{Original number of shares}}{\text{Number of shares after bonus issue}} \frac{400{,}000}{500{,}000} = \$0.12$$

Both the 20X6 figure for EPS and the re-stated 20X5 figure will be presented at the bottom of the statement of comprehensive income (or the income statement, if this is presented separately) in the 20X6 financial statements.

2.4 Basic earnings per share and a rights issue

A rights issue of shares is an issue of new shares for cash, where the new shares are offered initially to current shareholders in proportion to their existing shareholdings. The issue price of the new shares in a rights issue is always below the current market price for the shares already in issue.

Because rights issues are usually at less than full market price they include a bonus element. Since there is a bonus element in the issue price, an adjustment is needed for the EPS calculation, to ensure a fair comparison of the current year EPS with the previous year EPS.

Current year EPS

To adjust for the bonus element in the rights issue, the number of shares in the current financial year must be adjusted. You should multiply the number shares in issue before the rights issue by a factor (a 'rights factor) of:

$$\frac{\text{Actual cum rights price}}{\text{Theoretical ex rights price}}$$

Theoretical ex-rights price is explained and illustrated later.

Previous year EPS

In addition, to provide a fair comparison of the current year EPS with the previous year's EPS, the comparative EPS for the previous year is obtained by adjusting the EPS actually reported last year. The previous year's EPS is reduced by the following factor:

$$\frac{\text{Theoretical ex rights price}}{\text{Actual cum rights price}}$$

The **actual cum-rights price** is the market price of the shares before the rights issue.

The **theoretical ex-rights price** is the price that the shares ought to be, in theory, after the rights issue. It is a weighted average price of the shares before the rights issue and the new shares in the rights issue. If you are not sure how to calculate the theoretical ex-rights price, study the following example carefully.

Example

Entity L had 36,000,000 shares in issue on 1 January Year 2. It made a 1 for 4 rights issue on 1 June Year 2, at a price of $4 per share. The share price just before the rights issue was $5.

Total earnings in the financial year to 31 December Year 2 were $25,125,000. The reported EPS in Year 1 was $0.64.

Required

Calculate the EPS for the year to 31 December Year 2, and the adjusted EPS for Year 5 for comparative purposes.

Answer

After the rights issue, there will be 1 new share for every 4 shares previously in issue

		$
4 existing shares have a 'cum rights' value of	(4 × $5)	20.00
1 new share is issued for		4.00
5 shares after the issue have a theoretical value of		24.00

Theoretical ex-rights price = $24.00/5 = $4.80.

Date		Number of shares	Time factor	Rights fraction	Weighted average number of shares
1 Jan	Brought forward	36,000,000	× 5/12	× 5.00/4.80	15,625,000
1 June	Rights issue (1 for 4)	9,000,000			
31 Dec	Carried forward	45,000,000	× 7/12		26,250,000
					41,875,000

EPS Year 2 = $25,125,000/41,875,000 = $0.60, or 60c

Comparative EPS in Year 1 = $0.64 × ($4.80/$5.00) = $0.6144 or 61.44c.

Example

Entity M had 3 million ordinary shares in issue on 1 January Year 7. On 1 April Year 7, it made a 1 for 2 rights issue of 1,500,000 ordinary shares at $2 per share. The market price of the shares prior to the rights issue was $5.

An issue of 400,000 shares at full market price was then made on 1 August Year 7.

In the year to 31 December Year 7, total earnings were $1,746,875. In Year 6 EPS had been reported as $0.35.

Required

Calculate the EPS for the year to 31 December Year 7, and the adjusted EPS for Year 6 for comparative purposes.

Answer

After the rights issue, there will be 1 new share for every 2 shares previously in issue

		$
2 existing shares have a 'cum rights' value of	(2 × $5)	10.00
1 new share is issued for		2.00
3 shares after the issue have a theoretical value of		12.00

Theoretical ex-rights price = $12/3 = $4.

Date		Number of shares	Time factor	Rights fraction	Weighted average number of shares
1 Jan	Brought forward	3,000,000	× 3/12	× 5/4	937,500
1 April	Rights issue (1 for 2)	1,500,000			
		4,500,000	× 4/12		1,500,000
1 August	Issue at market price	400,000			
		4,900,000	× 5/12		2,041,667
					4,479,167

EPS Year 7 = $1,746,875/4,479,167 = $0.39, or 39c

EPS Year 6 = $0.35 × 4.00/5.00 = $0.28 or 28c.

2.5 Diluted earnings per share

In addition to the basic measure of EPS, a company must also disclose the diluted EPS in its statement of comprehensive income (or income statement, if presented separately). Diluted EPS warns existing shareholders that the EPS may fall in future years because of **potential new ordinary shares** that have been issued. Potential new ordinary shares may become actual ordinary shares at some time in the future

Potential new ordinary shares may be issued in any of the following forms:

- Convertible bonds: (bonds or debentures that can be converted into ordinary shares in the future, at the option of the bondholders)
- Convertible preference shares: (preference shares that can be converted into ordinary shares in the future, at the option of the preference shareholders)
- Options and warrants: (holders of options and warrants have the right to buy ordinary shares in the future at a predetermined fixed price)
- Contingently-issuable shares: (these are ordinary shares that will be issued if certain conditions are met)
- Employee incentive schemes (share options issued to the company's employees).

The owners of these instruments may become ordinary shareholders in the future. If this happens, the company's earnings will be shared by a larger number of shareholders. There is a strong possibility that the EPS may fall, and the EPS will become 'diluted'. ('Diluted' means 'watered down', and in relation to EPS, it means 'lower'.)

The diluted EPS is calculated by revising the total earnings and the weighted average number of shares as though the potential ordinary shares had already been issued.

The original earnings figure is revised by adjusting it for the dilutive effect of the potential ordinary shares when they become actual ordinary shares. An adjustment to total earnings is needed for convertible preference shares and convertible bonds.

- If convertible preference shares (potential ordinary shares) became actual ordinary shares, there would be a reduction in preference dividend, so total earnings would be higher.
- If convertible bonds (potential ordinary shares) became actual ordinary shares, there would be a reduction in interest costs (although there would no longer be tax relief on the interest costs), and total earnings would be higher.

When calculating the revised weighted average number of shares, the potential ordinary shares are deemed to have been converted into ordinary shares at the beginning of the period or, if later, the date of the issue.

Only dilutive shares should be included in the diluted EPS calculation.

- Potential new ordinary shares are not dilutive if EPS would have been higher if the potential shares had been actual shares in the period.
- Potential ordinary shares are dilutive when their conversion to ordinary shares decreases the EPS from continuing operations.

Diluted EPS and convertible debt and preference shares

Convertible instruments have two possible effects on EPS.

- Total earnings will increase because the interest or preference dividend will no longer be payable. With convertible debt, the tax relief on the interest will be lost, so the increase in total earnings is the interest no longer payable, minus the associated tax relief.
- The weighted average number of shares will increase.

The holders of the convertible debt or shares may have a choice of dates for conversion, and the rate of conversion into ordinary shares is often different for each conversion date. IAS 33 requires the best rate (from the holder's view) to be used.

Example

On 1 January Year 1, a company has 700,000 ordinary shares in issue. On 31 March Year 1, the company issues $200,000 6% convertible debentures. The terms of conversion are as follows:

(1) 100 shares per $100 debt if conversion takes place by 30 June Year 3

(2) 110 shares per $100 debt if conversion takes place by 30 June Year 5

The profit for the year to 31 December Year 1 is $200,000 and the tax rate is 33%.

The **basic EPS** for Year 1 is $200,000/ 700,000 = $0.29

Diluted EPS

As there is a choice of dates for conversion, IAS 33 requires that the diluted EPS calculation uses the best conversion rate from the holder's view. This will be 110 shares per $100 of debt. This would result in an additional 220,000 shares being issued ($200,000 × 110/100).

The company will save $12,000 in annual interest costs when the debt converts (6% × $200,000) but it will lose the tax relief on the interest. The tax relief is $12,000 × 33% = $3,960.

The diluted EPS for Year is therefore calculated as follows:

	Number of shares	Earnings
		$
Existing shares	700,000	200,000
New shares on conversion	220,000	
Interest saved		12,000
Tax relief lost		(3,960)
Adjusted amounts	920,000	208,040

Diluted EPS = $208,040/920,000 shares = $0.23.

Diluted EPS and share options and warrants

Share options and share warrants allow the holder the right to buy new ordinary shares at a future date, at a predetermined fixed price that is often lower than the current market price for the shares. If the options or warrants are 'exercised', the company will issue new shares and will receive less money than it would if the shares had been issued at the full market price.

When options or warrants have an exercise price that is less than the market price, there is a dilutive effect on EPS, and a diluted EPS must be calculated.

The technique for calculating diluted EPS for options and warrants is different from the technique for convertible preference shares or convertible debt. This is because a different situation applies with share options and share warrants. If these are exercised, the holders of the options or warrants will pay cash to obtain new ordinary shares.

- If the options or warrants are exercised, the entity will receive cash that it can invest to increase earnings. However, since the options or warrants have not yet been exercised, it is impossible to predict how total earnings will be affected when the cash is eventually received.
- The exercise price for the options or warrants will be less than the full market price for the shares. This means that there will be a bonus element in the issue.

These factors complicate the calculation of diluted EPS, but IAS33 has provided a solution, as follows.

- Calculate the number of shares that will be issued if all the options or warrants are exercised.
- Reduce this figure by the number of shares that could be purchased at full market price with the cash received from the exercise of the options or warrants. The market price of the shares should be the average market price during the period (the financial year).
- This net figure is then added to the existing number of shares in issue, to obtain the total shares for calculating the diluted EPS.

Example

Entity P had total earnings during Year 3 of $1,030,000.

It has 5,000,000 ordinary shares in issue. There are outstanding share options on 400,000 shares, which can be exercised at a future date, at an exercise price of $2.50 per share. The average market price of shares in Entity P during Year 3 was $4.

Required

Calculate the diluted EPS for Year 3.

Answer

Cash receivable on exercise of all the options = 400,000 × $2.50 = $1,000,000.

Number of shares this would buy at full market price in Year 3 = $1,000,000/$4 = 250,000 shares.

	Shares
Options	400,000
Minus number of shares at fair value	(250,000)
Net dilution	150,000
Existing shares in issue	5,000,000
Total shares	5,150,000

Diluted EPS = $1,030,000/5,150,000 = $0.20 or 20c.

Contingently-issuable shares

Contingently-issuable shares are ordinary shares issued for little or no cash when another party satisfies certain conditions. They may, for example be issued to employees if certain performance targets are met over a period of time, under the terms of a share grant incentive scheme.

Such shares should be included in the diluted EPS calculation if the conditions or targets have been met, and should be included from the beginning of the period, or

the date of the contingent agreement if later. If the conditions are not currently met, then no dilution should take place.

Employee incentive schemes

Employees of a company may be offered share options as part of their remuneration package. These options should be treated as having a dilutive effect from the date they are issued (the 'grant date').

The right of an employee to exercise his or her options may be dependent on the employee staying with the company for a number of years. However, for the purpose of calculating the diluted EPS, it should be assumed that this condition (the 'vesting condition') will be met.

If the options are performance-linked, then they should be treated as contingently-issuable shares in the manner described above.

2.6 Dealing with multiple dilutions

A company may have several different types of potential ordinary shares. If so, some of its potential ordinary shares will be more dilutive than others. Some might not be dilutive at all. Although each one individually dilutes the EPS, taken together this may not be true.

Diluted EPS should only be calculated for potential ordinary shares that are dilutive. When a company has several different types of potential ordinary shares, it is necessary to rank them in order of their dilutive effect, and calculate the diluted EPS in stages:

- First, calculate the diluted EPS taking only the most dilutive type of potential ordinary shares
- Next, calculate the diluted EPS taking only the two most dilutive types of potential ordinary shares.
- Next, calculate the diluted EPS taking only the three most dilutive types of potential ordinary shares.
- Repeat this process until you calculate a diluted EPS for all the types of potential ordinary shares.

The diluted EPS to report in the financial statements is the lowest amount for diluted EPS that you calculate.

This process is set out in a step-by-step approach below.

Step 1: rank the potential ordinary shares in order of dilution

For each potential ordinary share that could have a dilutive effect on EPS:

- calculate the extra earnings that each new share would provide (saving in preference dividend or interest net of tax / new shares issued).
- Rank these instruments from most dilutive to least dilutive.

Step 2: Find the maximum potential dilution to EPS

Starting with the most dilutive type of potential ordinary share, calculate the diluted EPS. Adding each type of potential ordinary share in order of ranking, re-calculate the diluted EPS. Repeat this process until the maximum potential dilution to EPS is found. This may arise before the last type of potential ordinary share in the order of ranking is considered.

The lowest diluted EPS that is calculated in this step-by-step process is the diluted EPS that must be reported in the financial statements.

Example

A company has 2 million ordinary shares in issue and earnings of $8 million.

It has in issue the following potential ordinary shares:

(1) 100,000 5% convertible preference shares of $100 each

Conversion terms are 1 for 2. The preference shares pay a dividend of $5/share.

(2) $500,000 10% convertible bonds

Conversion terms are 250 shares per $1,000.

The company pays tax at 33%.

Required

Calculate the diluted EPS.

Answer

Step 1: Ranking

We need to rank the preference shares and convertible bonds in order of 'dilutiveness'.

	Increased earnings (A)	New shares (B)	Extra EPS (A) ÷ (B)
Convertible preference shares	$		
Dividend saved	500,000		
Ordinary shares created		50,000	$10
Convertible bonds			
Interest saved	50,000		
Tax relief lost (at 33%)	(16,500)		
	33,500		
Ordinary shares		125,000	$0.27

The convertible bonds are the most dilutive, because the extra EPS they will add for each new share created is lower than the extra EPS that the preference shares would create. The convertible bonds should therefore be taken first when calculating the maximum potential dilution.

Step 2: Find the maximum potential dilution

	Earnings	Number of shares	EPS
	$		
Basic EPS	8,000,000	2,000,000	$4.00
If the convertible bonds are converted: change in total earnings	33,500	125,000	
	8,033,500	2,125,000	$3.78
Convertible preference shares are converted: change in total earnings	500,000	50,000	
	$8,533,500	2,175,000	$3.92

The diluted EPS is $3.78, because this is the maximum dilution that occurs. The effect of the convertible preference shares is anti-dilutive, as they increase the EPS up to $3.92. The preference shares should therefore be ignored.

2.7 Diluted losses

If a company has made a loss, its EPS is negative. IAS 33 requires the disclosure of basic and diluted losses per share, in the same way as EPS when there is a profit. Dilution means making a profit smaller or a loss larger.

If the basic EPS is negative (a loss), then the diluted EPS calculated by the methods described above will normally make the negative EPS smaller. When this happens, there is no dilution. The diluted EPS that is reported should then be the same as the basic EPS.

2.8 ED: Simplifying Earnings per Share

In 2008, an Exposure Draft 'Simplifying Earnings per Share' was issued, proposing amendments to IAS33. The ED was issued as part of the convergence project with the US Financial Accounting Standards Board (FASB). In addition to working towards convergence between international and US standards, the ED also makes proposals for clarifying and simplifying the calculation of EPS.

The main proposals for simplification are as follows.

- If an entity has issued a **financial instrument whose value is measured at fair value through profit or loss** (in accordance with IAS 39), this instrument should be **excluded from the calculation of diluted EPS**. This is because changes in fair value of these instruments are reported through profit or loss, and no further adjustment for potential dilution is appropriate. Only instruments that are **not**

measured at fair value through profit or loss should be included in the calculation of diluted EPS.

- In calculating diluted EPS for options and warrants, the current requirement of IAS33 is to make an assumption that the money raised from exercise of the options or warrants would be used to buy back shares of the company at their average market price for the period. (This was explained earlier.) To simplify the calculation, the ED proposes that the **end-of-period market price** for the shares should be used, rather than the average market price for the period.
- For the first time, it is proposed that potentially dilutive instruments should include **forward contracts** entered into by an entity **to sell** its own shares Examples of 'potential ordinary shares' are therefore 'options, warrants, forward contracts and convertible instruments'.
- (Note: The inclusion of forward contracts in potential ordinary shares applies to forward contracts for the sale of the entity's shares at a fixed price, but not to forward contracts for the repurchase its own shares. It is proposed in the ED that contracts to repurchase the entity's own shares should be excluded from the calculation of diluted EPS.)

IAS 34: Interim financial reporting

- Scope of IAS 34
- Form and content of interim financial statements
- Recognition and measurement
- Use of estimates in interim financial statements
- IFRIC Interpreation 10: Interim financial reporting and impairment

3 IAS 34: Interim financial reporting

3.1 Scope of IAS 34

IAS 1 requires that financial statements should be produced at least annually. Many companies are required by national regulations to produce accounts on a half-yearly basis or sometimes on a quarterly basis. For example, in the UK the Financial Services Authority requires listed companies whose shares are traded on the London Stock Exchange to produce accounts at the half year stage ('interim accounts') and at the year end ('annual report'). This is one of their conditions of listing.

IAS 34 **Interim financial reporting** does not specify the frequency of interim reporting: this is a matter for national regulations, which may vary between countries. IAS 34 focuses on providing guidance on the form and content of these interim accounts.

It encourages publicly-traded companies to prepare interim accounts and to file them with the national authority no later than 60 days after the end of the interim period.

3.2 Form and content of interim financial statements

IAS 34 requires that, as a minimum, an interim financial report should include:

- a condensed statement of financial position
- a condensed statement of comprehensive income, presented as either a condensed single statement or a condensed separate income statement followed by a condensed statement of comprehensive income
- a condensed statement of changes in equity
- a condensed statement of cash flows, and
- selected explanatory notes.

In the statement that presents the components of profit or loss (the statement of comprehensive income or the separate income statement), an entity should present the basic and diluted EPS for the period.

An entity could provide a full set of financial statements or additional selected information if it wishes to do so. If it chooses to produce a full set of financial statements for its interim accounts, the entity must comply with IAS 1.

The interim statements are designed to provide an update on the performance and position of the entity. It should focus on new activities, events, and circumstances that have occurred since the previous annual financial statements were issued. They should not duplicate information that has already been reported in the past.

3.3 Recognition and measurement

An entity should use the same accounting policies in the interim accounts that it uses in the annual financial statements.

Measurement for interim purposes should be made on a year-to-date basis. For example, suppose that a company uses quarterly reporting and in the first quarter of the year, it writes down some inventory to $nil. If it is then able to sell the inventory in the next quarter, the results for the six-month period require no write-down of inventory, and the write-down of inventory should be reversed for the purpose of preparing the interim accounts for the first six months of the year.

An appendix to IAS 34 gives some guidance on applying the general recognition and measurement rules from the IASB Framework to the interim accounts. Some examples are given below.

Intangible assets

The guidance in IAS 34 states that an entity should follow the normal recognition criteria when accounting for intangible assets. If development costs have been incurred, which at the interim date do not meet the recognition criteria, then they should be expensed. It is not appropriate to capitalise them as an intangible asset in the belief that the criteria will be met by the end of the annual reporting period.

Tax

Interim period tax should be accrued using the tax rate that would be applicable to expected total earnings.

3.4 Use of estimates in interim financial statements

The interim financial statements should be reliable and relevant. However IAS 34 recognises that the preparation of interim accounts will generally rely more heavily on estimates than the annual financial statements. An appendix of IAS 34 provides examples.

Pensions

A company is not expected to obtain an actuarial valuation of its pension liabilities at the interim date. The guidance suggests that the most recent valuation should be rolled forward and used in the interim accounts.

Provisions

The calculation of some provisions requires the assistance of an expert. IAS 34 recognises that this would be too costly and time-consuming for the interim accounts. IAS 34 therefore states that the figure included in the annual financial statements for the previous year should be updated without reference to an expert.

Inventories

A full count of inventory may not be necessary at the interim reporting date. It may be sufficient to make estimates based on sales margins to establish a valuation for the interim accounts.

3.5 IFRIC Interpretation10: Interim financial reporting and impairment

IFRIC 10 addresses the question of whether an entity should reverse impairment losses recognised in an interim period if the loss would not have happened or would have been smaller when measured at the end of the annual reporting period. This specifically refers to goodwill, investments in equity instruments and in financial assets carried at cost.

IFRIC 10 states that impairment losses cannot be reversed if they have been recognised in a previous interim period.

CHAPTER 14

Employee benefits and share-based payments

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1 IAS 19: Employee benefits

1.1 The scope and basic principles of IAS 19

A company may reward its employees in ways other than payment of a basic salary. Employers often provide entitlements to paid holidays, or pay an annual cash bonus to some employees, or provide employees with a company car, medical insurance and pension benefits. (Some employees also receive share options under company pension schemes: these are classified as share-based payments.)

IAS 19 provides guidance on accounting for all forms of employee benefits, except for share based payments. Share-based payments are dealt with by IFRS 2.

The basic principle in IAS 19 is that the cost of providing benefits to employees should be matched with the period during which the employees work to earn the benefits. This principle applies even when the benefits are payable in the future, such as pension benefits.

IAS 19 requires an entity:

- to recognise a liability when an employee has provided a service in exchange for a benefit that will be paid in the future, and
- to recognise an expense when the entity makes use of the service provided by the employee.

The basic double entry may therefore be (depending on the nature of the employee benefits):

- Debit: Employment cost (charged as an expense in the income statement)
- Credit: Liability for employee benefits

1.2 Short-term employee benefits

Short-term employee benefits are employee benefits that are paid within twelve months after the end of the period in which the employee provides the service. This includes:

- wages, salaries and social security contributions
- paid annual holiday and paid absences due to sickness
- profit-sharing payments and bonuses
- other benefits not in a monetary form, such as medical insurance, free accommodation in a house or flat owned by the entity and company cars.

The expense must be accounted for on an accruals basis and any unpaid entitlement should be recognised as a short-term liability. Discounting the liability to a present value is not required, because it is payable within 12 months.

Example

A company allows each employee five weeks of paid holiday in each calendar year (1 January to 31 December). Any holiday not taken by the end of one year can be carried forward to the next calendar year.

If some employees have not taken their full holiday entitlement by the end of the year, a liability should be recognised for the monetary value of the holiday entitlement that is carried forward to the next year. In this way the cost of the full five-week holiday entitlement is charged as an expense in the current year, even if some of the entitlement has been carried forward as a liability in the statement of financial position.

1.3 Post-employment benefits

Post-employment benefits are benefits that are given, or will be given, to employees after they have retired from the company. The most significant post-employment benefit is a retirement pension, but there may also be post-employment life insurance and medical care.

Accounting for post-employment benefit plans is the most complex aspect of IAS 19. Pension schemes (or pension 'plans') are either:

- defined contribution plans or
- defined benefit plans.

The accounting treatment differs for each type of pension plan.

1.4 Defined contribution pension schemes

In a defined contribution pension scheme, the employer pays an agreed amount of money ('defined contributions') at regular intervals into a pension fund for the employee. The contributions are usually paid in cash. The amount of money that the

employer contributes is usually a fixed percentage of the employee's wages or salary – say 5% of the employee's basic salary.

The contributions of cash into the pension fund are invested by the fund in a range of investments, to earn a return and increase the value of the fund. When an employee retires, he or she is paid a pension out of the fund. The amount of pension received by the employee is not pre-determined, but will depend on the size of the fund when the employee retires.

The size of the fund depends on:

- the amount of contributions that have been paid into the fund for the employee, and
- the returns earned by the investments in the fund.

The size of the employee's pension therefore depends on the performance of the investments in the fund, and the employee bears the risk of poor performance by the fund investments. If the investments perform worse than expected, the fund will be smaller than expected and the employee's pension will be lower than the employee would want it to be. However, the employer is under no obligation to pay any further amounts of money to the employee.

As the name 'defined contribution' implies, the company's obligation to pay a pension to the employee is limited to the agreed amounts of contribution. The company is not required to make good any shortfalls if the pension fund does not have enough assets to pay the pension benefits that the employee would like to have. In effect, the employee bears the risk of a poor-performing fund, not the employer.

Accounting treatment: contributions to defined contribution schemes

Since the risk of low investment returns and a lower-than-expected pension is a risk for the employee, not the employer, accounting for the employer's contributions to a defined contribution scheme is very simple.

Using the accruals concept:

- the contributions payable for the reporting period are charged to profit or loss as an expense (an employee cost) in the income statement.
- any unpaid contributions at the end of the year will be shown in the statement of financial position as an accrual/liability and any prepaid contributions will be shown as an asset (a prepayment). The accrual or prepayment will usually be current, not long-term.

1.5 Defined benefit pension schemes

A defined benefit pension scheme (or pension plan) has some similarities to a defined contributions scheme. An employer makes regular contributions into a pension fund for its employees, and the money paid into the fund is invested. The fund is used to provide pension benefits to employees when they retire.

The fund grows over time with the returns from the investments made by the fund and also from the payments of additional contributions that the employer regularly makes. The fund is also reduced by payments of pensions to employees who are now past their retirement age.

The major difference between defined benefit and defined contribution schemes is that in a defined benefits scheme, the employer guarantees the amount of pension benefits that its employees will receive after they retire. The risk remains with the employer.

The amount that an employee will receive is usually linked to the number of years that he or she has worked for the company, and the size of his/her annual salary at retirement date (or on leaving the company). For example, a scheme may promise an annual pension of:

2/3 × Final annual salary × [Number of years of service/40]

So if the entitlement to a pension is calculated by this formula, an employee earning $60,000 on retirement, and who has worked for the company for 20 years will collect a pension of $20,000 each year until death (2/3 × $60,000 × 20/40). This may be increased each year to allow for inflation, depending on the terms of the pension plan.

An actuary will advise the company how much to pay in contributions into the pension plan each year, in order to ensure there are sufficient funds to cover the company's obligation to make the pension payments. The actuary will have to make a large number of estimates to calculate these payments. For example, the actuary has to estimate the average life expectancy of retired employees, the expected number of years of service that retired employees will have given when they retire, their final salary and the expected returns on investments in the pension fund.

It is highly likely that the actuary's estimates will not be 100% accurate, so when the value of the pension fund and the size of the employer's future pension obligations are re-valued at the end of each year, the actuary may find that there is a shortfall or a surplus.

- When the value of the investments in the pension fund is higher than the value of the employer's obligations to make future pension payments, the fund is in surplus.
- When the amount of the employer's future pension obligations is more than the value of the investments in the pension fund, the fund is in deficit.

The company will be required to eliminate a deficit, but not necessarily immediately. A deficit may be eliminated over a period of several years. A deficit is eliminated by the employer making additional contributions into the fund.

When the fund is in surplus, perhaps because of a large rise in the value of the investments in the fund, the actuary may recommend that the employer should not make any more contributions into the fund for a period of time (and 'take a pension holiday'). Alternatively the company may withdraw the surplus from the fund, for its own benefit.

Example

An actuary values the investments in a pension fund at $470 million and estimates the present value of the employer's future pension obligations to be $500 million. The scheme is $30 million in deficit.

The employer may decide to eliminate the deficit by making extra contributions into the fund for the next five years.

1.6 Definitions: defined benefit pension schemes

The cost to the company of funding a defined benefit scheme will vary from one year to the next, due to the variability in fund asset values and the expected future pension obligations. This variability complicates the accounting treatment of an employer's defined benefit pension scheme costs and the liability to its pension scheme fund.

It will be useful to understand some of the terminology used in accounting for defined benefit schemes.

Fair value of the plan assets. A pension fund owns investments, many of them in the form of shares, bonds and other financial instruments. 'Fair value' is the market value of these financial investments and other investment assets held by the fund.

Present value of the plan obligations. A defined benefit scheme has future pension obligations. These are the obligations to pay pension benefits in the future that have already been incurred for current employees (who have not yet retired) and former (retired) employees. These are the future obligations that have already accrued as a future liability.

The obligations are estimated by an actuary, and are based on actuarial estimates and assumptions.

Since the obligations are payable in the future, and most are payable many years in the future, the value of the obligations should be discounted to a present value for accounting purposes.

Current service cost. Each year, the future obligations of a defined benefits pension fund change. They often increase, because existing employees have worked an extra year for the company, and their salaries will have gone up. This increases their future pension entitlements. For example, if an employee serves one more year with a company, his number of years of service increases and so his future pension entitlement increases.

Changes in the obligations of a pension scheme due to changes in the 'service history' of current employees are called the 'current service cost'. This increases the pension liability and the increase is treated as an expense in the income statement.

Contributions paid. Each year the employer pays additional contributions into the fund, adding to the assets of the fund. This increases the pension assets and decreases cash in the employees accounts.

Benefits paid. Each year, retired employees are paid pension benefits from the fund. When benefits are paid, assets of the fund are reduced, and the liabilities (pension obligations) are also reduced.

Discount rate (interest cost). This is the rate used to discount the future payment obligations in order to calculate their present value as at the end of each reporting period. Currently, the discount rate should be based on the market yield of a high-quality corporate bond at the end of the reporting period.

Each year, since pension liabilities are one year closer to settlement, they should be adjusted for the time value of money. The pension liability is already shown as a net present so this adjustment unwinds the discount on the liability.

The interest cost is calculated on the opening pension liability and increases the liability and is charged as a cost in the income statement.

Expected return on plan assets. The actuary has to make a forecast of the income (dividends, interest and capital gains) that will be generated by the investments in the pension fund. This should be based on market expectations at the beginning of the financial year, for returns on investment over the entire life of the plan (which may be many years).

Returns on investments increase the value of the pension fund, and an actuary needs to estimate what these returns are likely to be, in order to assess whether a scheme will be in surplus or deficit. The return is calculated on the opening assets of the pension scheme and is added to pension assets and shown as income in the income statement.

Measuring the pension obligation
The pension obligation is measured using the projected unit credit method, as is the current service cost and past service cost. It is discounted to present value. This method makes actuarial assumptions based on how the pension liability will be used, such as mortality rates; changes in retirement age, and discount levels amongst others.

Measuring the plan assets
The pension assets are measured at fair value, which is usually market value.

1.7 Basic principles of a defined benefit scheme

In order to understand the accounting treatment of defined benefit (DB) schemes in the accounts of the employer, it is important to understand how the employer is affected by a DB scheme.

When a DB pension scheme operates, the scheme itself exists independently of the employer, with its own assets and liabilities to its scheme members. The assets and obligations of the DB scheme are therefore excluded from the employer's statement of financial position.

However the employer has a liability to fund any financial shortfall in the DB scheme (and it has a 'right' to any surplus). The net deficit (or surplus) of the scheme is the difference between:

- the (fair) value of the assets of the scheme, which are its financial investments and other investments, and
- the future obligations of the scheme to provide benefits to the scheme members, mainly in the form of pensions after retirement: these future obligations are long-term and so are discounted to a present value.

The difference between these two amounts is shown as a long-term liability or long-term asset in the statement of financial position of the employer.

Changes in the fair value of scheme assets

The fair value of the assets of a DB scheme change each year.

- They increase with the returns obtained on the assets owned by the scheme, such as the returns on its financial investments. They also increase as more contributions are paid each year into the scheme.
- They are reduced by actual payments of benefits from the scheme, as pensions to members who are now retired.

Changes in the PV of scheme obligations

The PV of a scheme's obligations also changes each year.

- The obligations are stated as a present value, so each year some of the discount unwinds and the PV of the obligations increases.
- Obligations also increase as employees who are currently members of the scheme earn more pension entitlements by providing more service to the employee. Current service costs (and past service costs, which are explained later) therefore add to the obligations.
- The scheme's obligations are reduced by actual payments of benefits from the scheme, as pensions to members who are now retired. This is because payments of benefits are the settlement of some of the obligations of the scheme.

Actuarial differences

There is one extra complication. The expected value of the scheme's assets at the year end depend partly on assumptions made by actuaries about the return that will be obtained on the scheme's assets during the year. These actuarial expectations or assumptions are usually wrong, to a smaller or larger extent.

Similarly the present value of the scheme's obligations depends on assumptions made by actuaries about factors such as the life expectancy of retired scheme members. These assumptions might also change. When actuarial assumptions are changed, there will be an actuarial gain or loss, and this affects the obligations of the employer to the DB scheme.

1.8 Accounting treatment of defined benefit pension schemes

Stages in the accounting treatment

Each year, the expected surplus or deficit in the employer's obligations to a DB pension fund has to be re-assessed. The following steps must be taken to make this assessment:

- Start with the pension scheme's assets and the present value of its future obligations, as at the beginning of the financial year.
- Calculate what would be the scheme's assets and PV of future obligations at the end of the financial year, if the actuary's estimates were correct. In particular, assume that the discount rate is correct and that the expected rate of return on the fund's investments is also correct.
- To calculate what the scheme's assets would be, on these assumptions, the following calculation is necessary:

Pension scheme assets at the beginning of the year	A
Add: Expected return from the fund's investments during the year	B
Add: Contributions paid into the fund	C
Minus: Benefits paid from the fund	(D)
Expected pension scheme assets at the end of the year	A + B + C – D

- To calculate what the expected present value of the scheme's existing future obligations should be, the following calculation is necessary:

PV of pension scheme obligations at the beginning of the year	A
Add: The discounted value of these obligations for one year	B
= PV of obligations × Discount rate %.	
(This is because the obligations are one year nearer, so the PV is higher.)	
Add: Current service cost (increase in obligations in the year)	C
Minus: Benefits paid from the fund (= liabilities paid)	(D)
Expected PV of pension scheme obligations at the end of the year	A + B + C – D

- These calculations provide the expected position of the pension scheme at the end of the year, and the expected surplus or deficit.
- The actuary must provide a current estimate, as at the year end, of what the actual value of the plan assets, the most recent estimate of the PV of existing future obligations and the current estimate of the scheme's surplus or deficit.
- In profit or loss for the year in the accounts of the employer, the following items are costs or benefits:

Recognised in profit or loss	$
Current and past service costs: an expense	(X)
Interest cost (unwinding of the discount, see above): an expense	(X)
Expected return on plan assets (see above): a benefit	X
Actuarial gain or loss (or some of it): this is explained later	X or (X)

This accounting treatment can best be explained using an example:

Example

The following information relates to the defined benefit plan of Company X for the year to 31 December 20X6.

At 1 January 20X6:	$000
Fair value of the plan assets	900
Present value of the plan obligations	1,850
There are no unrecognised actuarial differences	

During 20X6:	$000
Current service cost	90
Contributions paid into the plan	150
Benefits paid out by the plan	60

Actuarial assumptions:	
Discount rate	11%
Expected return on plan assets	3%

New actuarial valuation at 31 December 20X6:	$000
Fair value of the plan assets	850
Present value of the plan obligations	1,960

Step 1: The opening position

At the beginning of the year, there is a deficit on the scheme of $950,000, because the assets of the scheme ($900,000) are less than the PV of expected future liabilities ($1,850,000).

The $950,000 must be shown as a liability in the company's statement of financial position. This is an obligation that the company has to the pension scheme. (The fund assets and liabilities are held within a separate pensions entity, and so do not appear in the statement of financial position of the company. Only the deficit is shown as a liability in the company's accounts.)

Step 2: Rolling forward the position

The actuary's assumptions about discount rate and return on investments, the actual cash payments into and out of the pension fund and the current service cost are used to 'roll forward' the opening position at the beginning of the year, assuming that the actuary's assumptions are correct. This will give an amount for the expected surplus or deficit at the end of the year.

		Fund position		Company position
Accounting steps	**Workings**	**Liabilities**	**Assets**	**Net**
		$000	$000	$000
At start of year		(1,850)	900	(950)
1.Interest expense	11% × 1,850,000	(204)		(204)
2.Interest earned	3% × 900,000		27	27
3.Current service cost	Given	(90)		(90)
4.Contributions paid	Given		150	150
5.Benefits paid out	Given	60	(60)	0
Expected year end position		(2,084)	1,017	(1,067)

Notes

(1) At the year end, the future pension payments are one year closer and so the discounting starts to unwind. As the liability was discounted at 11%, the $1,850,000 at the beginning of the year unwinds at 11%. The PV of the liability increases by $1,850,000 × 11% = $204,000, and this causes the company's deficit to increase.

(2) The assets in the scheme were expected to generate a return of 3% during the year, and this will reduce the company's deficit by $27,000.

(3) As the employees have served an extra year's service, their future pension benefits will increase. The current service cost reflects the increase in the deficit due to these higher pension payments.

(4) The company paid cash into the fund during the year, which reduces the deficit.

(5) The scheme pays out contributions to members who have retired. It does so by selling some of the investments to settle part of the liability. This transaction has no effect on the company.

After rolling forward the position at the beginning of the year, the scheme deficit has increased from $950,000 to $1,067,000, which is an increase of $117,000. This increase is taken to the income statement as an expense for the year. The double entry to record this transaction in the company's accounts is as follows:

		$000	$000
DR	Income statement (204 – 27 + 90)	267	
CR	Pension liability (increase = 1,067 – 950)		117
CR	Cash (contributions)		150

Step 3: The actuarial difference

By rolling forward the pension position using the actuary's estimates, the expected year end deficit was $1,067,000. However the new actuarial valuation at the end of the year shows that the actual deficit is now estimated at $1,110,000 ($1,960,000 PV of obligations - $850,000 value of plan assets).

There is an 'unexplained' difference of $43,000 ($1,110,000 - $1,067,000). This is the called the 'actuarial difference'.

		Fund position		Company position
Accounting steps	**Workings**	**Liabilities**	**Assets**	**Net**
		$000	$000	$000
At start of year		(1,850)	900	(950)
1.Interest expense	11% × 1,850,000	(204)		(204)
2.Interest earned	3% × 900,000		27	27
3.Current service cost		(90)		(90)
4.Contributions paid			150	150
5.Benefits paid out		60	(60)	0
Expected year end position		(2,084)	1,017	(1,067)
Actuarial difference		124	(167)	**(43)**
Actual position 31 December 20X6		(1,960)	850	(1,110)

When an actuarial valuation is updated at the end of each year, errors in the original estimates are discovered. The actuarial valuation is based on a number of assumptions, and over time, the actual results may not match the assumptions made.

In this example, the actuary had assumed the assets would generate a return of 3%. At the end of 20X6 it appears they have generated a return of less than 3%, because the actual asset valuation at the year end is considerably lower than the 'roll-forward' suggested that it should be.

The actuarial difference has to be accounted for. IAS 19 allows a number of possible accounting treatments of the actuarial difference.

Example

The previous example provides a lengthy explanation of the calculations. In your exam, you might be required to produce the necessary figures quickly. The following example shows how the calculations should be made.

XYZ Company has a defined benefit scheme for its employees, to which the following information relates:

Year 8		$m
1 January	Present value of scheme obligations	850
	Fair value of scheme assets	780
Year to 31 December		
	Expected return on scheme assets: 5%	
	Discount rate at start of year: 6%	
	Service costs	40

	Benefits paid to scheme members	32
	Contributions paid into the scheme	43
31 December	Present value of scheme obligations	920
	Fair value of scheme assets	836

The employer has a net liability at 1 January of $70 million (= 850 – 780) and a net liability of $84 million at 31 December (= 920 – 836).

The total actuarial gain or loss in the year is calculated as follows:

	$m
Pension scheme assets at the beginning of the year (fair value)	780
Expected return from the fund's investments during the year at 5%	39
Contributions paid into the fund	43
Benefits paid from the fund	(32)
Expected pension scheme assets at the end of the year	830
Actuarial gain (balance)	**6**
Pension scheme assets at the end of the year (fair value)	836

The actuarial difference is a gain because the actual value of the scheme assets at the end of the year is more than would be expected using the actuaries' assumptions.

	$m
PV of pension scheme obligations at the beginning of the year	850
Interest cost (discount unwinds) at 6%	51
Add: Current service cost (increase in obligations in the year)	40
Minus: Benefits paid from the fund (= liabilities paid)	(32)
Expected PV of pension scheme obligations at the end of the year	909
Actuarial loss (balance)	**11**
PV of pension scheme obligations at the end of the year	920

The actuarial difference is a loss because the actual PV of the scheme obligations at the end of the year is more than would be expected using the actuaries' assumptions.

The total (net) actuarial difference for the year is an actuarial loss of $5 million (= $11 million loss and $6 million gain).

1.9 Accounting for the actuarial difference

IAS 19 allows three possible accounting treatments of the actuarial difference.

Option 1: report the difference in full through the income statement

IAS 19 allows the actuarial difference to be taken to the profit or loss (the income statement) immediately. This would adjust the pension deficit in the company's statement of financial position to its true position.

In the above example the actuarial difference could be written off as an expense of $43,000 in 20X6. The liability of the company to its pension scheme will be shown in the statement of financial position as $1,110,000.

The journal entry to record this is the company's accounts are as follows:

		$000	$000
DR	Income statement	43	
CR	Pension liability		43

Option 2: the corridor approach

The accounting treatment in Option 1 will lead to large variations in the reported profits of a company from one year to the next, because the actuarial difference could be quite large. Actuaries might change their assumptions drastically (for example, after an equity market 'crash' has reduced the value of investments in the scheme, or after the actuary has increased his estimate of the life expectancy of retired employees).

If there is a large actuarial difference each year, a company with stable operating profits could report profits that fluctuate each year. The actuarial differences could hide the company's operating performance.

It was therefore considered necessary to allow companies a way of managing the actuarial differences, so that reported profits are not increased in one year and reduced in the next year by actuarial differences each year. Over time, favourable and adverse actuarial differences might largely cancel each other out.

Therefore IAS 19 allows the use of a materiality test, called the '**corridor approach**' to decide how much (if any) of the actuarial difference must be recognised in profit or loss (the income statement) each year. A company can choose to adopt the corridor approach as its accounting policy. When it adopts the corridor approach, the only actuarial difference that is taken to the income statement is that part of the difference that 'falls outside the corridor' – (exceeds the limits set by the corridor).

The corridor is the **higher** of:

- 10% of the fair value of the scheme's assets at the beginning of the year
- 10% of the present value of the scheme's liabilities at the beginning of the year.

So in the example above, the corridor is the higher of:

- 10% × $900,000 = $90,000
- 10% × $1,850,000 = $185,000

Therefore the corridor is $185,000.

Given that the actuarial difference is $43,000 and smaller than the corridor, no actuarial difference is recognised in the income statement, using Option 2 as the accounting policy.

	$000
Net deficit at year end (actuary'slatest estimate)	1,110
Minus unrecognised actuarial loss	(43)
Net liability(scheme deficit) to be reported in the company's statement of financial position	1,067

Further rules on the corridor method

A company must recognise in its income statement, as a **minimum**, the amount of the actuarial difference that falls outside the corridor. The company could use a smaller corridor than 10% – say 5%.

The excess actuarial difference that falls outside the corridor **should be recognised in the income statement over the average remaining service lives of the employees concerned**.

Recognition should start from the next year. IAS 19 permits faster recognition, so the actuarial difference could be taken in full immediately.

However the company chooses to apply the corridor approach, they must be consistent in their accounting policy from one year to the next.

Example

The earlier example will now be continued into the next two years:

Opening position at 1 January:	**20X7**	**20X8**
	$000	$000
Fair value of the plan assets	850	879
Present value of the plan obligations	1,960	2,400
Unrecognised actuarial loss brought forward	43	?
During the period:	$000	$000
Current service cost	100	110
Contributions paid into the plan	140	120
Benefits paid out by the plan	150	100
Actuarial assumptions:		
Discount rate	11%	11%
Expected return on plan assets	3%	3%
The actuarial valuation at 31 December:	**20X7**	**20X8**
	$000	$000
Fair value of the plan assets	879	980
Present value of the plan obligations	2,400	2,780

The company has a policy of applying a 10% corridor, any excess being amortised over the average remaining service lives of ten years.

Required

For each year:

(1) Calculate the actuarial gain or loss arising in the year.

(2) Applying the corridor approach, calculate the amount of the difference to be recognised.

(3) Calculate the liability to be disclosed in the statement of financial position.

(4) Prepare an analysis of the expense taken to the income statement.

Answer

		Fund position		Company position
Requirement 1	**Workings**	**Liability**	**Assets**	**Net**
		$000	$000	$000
At 1st January 20X6		(1,960)	850	(1,110)
1. Interest expense	11% × 1,960	(216)		(216)
2. Interest earned	3% × 850		26	26
3. Current service cost	Given	(100)		(100)
4. Contributions paid			140	140
5. Benefits paid out		150	(150)	0
Expected year end position		(2,126)	866	(1,260)
Actuarial difference	Balance	(274)	13	(261)
Actual position 31st Dec 20X7		(2,400)	879	(1,521)
At 1st January 20X8		(2,400)	879	(1,521)
1. Interest expense	11% × 2,400	(264)		(264)
2. Interest earned	3% × 879		26	26
3. Current service cost	Given	(110)		(110)
4. Contributions paid			120	120
5. Benefits paid out		100	(100)	0
Expected year end position		(2,674)	925	(1,749)
Actuarial difference		(106)	55	**(51)**
Actual position 31st Dec 20X8		(2,780)	980	(1,800)

The corridor = greater of:	**20X7**	**20X8**
	$000	$000
10% of scheme assets at beginning of the year	85	87.9
10% of liability at beginning of the year	196	240.0
Corridor (the higher of the two amounts)	196	240.0

Requirement 2

Actuarial difference to be recognised	**20X7**	**20X8**
	$000	$000
Cumulative unrecognised actuarial loss b/fwd	43	304.0
(For 20X8 = 43 unrecognised in 20X6 + 261 actuarial difference in 20X7)		
Corridor	196	240.0
Actuarial difference to be recognised	**0**	**64.0**
Average remaining service lives	10	10.0
Actuarial difference to be recognised in year	**0**	**6.4**
Unrecognised actuarial loss 1 January	43	304.0
Actuarial loss for year	261	51.0
Actuarial loss recognised	0	(6.4)
Unrecognised losses at 31 December	**304**	**348.6**

Requirement 3

Liability in statement of financial position	**20X7**	**20X8**
	$000	$000
Net liability at year end	1,521	1,800.0
Unrecognised losses	(304)	(348.6)
Net liability to be reported	**1,217**	**1,451.4**

Requirement 4

Income statement expense	**20X7**	**20X8**
	$000	$000
Interest expense	(216)	(264.0)
Interest earned	26	26.0
Current service cost	(100)	(110.0)
Actuarial loss recognised	0	(6.4)
Expense to be recognised	**(290)**	**(354.4)**

Option 3: report the difference in full through equity reserves

A third option for accounting for the actuarial difference was introduced from December 2004. This was due to problems with IAS 19 (which have not been resolved).

IAS 19 adopts an approach that measures a company's pension obligations to a defined benefit scheme by comparing the fair value of the assets and the present value of the liabilities. The assets will include investments in financial instruments, whose price may be volatile and move up and down by large amounts in any year. The Option 1 approach to reporting the actuarial difference can therefore result in significant fluctuations in the reported profit each year.

Using the corridor approach, a part of the 'actuarial difference' may be deferred. Companies are able to choose whether to adopt the corridor approach and how it should apply. Unfortunately, giving companies a choice of accounting method does not help with the IASB's goal of comparability of financial statements between entities.

The ability to defer the actuarial differences (using the corridor method) deals with the volatility problem, but results in items being shown in the statement of financial position that do not meet the IASB Framework definition of an asset or liability.

A third approach to reporting actuarial differences was therefore introduced as an acceptable option from December 2004, by means of an amendment to IAS 19. By this method, companies are allowed to recognise actuarial gains and losses immediately in full in the period in which they occur, but do not have to report these gains or losses through profit or loss (the income statement). Instead, they can be taken directly to reserves.

A company adopting this accounting policy must apply the policy to all its defined benefits plans and all its actuarial gains and losses.

1.8 Past service costs

A company may change the terms of its pension plan once it is in operation, so that the future benefits payable to retired employees are changed. This affects the future pension payments, and so changes the present value of the liabilities of the scheme. Past service costs could cause the pension liability to increase or decrease, depending on the changes made and these are also recognised in the income statement.

- If the benefits have 'vested' and the employees are entitled to the new benefits immediately, then the increase in the scheme's liabilities should be expensed immediately (charged as an expense in the income statement).
- If the benefits 'vest' in the future, and the employees are therefore not entitled to the benefits until a later date, then the costs to the company of the increase in the obligations/liabilities of the scheme should be spread over this vesting period.

Example

An enterprise operates a pension plan that provides a pension of 2% of final salary for each year of employment. The employees are eligible to join the pension scheme after five years of service. On 1 January 20X7 the enterprise improves the pension to 2.5% of final salary for each year of service starting from 1 January 20X3. At the date of the improvement, the present value of the additional benefits for service from 1 January 20X3 to 1 January 20X7 is as follows:

	$000
Employees with more than five years' service at 1 January 20X7	150
Employees with less than five years' service at 1 January 20X7 (average period until vesting: three years)	120
	270

- The enterprise recognises $150,000 immediately because those benefits are already vested.
- The enterprise recognises $120,000 on a straight-line basis over three years from 1 January 20X7.

1.9 ED 2009/10 Discount rate for employee benefits: Proposed amendments

The IASB withdrew this ED in October 2009. The reason given for its withdrawal was that responses to the ED had shown that the proposed change would lead to unexpected complications. IASB will now proceed with a longer term project to redraft IAS 19.

The ED was an attempt to solve a particular problem. This problem still exists though now there is no solution expected. This text contains the following brief explanation of the issue for the sake of completeness.

IAS 19 requires an entity to determine the rate used to discount employee benefit obligations with reference to market yields on high quality corporate bonds. In some countries there is no deep market in such bonds. In this case, IAS 19 requires the use of market yields on government bonds instead.

This requirement means that entities with similar employee benefit obligations can report them at very different amounts. This effect has been much greater as a result of the global financial crisis because of the significant widening of the spread between yields on corporate bonds and yields on government bonds.

The ED proposed to eliminate the requirement to use government bond rates to determine the discount rate for employee benefit obligations when there is no deep market in high quality corporate bonds. This was to be replaced by a principles based approach.

IFRS 2: Share-based payment

- The objective of IFRS 2
- The nature of share options and the accounting problem
- Accounting for equity-settled share-based payment transactions
- Cash-settled share based payments
- Share based payments and deferred tax
- IFRS 2: disclosure requirements
- Comments on IFRS 2
- IFRIC Interpretation 11: IFRS 2 - Group and treasury share transactions
- IFRIC Interpretation 8: Scope of IFRS 2

2 IFRS 2: Share-based payment

2.1 The objective of IFRS 2

IFRS 2 **Share-based payment** specifies how entities should account for share-based payment transactions. A share-based payment transaction is defined as a transaction in which an entity:

- receives goods or services as consideration for equity instruments of the entity, or
- receives goods or services from a supplier by incurring a liability to the supplier for an amount that is based on the entity's share price.

This can include inventories, property, plant and equipment, intangible assets and other non-financial assets. It excludes shares issued in a business combination (IFRS 3) and contracts for the purchase of goods under IAS 32 and 39.

An important example of a share-based payment transaction is the award of share options to employees (often senior managers and directors). An award of share options to an employee is seen as consideration given by the entity to the employee in return for the employee's services and IFRS 2 requires an expense to be recognised in respect of this.

Occasionally shares may also be used instead of cash to pay suppliers for goods or services. These are described as share based payments, and until IFRS 2, there was no accounting standard addressing the recognition and measurement of these transactions.

IFRS 2 recognises three types of share-based payment transaction:

- **Equity-settled shared based payment –** This is where the entity provides shares or share options in return for goods and services.
- **Cash-settled share based payment –** This is where the entity makes a cash payment in return for goods and services, and the amount of the payment is linked to linked to its share price.

- **Choice of settlement** – This is where the transaction can be settled in cash or shares.

IFRS 2 requires an expense to be recognised for the goods or services received by a company. The corresponding entry is a liability or an increase in equity depending on whether it is a cash-settled or equity-settled transaction

IFRS 2 requires that the cost of goods and services should be recognised when they are received. With goods, it is the date they are received. This could result in an asset or an expense, depending on the nature of the transaction. Recognition of the expense might be immediate or spread over a 'vesting period' if the shares are issued in the future.

2.2 The nature of share options and the accounting problem

The nature of employee share options

In an employee share option scheme, an employee is given the right to subscribe for new shares in the company at a future date, at a price that is usually fixed when the share options are awarded.

There are often some conditions attached to the right of the employee to exercise the options and buy the new shares. These conditions are called **vesting conditions**. When these conditions have been met, the right to subscribe for new shares **vests** in the employee. In other words, the right to buy the new shares becomes an unconditional entitlement.

The vesting conditions may have to be satisfied within a period of time, known as a vesting period. For example, an employee may be granted a number of share options, giving him the right to subscribe for new shares in the company on a future date, on condition that the individual remains an employee of the company for at least the next three years. In this example, the vesting conditions are the requirement to serve at least three more years with the company, and the vesting period is three years.

The accounting problem

The award of share options to an employee is a reward for services given by the employee.

- If the employee is rewarded with a cash bonus, the cost of the cash bonus would be included in total employment costs and charged as an expense in the relevant accounting period.
- A problem in the past with accounting for share options was that although share options are a similar type of reward for service, the cost of the options were not charged as an expense in the income statement.

Accounting for share options was therefore illogical. Employees were given rewards, but the cost of those rewards was not recognised in the income statement. The company incurred a liability to issue new shares at a price below current market value, but no liability was shown in the statement of financial position.

IFRS 2 requires a cost to be accounted for when share options are granted, because a transaction has occurred and so a cost should be matched against the benefits provided by the employees. The question is how to calculate the cost and how to recognise it in the financial statements.

Why are share options an expense?

When a company issues share options, it incurs an expense. It gives employees the right to subscribe for new shares at a future date, at a price that is expected to be lower than the market price of the shares when the options are exercised.

Share options therefore have a value. When share options are awarded to an employee, the employee is therefore given something of value.

2.3 Accounting for equity-settled share-based payment transactions

IFRS 2 states that share-based payment transactions, such as the award of share options, should recognise the cost when the transaction is made.

- An entity should recognise the services (or goods) received in a share-based payment transaction when it obtains the services (or goods).
- If the goods or services received do not qualify for recognition as assets, they should be recognised as expenses.

This means that when a company receives services from an employee, in return for which share options are awarded, the cost of the share options should normally be recognised immediately as an expense, because employee costs do not normally qualify for recognition as an asset.

The basic rule

For share-based payment transactions, an entity should measure the cost of the services (or goods) received at their **fair value**, with a corresponding increase in equity.

If a fair value cannot be reliably measured for the services or goods, the fair value of the equity instruments should be used instead.

When share options are granted to an employee, the fair value of the employment services provided in return for the options cannot be measured reliably; therefore the cost of the services should be measured as the fair value of the share options.

A value for share options can be obtained using a **share option pricing model**, such as the Black-Scholes model.

In the case of share options to employees, the cost of the options should be **recognised** in the accounts of the company at the **grant date**. This is the date that the options are awarded to the employee, not the date that they can be exercised (which may be three or more years later).

This is an important point. The fair value of the options at the date of the grant of the options is used to account for transaction. The fair value of the options at

subsequent year-ends is not relevant: in normal circumstances, the share options are not re-valued each year.

No vesting conditions

Where the right to the equity instruments, such as share options, vests immediately, so that there are no vesting conditions, it is assumed that the services (or goods) provided that create the entitlement to the equity instruments have already been provided.

The accounting treatment is therefore simply:

Debit: Cost of recognised services already received (usually an employment cost)
Credit: Equity

(Cost = fair value of the share options awarded.)

Example

PQR buys some inventory on 1 January 20X7 for $100,000, but instead of settling in cash it pays for the inventory by issuing 10,000 $1 shares to the supplier on 31 January 20X7.

The direct measurement method will be used to measure the fair value of this equity settled share based transaction.

	$	$
DR Purchases	100,000	
CR Share capital (nominal value)		10,000
CR Share premium (balance)		90,000

Example

PQR awards 1,000 shares to its top sales team at the end of the year. The shares have a nominal value (par value) of $1 and a market value of $5 each.

This is another equity-settled share based transaction but here it is not possible to measure the contribution provided by the sales team to the company. As it is not possible to fair value their services, the direct method cannot be used. Instead, the indirect method is used and the transaction is measured using the fair value of the shares granted, $5,000 (1,000 shares × $5).

	$	$
DR Wages and salaries	5,000	
CR Share capital (nominal value)		1,000
CR Share premium (balance)		4,000

Vesting conditions and a vesting period

The rights to the equity instruments may not vest immediately, but only after the end of a vesting period. For example, the right to exercise share options may not 'vest' until after a period of three years after the options are granted. (If the right to exercise share options depends on achieving a performance target, the length of the vesting period should be estimated.)

In such cases, the cost of the equity instruments should be spread over the vesting period, on a straight-line basis. This is because it is assumed that the services (or goods) to which the equity instruments relate are provided to the entity during the vesting period.

In accounting for share options, the cost of the options that have been granted accumulates over the vesting period. Vesting conditions are taken into account by adjusting the number of equity instruments included in the measurement of accumulated cost.

For example, suppose that an employee is granted 30,000 share options and a vesting condition is that the employee should work for three more years in order to earn the right to exercise the options.

- At the end of Year 1, the number of options taken into consideration in measuring the cost of the share options is 10,000 (30,000 × 1 year/3 years).
- At the end of Year 2, the number of options taken into consideration in measuring the cost of the share options is 20,000 (30,000 × 2 years/3 years).
- At the end of Year 3, the number of options taken into consideration in measuring the cost of the share options is the actual number of options for which the exercise rights are vested. This is 30,000.

The amount charged as an employment cost in the income statement each year is the difference between:

- the accumulated cost of the options as at the end of the current year, and
- the accumulated cost of the options as at the end of the previous year.

Failure to satisfy vesting conditions

Eventually, the cost of the services (or goods) received by the entity in return for equity instruments should be based on the actual number of equity instruments (such as options) that actually vest. So on a cumulative basis, no cost is recognised for services (or goods) if the equity instruments do not vest because of a failure to satisfy the vesting conditions.

For example, suppose that an employee is granted share options which may be exercised on condition that he should work for the company for at least three more years. If the employee is still working for the company after one year, the cumulative cost should be based on the cost of 1/3 of the options granted. If the employee then leaves the company in the following year, the cumulative cost at the end of year 2 is reduced to 0 options, because the employee has failed to satisfy the vesting conditions, and the options will not vest at the end of three years.

IFRS 2 requires that an entity should recognise an amount for services (or goods) received during the vesting period, **based on the best estimate of the number of options** (or other equity instruments) **that are expected to vest.** Where appropriate, the best estimate should be revised at the end of each financial period. At vesting date, the cumulative cost of the options (or other equity instruments) should be based on the number of options that actually vest.

Example

A company grants 1,000 share options to each of 200 employees. Each grant is conditional on the employees working for at least three years for the company.

The value of the options at the grant date is estimated at $12 per option, using an option pricing model.

Year 1

The company estimates that 20% of the employees will leave within three years and so will lose their right to their options. During Year 1, 13 employees leave the company, and the estimate that 20% will leave within three years is not changed.

The cost of the share options in Year 1, recorded as an employment cost and an addition to equity, is:
1/3 × 200,000 options × 80% × $12 = $640,000.

This is recorded as:

DR Employment costs	$640,000
CR Equity	$640,000

Year 2

During Year 2, another 12 employees leave, and the company does not change its estimate that 20% will leave within three years. The cost of the options (employment cost and addition to equity) is calculated for Year 2 as follows:

		$
Cumulative cost, end of Year 2	2/3 × 200,000 options × 80% × $12	1,280,000
Cumulative cost, end of Year 1	(see above)	640,000
Year 2 cost		640,000

Year 3

At the end of Year 3, a total of 40 employees have left the company, and the remaining 160 receive the right to exercise their share options. The cost of the options (employment cost and addition to equity) is calculated for Year 3 as follows:

		$
Cumulative cost, end of Year 3	160,000 options × $12	1,920,000
Cumulative cost, end of Year 2	(see above)	1,280,000
Year 3 cost		640,000

In practice, however, the estimate of the number of share options that will eventually vest is likely to change each year. The cumulative cost each year should be based on the best current estimates of the number of equity instruments that will eventually vest.

Example

A company grants 1,000 share options to each of 200 employees. Each grant is conditional on the employees working for at least three years for the company.

The value of the options at the grant date is estimated at $12 per option, using an option pricing model. Initially, the company expects that 20% of these employees will leave before the end of the three years.

Year 1

During Year 1, 18 employees leave the company, and the company revises its estimate of the number of employees who will leave from 20% to 25%. The current value of the share options is now $14.

The cost of the share options in Year 1, recorded as an employment cost and an addition to equity, is:
1/3 × 200,000 options × 75% × $12 = $450,000.

(The current value of the options is irrelevant.)

Year 2

During Year 2, only 5 more employees leave the company, and the company revises its estimate of the number of employees who will leave from 25% to 15%.

The cost of the options (employment cost and addition to equity) is calculated for Year 2 as follows:

		$
Cumulative cost, end of Year 2	2/3 × 200,000 options × 85% × $12	1,360,000
Cumulative cost, end of Year 1	(see above)	450,000
Year 2 cost		910,000

Year 3

At the end of Year 3, a total of 38 employees have left the company, and the remaining 162 receive the right to exercise their share options. The cost of the options (employment cost and addition to equity) is calculated for Year 3 as follows:

		$
Cumulative cost, end of Year 3	162,000 options × $12	1,944,000
Cumulative cost, end of Year 2	(see above)	1,360,000
Year 3 cost		584,000

2.4 Cash-settled share based payments

Cash-settled share based payment transactions occur when goods or services are paid for at amounts that are based on the price of the company's equity instruments. The expense for cash-settled transactions is the cash paid by the company. For example, share appreciation rights entitle employees or other third parties to cash payments equal to the increase in the share price of a number of an entity's shares over a specified period of time.

Where a company pays for goods or services by incurring a liability linked to their share price, the transaction should be measured at the fair value of the liability. Until the liability is settled, the entity must re-measure the liability at the end of each reporting period, and again at the date of settlement.

If there is a vesting period, the expense is spread over this period in the same way as for equity-settled schemes.

Example

Entity X grants 100 cash-settled share appreciation rights (SARs) to each of its 500 employees. The grant is conditional on the employee working for Entity X for the next three years.

By the end of year 1, 400 employees are expected to stay for three years and collect their rights. Over the year, the company's share price has increased by $9.

The company must settle in cash, which means that each time the share price rises the cost to the company of issuing the rights increases.

End of Year 1

Total expected expense:

	$
400 employees × 100 SARs × fair value $9	360,000
3 years to vest	× 2/3
Expense to date	120,000

	$	$
DR Wages and Salaries	120,000	
CR Liability		120,000

By the end of year 2, 410 employees are expected to stay until the rights vest. The fair value of a right is now $11.

End of Year 2

Total expected expense:

	$
410 employees × 100 SARs × fair value £11	451,000
3 years to vest	× 2/3
Expense to date	300,667
Minus: Expense recorded in year 1	(120,000)
Expense for year 2	180,667

	$	$
DR Wages and Salaries	180,667	
CR Liability		180,667

2.5 Share based payments and deferred tax

In some tax jurisdictions, a tax allowance is given for share based transactions. Sometimes, this allowance amounts to the intrinsic value of the share option (the difference between the market value of the shares and the exercise price for the option). This leads to a deferred tax asset.

For example, if the fair value of a share option at the grant date is $10m, the tax allowance on the intrinsic value is $8m and the tax rate is 30%. The options vest in 4 years.

The deferred tax assets is $8m × 30% × ¼ = $600,000.

This deferred tax assets can only be recognised if there are sufficient future profits to offset against.

2.6 IFRS 2: disclosure requirements

IFRS 2 requires an entity to disclose information that will enable users of its financial statements to understand the nature and extent of share-based payment transactions that have existed during the financial period.

The required disclosures include:

- A description of each type of share-based payment arrangement that existed at any time during the financial period, including their general terms and conditions such as vesting conditions
- The number and weighted average price of share options for each of the following 'groups' of options
  - options outstanding at the beginning of the year
  - options granted during the year

- options forfeited during the year
- options that were exercised during the year
- options that expired (and were not exercised) during the year
- options outstanding at the end of the year
- of these, options that could already be exercised as at the end of the year

- For the share options exercised during the year, the weighted average share price at the exercise dates
- For the share options outstanding at the end of the year, the range of exercise prices and their weighted average remaining contractual life.

2.7 Comments on IFRS 2

IFRS 2 is the first IFRS to deal with accounting for share-based payments. A very similar standard already existed in the US, but in some countries, companies have been able to avoid accounting for such items.

In the UK, guidance in UITF 17 required rewards of share options to be accounted for at their intrinsic value, rather than fair value. Intrinsic value is the difference between the market value of the shares and the exercise price for the option. (This is the price at which the holder of the options can apply to buy new shares when the options vest.) When share options are first issued, their exercise price is often higher than the current market price and so the intrinsic value is zero. So a move to 'fair values' for options would considerably increase the cost recorded in a company's income statement.

It is therefore not surprising that IFRS 2 met with considerable criticism. Many companies have threatened to withdraw their share based payment schemes, because they lower their reported profit and affect their EPS.

IFRS 2 is also very complicated, particularly in the valuation of share options. Option pricing models such as Black-Scholes or the Binomial model were not previously used by companies and the models are complicated to apply.

The IASB believe that the value of share-based payment transactions, including employee share options, must be reflected in the accounts. It does not feel that it is the responsibility of the IASB to design accounting standards around the 'political' needs of companies.

2.8 IFRIC Interpretation 11: IFRS 2 – Group and treasury share transactions

IFRIC 11 deals with whether the following transactions should be accounted for as equity-settled or as cash-settled under the requirements of IFRS 2:

(a) An entity grants to its employees rights to equity instruments of the entity (e.g. share options), and either chooses or is required to buy the equity instruments (i.e. treasury shares) from another party, to satisfy its obligations to its employees.

(b) An entity's employees are granted rights to equity instruments of the entity (e.g. share options), either by the entity itself or by its shareholders, and the shareholders of the entity provide the equity instruments needed.

IFRIC 11 states that share-based payment transactions in which an entity receives services as consideration for its own equity instruments shall be accounted for as equity-settled. This applies regardless of whether the entity chooses or is required to buy those equity instruments from another party to satisfy its obligations to its employees under the share-based payment arrangement. It also applies regardless of whether:

(a) the employee's rights to the entity's equity instruments were granted by the entity itself or by its shareholder(s) or

(b) the share-based payment arrangement was settled by the entity itself or by its shareholder (s)

The second issue dealt with in IFRIC 11 concerns share-based payment arrangements that involve two or more entities within the same group. For example, employees of a subsidiary might be granted rights to equity instruments of its parent as consideration for the services provided to the subsidiary. However, IFRS 2 does not give guidance on how to account for such transactions in the individual or separate financial statements of each group entity.

IFRIC 11 states that where a parent grants rights to the employees of the subsidiary, (provided that the share-based arrangement is accounted for as equity-settled in the consolidated financial statements of the parent) the subsidiary shall measure the services received from its employees in accordance with the requirements applicable to equity-settled share-based payment transactions, with a corresponding increase recognised in equity as a contribution from the parent.

Where a subsidiary grants rights to equity instruments of its parent to its employees, the subsidiary shall account for the transaction with its employees as cash settled.

2.9 IFRIC Interpretation 8: Scope of IFRS 2

IFRIC deals with a share-based payment where the entity cannot identify some or all of the benefits received in return for a share-based payment. For example, an entity might grant shares to some individuals (other than employees) who are members of a local community, possibly as a means of enhancing its reputation amongst customers. The company might expect long-term economic benefits from the granting of shares, but cannot identify the specific benefits that it will receive.

IFRIC 8 states that for this type of transaction, the entity should account for the share-based payment in accordance with IFRS 2. The unidentifiable goods or services received should be measured at the fair value (at the grant date) of the equity instruments granted.

CHAPTER 15

Taxation

Contents

Current tax and deferred tax

- Current tax
- Deferred tax

1 Current tax and deferred tax

IAS 12: *Income taxes* deals with accounting for tax on the profits of entities. It deals with both current tax and deferred tax.

1.1 Current tax

The rules on accounting for current tax are set out briefly below.

A company's profits are subject to income tax. Under the accruals concept, the tax expense and current tax liability are recognised at the same time as the associated gain or loss, not when the tax is paid.

- The income tax expense is usually charged to profit and loss. However if the gain or loss being taxed was recognised as other comprehensive income (and directly in equity, for example as a revaluation gain) then the tax effect should also be recognised in other comprehensive income and directly in equity, and should not be included in profit or loss.
- Tax payable is not settled immediately and so there will be a liability in the statement of financial position for the current tax that is payable.
- The total current tax charge for the year is **estimated** for the purposes of preparing the year-end accounts, but is not finalised by the tax authorities until after the year end.

Under-provision or over-provision of tax in the previous period

If the final amount collected differs from the estimated amount charged, the under-provision or over-provision is adjusted through the next year's profit and loss. A prior year adjustment must not be recorded when adjusting an accounting estimate.

Any such **under- or over-provisions** are dealt with in profit or loss for the following accounting period.

Example

Entity X has a current tax liability at the end of Year 1 of $90,000. During Year 2 the actual tax liability for Year 1 was finally agreed as $85,000 and this tax was paid. The tax liability for Year 2 was estimated at $100,000.

	$
Estimated tax liability for Year 1	(90,000)
Actual tax liability for Year 1	(85,000)
Over-provision for tax in Year 1	(5,000)

The tax payable account for Year 2 would appear as follows:

Tax payable

Year 2	$	**Year 2**	$
Cash	85,000	Balance brought forward	90,000
Profit and loss	5,000		
	90,000		90,000
Balance carried forward	100,000	Profit and loss	100,000
	100,000		100,000

A note to the financial statements should disclose the breakdown of the total tax charge as follows. The current tax liability in the statement of financial position at the end of Year 2 is $100,000. The tax charge in profit or loss for Year 2 is $95,000.

	$
Current tax for the year	100,000
Over-provision of tax in the previous year	(5,000)
Total tax charge	95,000

Tax losses

Where an entity makes a **tax-allowable loss** it is usually entitled to 'carry back' the loss against profits of a previous year, and so to recover some of the current tax paid for an earlier year.

When this happens, the recoverable tax is an asset. It is probable that benefits (refund of tax) will flow to the entity and the amount can be reliably measured. The benefit therefore meets the IASB Framework's definition of an asset. Therefore an asset is recognised in the period in which the tax loss occurs.

1.2 Deferred tax

An entity pays tax on its profits to the tax authorities. This tax is calculated by multiplying the **taxable profits** by the appropriate tax rate. However, taxable profits are rarely the same as **profit before tax** as disclosed in profit or loss. This is because certain items that have been included in the calculation of profit or loss for financial reporting purposes are not **allowable** for tax purposes.

The differences between accounting profit and taxable profit for any financial year can be classified as:

- permanent differences, and
- temporary differences.

Permanent differences

Permanent differences arise from items of income and expenditure:

- that have been included the calculation of accounting profit)
- but will **never** be included in at the calculation of taxable profits.

This is because the item of expense is not allowable for tax purposes. For example, some countries do not allow entertainment expenses to be deducted in arriving at taxable profits. Such expenses have to be 'added back' to the accounting profit in order to compute the taxable profit. As a result the entity will pay more tax.

Temporary differences

Temporary differences arise from items of income and expenditure that are:

- included in both accounting profits and taxable profits
- but in different accounting periods.

For example, tax relief for capital expenditure on non-current assets may be given at a faster rate than depreciation is charged on the non-current assets in the financial statements. Over the full life of the asset, the total amount allowed as deductions from taxable profits will be the same as the total depreciation charge in the financial statements. However, in each individual financial year, the amount of 'depreciation' allowed for tax purposes and the depreciation charge in the financial statements are different.

The tax effect of these temporary differences is accounted for in the financial statements by means of **deferred tax**.

Deferred tax liability

When a transaction is recognised in the accounts of an entity is not subject to tax until a later year, there is an amount for deferred tax. This is tax that will eventually become payable in a later year. This deferred tax satisfies the definition of a liability in the IASB Framework, because it represents a legal obligation where a probable outflow of cash will be required. Deferred tax payments are therefore shown as a liability in the statement of financial position.

Example

A company receives interest of $50,000 in January 20X7 relating to the year ended 31 December 20X6. According to the rules IAS 18 **Revenue** the interest is recognised under the accruals concept and will be included as revenue in profit and loss for 20X6. The tax authorities assess the income on a cash received basis and so tax will not be levied until 20X7.

The company must recognise the deferred tax on the interest in its 20X6 accounts. Assuming a tax rate of 30%, a deferred tax expense and a deferred tax liability for $15,000 will be recognised.

Deferred tax: principles

- Identifying the temporary difference
- Calculating the deferred tax liability
- Deferred tax expense (profit and loss)
- Further examples of when a deferred tax provision might arise
- Deferred tax and asset revaluations (or fair value adjustments)
- Alternative approaches to accounting for deferred tax
- Discounting deferred tax liabilities?

2 Deferred tax: principles

2.1 Identifying the temporary difference

Taxable profits are usually different from accounting profits because the tax authorities make their calculations using different rules from the accounting rules in the international accounting standards. For example most tax authorities do not accept depreciation as an allowable deduction and instead use their own rules to provide tax relief on the asset. In any one year, the depreciation and the tax allowance will not match and so the carrying amount in the balance sheet and the tax base will differ. This difference is a **temporary difference** because over the life of the asset, the total depreciation expenses for the asset in the accounts and the total tax relief given by the tax authorities will be equal.

The terminology of IAS 12

IAS 12 refers to the **tax base** of assets or liabilities. This is the amount attributed to an asset or liability for the purpose of calculating tax. The tax base might be different from the amount shown for the asset or liability in the statement of financial position. For example, suppose that an entity has reported interest income of $2,000 in profit and loss and this is receivable as at the end of the financial year. If the tax authorities tax interest on a cash basis (cash received):

- there will be an asset of $2,000 in the statement of financial position, but
- the tax base is $0, because the interest is not recognised for tax purposes until the cash is received.

There is a difference between the tax base and the financial statements, but it is only temporary. The interest will eventually be recognised for tax purposes when the cash is received.

The provision for deferred tax is based on differences between:

- **values in the statement of financial position** (carrying values/net book values), and

- the **tax base values** (sometimes referred to as tax values or tax written-down values).

Example

A company with a year end of 31 December buys a non-current asset on 1 January Year 1 for $18,000. The asset has a useful life of three years and no residual value. The tax regime relevant to this company does not allow depreciation as an allowable deduction, but instead grants tax relief ('capital allowances') each year as follows:

Year 1	$8,000
Year 2	$6,000
Year 3	$4,000

	Carrying amount, statement of financial position	Tax base	Temporary difference
	$000	$000	$000
1 January Year 1	18	18	
Charge for year (depreciation/ capital allowance)	(6)	(8)	
31 December Year 1	12	10	2
Charge for year	(6)	(6)	
31 December Year 2	6	4	2
Charge for year	(6)	(4)	
31 December Year 3	0	0	0

Temporary difference = the difference between the carrying value in the statement of financial position and the tax base.

- At the end of year 1, the carrying amount is higher than the tax base as the tax authorities have allowed a tax relief that is greater than the depreciation expensed.
- The carrying amount of $12,000 shows that the entity is expecting to recover this amount against future profits, but the tax authorities will only give future relief of $10,000. This will result in the entity paying income tax on the $2,000 in future years.
- The entity will recognise a liability in Year 1 for the anticipated tax on this temporary difference.

2.2 Calculating the deferred tax liability

IAS 12 adopts a **full provision method** to providing for deferred tax. The liability is calculated by applying the tax rate for the entity to the temporary difference at the end of the reporting period.

IAS 12 requires that the liability be measured at the tax rates that are expected to apply to the period when the deferred tax is settled using rates that have been 'enacted'. This is called the **liability method.**

In the example above, the deferred tax will be settled in year 3 when the temporary difference reverses to $0. Unless the tax rates for the next two years have been announced ('enacted') by the tax authorities, the current tax rate will serve as an approximation. The liability should then be updated each year as further information relating to future tax rates comes to light.
The company's tax status may also change as it circumstances change – for example as the company grows it may move into a new tax bracket. SIC Interpretation 25 *Income taxes – changes in the tax status of an enterprise or its shareholders* requires that the deferred tax liability should be re-measured as the company's tax status changes.

Example

The previous example will be continued.

The company has a tax rate of 30% for Year 1. At the end of Year 2, the tax authorities announce that tax rates will increase to 33% with effect from 1st January Year 3.

The deferred tax liability that will be recognised in the statement of financial position at the end of each year is as follows:

	Temporary difference	Tax rate	Deferred tax liability
Year 1	$2,000	30%	$600
Year 2	$2,000	33%	$660
Year 3	0	33%	0

The tax rate used is 30% in Year 1, which is the best estimate of what the tax rate will be in Year 3. At the end of Year 2, the liability is re-measured at 33% not 30%, because the temporary difference will be settled in Year 3 when the rate will be 33%. As this information has been announced in Year 2, it should be used to calculate the provision at the end of Year 2.

A provision for deferred tax of $600 should be recorded in the statement of financial position for Year 1, and this should be increased to $660 in Year 2, before reducing to $0 at the end of Year 3.

In some countries, the manner in which the entity will recover or settle the carrying amount of its assets and liabilities affects the tax rate. For example there may be one tax rate for trading gains and a different tax rate for capital gains. Where such a situation exists, the deferred tax liability or asset should reflect the tax rate consistent with the manner of settlement.

Example

An asset has a carrying amount of $100,000 and a tax base of $60,000. A tax rate of 20% would apply if the asset was sold and a tax rate of 30% would apply to other income.

The entity should recognise a deferred tax liability of $8,000 ($40,000 × 20%) if it expects to sell the asset, or a liability of $12,000 ($40,000 × 30%) if it expects to keep the asset and continue using it in the business to generate revenue.

2.3 Deferred tax expense (profit or loss)

A deferred tax expense is charged in the income statement to obtain the required liability in the statement of financial position. This expense is recognised in profit or loss for the period (unless the related transaction was recognised as other comprehensive income, in which case the tax expense should also be recognised in other comprehensive income and directly in equity). In simple terms, the tax expense follows the original recording of the income or expense.

In the previous example, the asset is expensed to profit or loss (the income statement) through the depreciation charge. Therefore the deferred tax should also be recognised in profit or loss.

	Brought forward liability	Carried forward liability	Charge/ (credit) to profit and loss
	$000	$000	$000
Year 1	0	600	600
Year 2	600	660	60
Year 3	660	0	(660)

Example

The previous example will now be continued.

The accounting profit in each year was $50,000.

Required

Show the total tax expense for each year.

Answer

Working: income tax expense

	Year 1	Year 2	Year 3
	$000	$000	$000
Profit before tax	50,000	50,000	50,000
Add: Depreciation	6,000	6,000	6,000
Minus: Capital allowance	(8,000)	(6,000)	(4,000)
Taxable profit	48,000	50,000	52,000
Tax rate	30%	30%	33%
Income tax expense	14,400	15,000	17,160

	Year 1	Year 2	Year 3
	$000	$000	$000
Income tax (see working)	14,400	15,000	17,160
Deferred tax	600	60	(660)
Total tax expense	15,000	15,060	16,500

In this example, the accounting profit in each year is the same ($50,000), but the income tax expense fluctuates. This is because tax is levied on the taxable profit which differs from the accounting profit. This could be confusing for a user of financial statements.

- By accounting for the deferred tax on the timing difference, the Year 1 total tax expense ($15,000) is now in line with the accounting profit ($50,000 × 30%).
- Similarly in Year 2, the total tax expense ($15,060) is almost in line with the accounting profit, the only difference arising because of the change in the anticipated tax rate in Year 3).
- The total expense in Year 3 is higher than the previous two years due to the increase in the tax rate. However, the total expense of $16,500 still equates to the tax rate applied to the accounting profit (33% × $50,000).

The total tax expense each year is therefore equivalent to the tax rate applied to the accounting profit and the distortion in tax charges caused by the temporary differences has been eliminated.

2.4 Further examples of when a deferred tax provision might arise

Because the tax treatment of items varies from country to country any examination question will have to specify the tax treatment of particular items. However, the following examples from IAS 12 illustrate the types of situation you might be required to deal with in your examination.

Interest receivable

Interest may be received in arrears, leading to a receivable in the statement of financial position. However, this interest may not be taxable until the cash is received.

Example

Entity B has a balance for interest receivable of $4,000 in its financial statements at 31 December Year 1. Interest is not taxed until it is received. The relevant tax rate is 30%.

Required

Calculate the deferred tax provision at 31 December Year 1.

Answer

The interest receivable of $4,000 is included in income in profit or loss for Year 1. However, it is not included in taxable profits for Year 1, which means that taxable profits in Year 1 will be higher by $1,200 ($4,000 × 30%).

When the interest is received (in Year 2) taxable profits will be higher than accounting profits and therefore more tax will be payable.

A deferred tax provision of $1,200 should therefore be set up in Year 1.

This provision will increase the total tax charge in Year 1 and reduce reported profits after tax. The provision will reverse to $0 in Year 2, and the net tax charge in Year 2 will be computed by subtracting the reduction in the deferred tax liability from the current tax charge for Year 2.

Development costs

In calculating accounting profits, development costs may be capitalised and amortised (in accordance with IAS 38). However, tax relief may be given for the development costs as they are paid.

Example

In the year ended 30 June Year 1, Entity C incurred development costs of $320,000. These were capitalised in accordance with IAS 38, with an amortisation charge of $15,000 in Year 1. Development costs are an allowable expense for tax purposes in the period in which they are paid. The relevant tax rate is 30%.

Required

Calculate the deferred tax provision at 30 June Year 1.

Answer

The charge for development costs in Year 1 in the financial accounts is the amortisation charge of $15,000. However, total development costs were $320,000, attracting tax relief in full at the rate of 30%. Taxable profits will therefore be much lower than accounting profits in Year 1.

The development costs incurred but not yet amortised of $305,000 should be deducted from accounting profits to arrive at taxable profits. In future years, when the remaining amortisation charges are added back to accounting profits to arrive at taxable profits, taxable profits will be higher and therefore more tax will be payable.

A deferred tax provision should therefore be set up for $305,000 × 30% = $91,500.
This calculation may be presented more completely in either of two ways:

	$
Accounting profit reduced for development costs amortisation by:	(15,000)
Taxable profit reduced for development costs by:	(320,000)
Difference	(305,000)
Deferrred tax liability (× 30%)	$91,500

Alternatively:	$
Asset value in statement of financial position ($320,000 - $15,000)	(305,000)
Tax written-down asset value	0
Difference	(305,000)
Deferred tax liability (× 30%)	$91,500

2.5 Deferred tax and asset revaluations (or fair value adjustments)

When an asset is re-valued and there is no equivalent adjustment in the tax charge for the year, deferred tax should be recognised for the value adjustment. It should be recognised in other comprehensive income.

Example

An asset costing $100,000 on which accumulated depreciation is $30,000 is re-valued for the first time to $150,000. Related deferred tax on the revaluation gain is $20,000.

The revaluation is accounted for as follows:

- The total revaluation gain is $80,000. The balance on the non-current asset account increases from $100,000 to $150,000, and the balance on the accumulated depreciation account for the asset is reduced from $30,000 to $0.
- For the revaluation gain of $80,000, deferred tax is $20,000. The balance on the revaluation reserve should therefore increase by $60,000 (= $80,000 - $20,000).

The debit and credit entries are:

	Debit	Credit
	$	$
Asset account	50,000	
Accumulated depreciation	30,000	
Revaluation reserve		60,000
Deferred tax liability		20,000

In subsequent years, the depreciation charge on a re-valued non-current asset is based on the re-valued amount rather than historical cost. The annual depreciation charge is therefore higher than it would have been if the asset had not been re-valued.

As an adjustment, there is a transfer to retained earnings for the difference between the depreciation charge in the income statement and the depreciation that would have been charged on historical cost. The adjustment is:

	Debit	Credit
	$	$
Revaluation surplus	X	
Deferred tax	X	
Retained (distributable) profits		X

Example

An asset has been re-valued by $50,000. The revaluation reserve has been credited with $40,000 and the deferred tax account (liability) by $10,000.

The new annual depreciation charge on the asset is $15,000. Based on historical cost it would have been $10,000.

There should therefore be a transfer to retained profits in each subsequent year for the difference of $5,000 between depreciation on the re-valued amount and re-valuation

on the original historical cost. If the asset is held until the end of its useful life, the annual transfer will be as follows:

	Debit	Credit
	$	$
Revaluation surplus	4,000	
Deferred tax	1,000	
Retained (distributable) profits		5,000

By the end of the useful life of the asset, the balances on the revaluation reserve and the deferred tax account for the asset will have been reduced to $0.

If the asset is disposed of before the end of its useful life, the remaining balances on the revaluation reserve and deferred tax account for the asset are transferred to distributable profits in the same way.

2.6 Alternative approaches to accounting for deferred tax

To account for deferred tax, IAS 12 requires:

- a full provision approach, and
- the liability method.

In theory, there are three possible ways of identifying the temporary differences on which to provide for deferred tax.

- full provision
- partial provision
- nil provision (flow through method).

The tax rate applied to these temporary differences in order to calculate the deferred tax can be ascertained using:

- the liability method, or
- the deferral method.

Alternatives to the full provision method

The full provision method identifies the temporary differences at the end of the reporting period and requires deferred tax to be provided on them in full.

One criticism of the method is that to continue in business, companies must continue to reinvest in assets. As a result, new temporary differences originate every year and these may be larger than the effect of the temporary differences reversing. As a consequence, there may be a quantity of timing differences that will exist indefinitely, into the foreseeable future.

If a full provision is made for all temporary differences, some of the provision may not be necessary.

Consequently, the full provision method may be over-prudent and contradictory to the principles in the IASB Framework and IAS 37, which state that a liability should only be recognised if it is probable that it will be payable.

Partial provision method

The partial provision method addresses the above criticisms of the full provision method by requiring that deferred tax is only provided for, to the extent that tax is expected to become payable.

At the end of a reporting period, the company identifies all temporary differences, but then looks at its capital expenditure forecasts and other forecasts, to identify the tax liabilities that are expected to 'crystallise' and become payable. A liability is only recorded on those items that are expected to 'crystallise' (become payable) in the foreseeable future. The balance of the tax is not provided for. This balance is simply disclosed by way of a note to the accounts.

The partial provision method is perhaps a more realistic estimate of the tax that will actually be paid, but its calculation is more subjective than the full provision method because it is based on forecasts, which could be subject to manipulation in order to affect the deferred tax charge. (A careful choice of the number of years of capital expenditure forecasting to be used plus the selection of suitable forecast figures could be used to manipulate the financial statements.)

Nil provision method

The nil provision method (also know as the 'flow through method') ignores deferred tax completely and only accounts for current tax. This method contradicts the accruals concept and the liability recognition rules of the IASB Framework.

Alternative to the liability method: deferral method

The liability method uses the tax rates which will be in place when the temporary differences reverse. The deferred tax liability is then adjusted as the assessment of the future rate changes.

An alternative approach is to use the tax rates in existence when the timing difference arose. This rate is then not updated, and the deferred tax liability remains unadjusted. This method is not considered as accurate as the liability method, and IAS 12 calls for the use of the liability method.

2.6 Discounting deferred tax liabilities?

The full provision method requires that the total temporary differences be provided for. However where deferred tax liability may not be settled until several years in the future, it may be considered more accurate to discount the liability.

The original IAS 12 did not state explicitly whether discounting should be used, but the revised version of IAS 12 prohibits its use, stating that for discounting to be reliable, a detailed schedule of the timing of the reversal of each temporary difference would be needed. This is too difficult in many cases, and so to achieve consistency of treatment, no entity is permitted to discount its deferred tax liabilities (or assets).

Deferred tax: individual company

- Temporary differences
- Deferred tax assets
- Deferred tax relating to revaluations and other items recognised outside profit or loss

3 Deferred tax: individual company

This section provides some additional notes on deferred tax in the accounts of an individual company.

3.1 Temporary differences

IAS 12 defines temporary differences as the difference between the tax base of an asset or liability and its carrying amount in the statement of financial position. Temporary differences may arise in the following circumstances:

- Accounting depreciation does not equal tax-allowable depreciation (capital allowances).
- An item of income or expense is included in the accounting profit in one period but included in the taxable profit in another. For example, capitalised development costs are amortised over several years in the financial statements, but tax relief is given as the costs are incurred (on a cash basis).
- Leases may be treated as finance leases under IAS 17, but treated as operating leases under the tax legislation of the local country. (Some tax authorities do not allow finance lease accounting)

IAS 12 states that if an item is not taxed, its tax base should be equal to its carrying amount. This will not then attract a temporary difference. For example, a loan has a carrying value of $100,000, but repayment of the loan itself has no tax consequences. The tax base of the loan (which ought to be $0) is treated as $100,000, so that no temporary difference and no deferred tax arises.

Similarly, a deferred tax liability does not arise for the impairment of goodwill, which is not deductible for tax purposes.

3.2 Deferred tax assets

Most temporary differences give rise to deferred tax liabilities. However deferred tax assets can also arise.

A deferred tax asset must only be recognised to the extent that it is probable that taxable profit will be available against which the deductible temporary difference can be used.

Example

An entity recognises a liability of $100,000 for accrued product warranty costs. For tax purposes, the product warranty costs will not be deductible until the entity pays any warranty claims. The tax rate is 30%.

The tax base of the liability is nil (carrying amount $100,000 minus the amount that will be deductible for tax purposes in future periods). In settling the liability, the entity will reduce its future taxable profits by $100,000 and so will reduce its future tax payments by $30,000 (30% × $100,000).

The difference between the tax base of nil and the carrying value of the warranty liability of $100,000 is a deductible temporary difference of $100,000. Therefore the company should recognise a deferred tax asset of $30,000, but only if it is probable that the entity will earn sufficient taxable profit in future periods to benefit from the reduction in tax payments.

Where a deferred tax asset is recognised it should be:

- separately disclosed in the statement of financial position in accordance with IAS 1
- reviewed at the end of each reporting period and reduced to the extent that it is no longer probable that it can be recovered against future taxable profits.

Example

A company has made a trading loss of $500,000 for the year to 31 December 20X6 and as it is unable to relieve the loss against earlier years it wishes to carry it forward to relieve against future profits. The company anticipates it will return to profitability in the next year. The company has a tax rate of 30% in 20X6.

The carry forward of the trading loss will result in less tax being paid in future years once the company returns to profit. The trading loss of $500,000 therefore represents a temporary difference that will result in a deferred tax asset. If the company's rate of tax is 30%, the deferred tax asset should be recognised as $150,000 (30% × $500,000).

3.3 Deferred tax relating to revaluations and other items recognised outside profit or loss

IAS 12 specifies that a change in the deferred tax provision is recognised as an income or expense for the period and is included in the income statement (profit or loss) for the period, except to the extent that the tax arises from:

- a transaction or event that is recognised outside profit or loss, either in other comprehensive income or directly in equity
- a business combination (see next section).

Where a transaction or event is recognised outside profit or loss and in other comprehensive income, any current or deferred tax associated with it should be recognised in other comprehensive income. A gain on the revaluation of a non-current asset is an example.

Where an entity reports a revaluation gain in other comprehensive income, the total gain is recorded as:

Credit: Revaluation reserve (gain net of deferred tax provision)

Credit: Deferred tax provision on the gain (= revaluation gain × tax rate).

(Note: The timing difference arises as the revaluation is reflected in the balance sheet carrying value, but no further tax relief is given by the authorities. As the tax base does not change, a temporary difference will arise and deferred tax must be provided.)

Similarly where a transaction or event is recognised outside profit or loss and outside other comprehensive income, and is recognised instead directly in equity, any current or deferred tax associated with it should be recognised directly in equity. An adjustment to the opening balance on retained earnings following the correction of a prior year error is an example.

Example

A company recently re-valued a non-current asset from its carrying amount of $300,000 to a re-valued amount of $400,000. The revaluation surplus is $100,000. The tax rate is 25%.

On revaluation, a deferred tax liability should be created. This is $25,000 (25% × $100,000). The balance on the revaluation reserve is $75,000 (the revaluation of $100,000, minus the deferred tax provision of $25,000).

The increase in the deferred tax liability is not included in the total tax charge for the year in the income statement. In the statement of comprehensive income, the revaluation gain is reported as $100,000 less the deferred tax provision of $25,000.

However, when the asset is eventually sold, and the tax on the gain is based on the historical cost of the asset, the deferred tax liability is reduced to $0, reducing the total reported tax charge for the year in which the disposal occurs.

Example

A company has held an asset for a number of years. The carrying amount in the statement of financial position at 1 January is 1,000 and the tax base is 800. During the year depreciation of 10% is charged on a reducing balance basis, and a there is a capital allowance for tax purposes of 150. On the last day of the year the company re-values the asset upwards by 350.

The company has a deferred tax liability on 1 January of 60. The tax rate is 30%.

The temporary difference as at the 31 December is calculated as follows:

	Carrying amount	Tax base	Temporary difference
1 January	1,000	800	200
Depreciation/ Capital allowance	(100)	(150)	50
	900	650	250
Revaluation	350	-	350
At 31 December	1,250	650	600

Two additional temporary differences have arisen, one due to the difference between the depreciation charge (100) and the capital allowance in the year (150), and the second due to the revaluation of the asset. A deferred tax provision must be recognised on both differences at 30%. Therefore a liability of 180 (600 × 30%) is required at the year end.

- As the depreciation is an expense in profit or loss, this temporary difference should be also be recognised in profit or loss.
- As the revaluation is reported in other comprehensive income, the temporary difference on the revaluation should also be recognised in other comprehensive income.

Deferred tax liability at 1 January (200 × 30%)	60
Expense in profit or loss (500 × 30%)	15
Recognised in other comprehensive income (350 × 30%)	105
Deferred tax liability at 31 December (600 × 30%)	180

The accounting entries required (shown here in journal form) are therefore as follows:

DR	Income statement (expense)	15	
DR	Other comprehensive income	105	
CR	Deferred tax liability		120

Recovery of revalued non-depreciable assets

The same basic principle applies to assets that are re-valued but are not depreciated, such as land. When land is re-valued its tax base does not change.

SIC Interpretation 21 states that a deferred tax liability arising from the revaluation of a non-depreciable asset should be measured on the basis of the tax consequences that would follow from recovery (disposal) of the asset through sale.

Deferred tax: business combinations

- Revaluation of assets/liabilities in the fair value exercise
- Parent's deferred tax asset now recognised after an acquisition
- Unremitted earnings of group companies
- Unrealised profit adjustments

4 Deferred tax: business combinations

Additional deferred tax items need to be considered in preparing group accounts, because new sources of temporary differences arise:

- goodwill (recognition of deferred tax for purchased goodwill is prohibited by IAS 12)
- revaluation of assets/liabilities in the fair value exercise
- unremitted earnings of group companies
- unrealised profit adjustments.

4.1 Revaluation of assets/liabilities in the fair value exercise

When a parent company makes an acquisition, it must perform a fair value exercise on the assets and liabilities of the entity it has acquired. This will result in a change in the carrying value of some of the assets and liabilities. However, the tax base will not be affected, as this is based on the original cost.

Temporary differences arise for all the re-valued assets and liabilities

Example

A company acquires a subsidiary on 31 December 20X6 for $600,000 and performs a fair value exercise as at that date.

The deferred tax implications of the acquisition may therefore be as follows: (Numbers are included for the purpose of illustration.)

	Fair value	Tax base	Temporary differences
	$000	$000	$000
Property, plant and equipment	270	155	115
Accounts receivable	210	210	-
Inventory	174	124	50
Pension liability	(30)	-	(30)
Accounts payable	(120)	(120)	-
Deferred tax	(9)	Not applicable	-
	495		135

Deferred tax must be recognised on timing differences of $135,000. Assuming a tax rate of 40%, this results in a liability of $54,000 ($135,000 × 40%). However the subsidiary

already has a deferred tax liability of $9,000, so only an additional liability of $45,000 should be recognised.

The recognition of a further liability on acquisition of the subsidiary will give rise to further goodwill as follows:

Goodwill arising:

	$000	$000
Cost of investment		600
Fair value of net assets acquired (as in the statement of financial position)	495	
Deferred tax arising on fair value exercise	(45)	
		(450)
Goodwill on acquisition		150

The deferred tax is therefore not expensed and charged as a cost in profit or loss. Instead, it is capitalised by adding it to the amount of the purchased goodwill.

4.2 Parent's deferred tax asset now recognised after an acquisition

A parent company may have a deferred tax asset that it has not recognised as it does not believe it probable that taxable profits will be available against which the asset can be used.

As a result of an acquisition, the parent may be able to utilise the tax position of the subsidiary to claim group relief against the future profits of the subsidiary. This would now permit the parent to recognise the deferred tax asset and reflect this in the goodwill arising on the acquisition.

Example

Entity A acquired 80% of Entity B for $150,000. The fair value of Entity B's net assets at acquisition was $120,000. Entity A had unused tax losses of $15,000 at the date of acquisition but had not been able to recognise a deferred tax asset in relation to these. Management of Entity A believe that these losses are now recoverable as a result of the acquisition. If the tax rate is 30%, calculate the deferred tax adjustment.

Goodwill arising:

	$
Cost of investment	150,000
Share of net assets acquired (80% × 120,000)	(96,000)
	54,000
Deferred tax asset now recognised by Entity A on the acquisition (30% × 15,000)	(4500)
Goodwill on acquisition	49,500

4.3 Unremitted earnings of group companies

When a company acquires a subsidiary or associate, it acquires a right to receive dividends out of its accumulated profits. A temporary difference arises on the profits of the subsidiary or associate that have not been distributed to the parent.

IAS 12 requires that a deferred tax liability be recognised for these undistributed earnings, because they will attract tax when the dividends are paid to the parent in the future.

However, where the parent controls the entity's dividend policy, it is possible that the temporary difference will not reverse in the foreseeable future. This might be because the parent does not intend that the subsidiary should pay dividends, and does not plan to dispose of its investment in the subsidiary. In this situation no deferred tax liability should be recognised. However, this will only be the case for subsidiaries, as the parent is unable to control the dividend policy of an associate.

The IASB has indicated that this rule may change in order to achieve convergence of IFRSs and US GAAP. The change would require that deferred tax should be provided in full on undistributed earnings of subsidiaries irrespective of dividend policy intentions.

4.4 Unrealised profit adjustments

Where inter-company trading takes place between group companies and the inventory is still held by the group at the year end, an adjustment is made in the group accounts because the profit has not been realised outside of the group.

However, tax is charged on the profits of the individual companies, not on the group as a whole. The profit on intra-group sales will therefore be subjected to tax, and this will create a temporary difference.

The issue to resolve is whose tax rate should be used when providing for the deferred tax on this temporary difference – the seller's or the buyer's? IAS 12 requires that deferred tax be provided at the buyer's rate of tax.

Tax: presentation and disclosure

- Multiple temporary differences
- Statement of financial position
- Statement of comprehensive ncome

5 Tax: presentation and disclosure

5.1 Multiple temporary differences

A deferred tax asset can be offset against a deferred tax liability as the existence of deferred tax liability (to the same tax jurisdiction) is strong evidence that the asset will be recoverable.

Example

The following deferred tax positions relate to the same entity:

	Situation 1	Situation 2
Deferred tax liability	12,000	5,000
Deferred tax asset	(8,000)	(8,000)
	4,000	(3,000)

- In situation 1, the financial statements will report the net position as a liability of 4,000. The existence of the liability indicates that the company will be able to recover the asset, so the asset can be set off against the liability.
- In situation 2, setting off the asset against the liability leaves a deferred tax asset of 3,000. This asset may only be recognised if the entity believes it probable that it will be recovered in the foreseeable future.

5.2 Statement of financial position

The main disclosure requirements of IAS 12 in relation to the statement of financial position include the following:

- Tax assets and liabilities must be presented separately from other assets and liabilities in the statement of financial position.
- Deferred tax assets and deferred tax liabilities must not be classified as current.
- An entity can offset current tax assets and current tax liabilities if, and only if:
  - there is a legally enforceable right to set off the current tax assets against the liabilities, and
  - the deferred tax assets and liabilities relate to taxes levied by the same tax authority on the same entity (or on different entities that intend to settle the net amount).

5.3 Statement of comprehensive income

The total tax expense relating to profit or loss from ordinary activities should be shown in the statement of comprehensive income. (However if the entity presents the components of profit or loss in a separate income statement, the tax relating to profit or loss on ordinary activities should be reported in the income statement.)

The major components of tax expense (or income) should be shown separately. These may include:

- current tax
- over-provision or under-provision in the previous year
- the deferred tax expense (or income) relating to the origination or reversal of temporary differences
- the deferred tax expense (or income) relating to changes in tax rates or the imposition of new taxes.

These components of tax expense make up the tax charge to include in profit or loss for the period.

An entity should also disclose separately:

- the total current and deferred tax relating to items that have been charged to or credited to equity, and
- the amount of tax relating to each component of other comprehensive income.

6 ED 2009/2: Income tax (withdrawn)

The IASB withdrew this ED in October 2009. The IASB intend to make short term changes to IAS 12 and enter into a joint project with FASB which will reconsider the fundamental approach to accounting for income taxes.

CHAPTER 16

Reporting financial performance

Contents

Reporting financial performance

- What is financial performance? Comprehensive income
- Reporting requirements for financial performance: IAS1
- Features of a statement of comprehensive income
- Statement of changes in equity (SOCIE)

1 Reporting financial performance and IAS1

1.1 What is financial performance? Comprehensive income

One of the purposes of financial statements is to provide users with relevant and reliable information about an entity's financial performance. It is probably tempting to think of financial performance for a business entity in terms of the profit or loss it makes from its operations. However, there are other aspects to financial performance other than operating profit or loss, and entities are now required by IAS 1 **Presentation of financial statements** (revised 2007) to report financial performance in terms of comprehensive income.

Definition of comprehensive income

The difference between total equity at the beginning and end of a financial period can be explained by two factors:

- 'owner changes in equity'
- 'non-owner changes in equity'.

Owner changes in equity are caused by transactions with the equity shareholders of an entity 'in their capacity as owners'. These transactions have nothing to do with the financial performance of the entity, but they create increases or reductions in total equity. The main examples of these transactions are:

- issues of new equity
- payments of dividends
- purchase of its own shares by the company (and subsequent cancellation of the shares).

Other changes in equity are caused by transactions or developments that are not 'owner changes'. Non-owner changes in equity are **comprehensive income**.

Total comprehensive income consists of:

(1) Profits or losses from normal, recurring income and expenses

(2) Gains and losses that are included in profit and loss and are not expected to occur regularly (for example, profits and losses on the sale of non-current assets; costs of a major restructuring)

(3) Gains and losses that are not included in profit or loss (for example, gains on the revaluation of assets).

Items (1) and (2) have been reported in the past in the income statement. Total comprehensive income can be classified as either:

- recognised profits or losses, or
- other components of comprehensive income.

Other components of comprehensive income are items that result in an increase or reduction in equity, other than owner changes in equity, which are not reported in profit or loss for the period. These include:

- changes in the revaluation surplus for non-current assets
- actuarial gains or losses on defined benefit pension schemes
- gains or losses on translation of the financial statements of a foreign subsidiary
- gains or losses on revaluation of available-for-sale financial instruments.

IAS1 (revised) uses the following definitions:

- profit or loss, to mean items that are recognised as realised profits or losses in a period (traditionally reported in the income statement)
- other comprehensive income, to mean the items described above
- total comprehensive income, to mean profit or loss plus other comprehensive income in the period.

1.2 Reporting requirements for financial performance: IAS1

IAS 1 *Presentation of financial statements* (revised) requires financial performance to be reported in either one or two statements:

- a single **statement of comprehensive income**, or
- two statements, a **separate income statement** reporting the components of profit or loss for the period, **followed by a statement of comprehensive income** which begins with profit after tax for the period and then reports the other components of comprehensive income.

When two separate statements are presented, the effect is simply to divide the single statement of comprehensive income into two separate parts, one following on from the other.

For convenience, this text refers to 'income statement' when it also means the first part of a single statement of comprehensive income that reports the recognised profit or loss after tax for the period.

1.3 Features of a statement of comprehensive income

Most of the features of the 'income statement' or 'profit or loss' section of a statement of comprehensive income are described in other chapters of this text, and dealt with by other accounting standards.

Material items

IAS1 specifies, however, that in order to enable users to obtain a better understanding of financial performance, material items of profit or loss should be disclosed, either as separate line items within profit or loss, or in a note to the financial statements, showing both their nature and the amount. Items that might give rise to a separate disclosure of material items include:

- a write-down of inventories to net realisable value
- a write-down of property, plant and equipment to its recoverable amount
- a reversal of such write-downs
- the cost of restructuring
- disposals of items of property, plant and equipment
- disposals of investments
- discontinued operations
- the income or expense of settlement of litigation
- a reduction in (reversal of) a provision.

As well as being material, most of these items are relatively unusual and may not occur every year. Users need to be made aware that these items are included in profit and loss because they may distort the overall result for the period. For example, if an entity has sold several properties at a profit, its profit for the current period may be exceptionally high, but will fall to a more normal level in the following period.

Material items are normally disclosed in the notes, but they may be disclosed as a separate line item on the face of the income statement/statement of comprehensive income if they are sufficiently material or unusual to justify this treatment.

Components of other comprehensive income

Component items of 'other comprehensive income' should be shown individually in the statement of comprehensive income, and the income tax relating to each item must also be disclosed, either in the statement itself or in a note to the financial statements.

IAS1 requires both profit (or loss) for the period and also total comprehensive income for the period to be analysed between the amounts attributable to:

- owners of the parent entity and
- non-controlling interests.

Reclassification adjustments

A consequence of reporting other comprehensive income, which is not recognised and reported profit or loss, is that an item that is reported as other comprehensive income in one year might be reported as a recognised profit or loss (in the income statement) in a subsequent year.

For example, an entity might revalue an available-for-sale financial investment, and report the gain as other comprehensive income in Year 1. In Year 2, it might then sell the investment and report a realised gain on the sale. As a consequence, the gain is reported twice, as other comprehensive income in Year 1 and as a realised profit in Year 2. To avoid this double-counting, the statement of comprehensive income should also report 'reclassification adjustments' as other comprehensive income.

For example suppose that an entity holds an available for sale financial investment which it revalues from $1 million to $1.4 million in Year 1. The unrealised gain of $400,000 should be reported as other comprehensive income (net of tax) in Year 1. If the investment is then sold in Year 2 for $1.6 million, there is a reported gain of $600,000 within profit or loss, and other comprehensive income in Year 2 should be reduced by $400,000 (less tax) to reverse the unrealised gain reported in Year 1.

Reclassification adjustments are needed for most items of other comprehensive income, when a gain or loss is subsequently recognised in profit or loss. Exceptions are:

- changes in the revaluation surplus on a non-current asset, and
- actuarial gains or losses on defined benefit pension schemes.

These are exceptions because the realised gain or loss on these items is not reported through profit or loss.

1.4 Statement of changes in equity (SOCIE)

The purpose of a statement o f changes in equity is to show how each component of equity has changed between the beginning and the end of the reporting period.

IAS1 (revised) requires all 'owner changes in equity' (transactions with equity owners in their capacity as owners) to be reported in the statement of changes in equity, and to be distinguished from changes in equity due to profit or loss and other comprehensive income.

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. **Components of equity** include:

- share capital
- share premium
- retained earnings
- revaluation reserve
- non-controlling interests.

In a SOCIE for a group of companies, the amounts attributable to owners of the parent entity and the amounts attributable to the non-controlling interest (NCI) should be shown separately.

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 property revaluation)
- 'transactions with owners in their capacity as owners'.

Retrospective adjustments

IAS8 requires that when an entity introduces a change of accounting policy or re-states amounts in the financial statements to correct prior period errors, the adjustments should be made retrospectively (to the extent that this is practicable).

Retrospective adjustments result in changes in the reported amount of an equity component, usually retained earnings. Retrospective adjustments and re-statements are not changes in equity, but they are adjustments to the opening balance of retained earnings (or other component of equity).

Where retrospective adjustments are made, the SOCIE must show for each component of equity (usually retained earnings) the effect of the retrospective adjustment. This is shown first, as an adjustment to the opening balance, before the changes in equity are reported.

Example: statement of changes in equity

A simplified example of a statement of changes in equity for a single entity is shown below.

PQR Entity

Statement of changes in equity for the year ended 31 December 20X9

	Share capital	Share premium	Revaluation reserve	Retained earnings	Total
	$000	$000	$000	$000	$000
Balance at 31 December 20X8	200	70	80	510	860
Change in accounting policy	-	-	-	(60)	(60)
Re-stated balance	200	70	80	450	800
Changes in equity for 20X9					
Issue of share capital	80	100			180
Dividend payments				(90)	(90)
Profit for the year				155	155
Other comprehensive income for the year			12		12
Balance at 31 December 20X9	280	170	92	515	1,057

IFRS 5: non-current assets held for sale and discontinued operations

- The need for an accounting standard on discontinued operations
- Definition of discontinued operations
- The measurement of non-current assets and disposal groups held for sale
- Allocation of an impairment loss on a disposal group
- Presentation and disclosure

2 IFRS 5: Non-current assets held for sale and discontinued operations

2.1 The need for an accounting standard on discontinued operations

IFRS 5 **Non-current assets held for sale and discontinued operations** sets out requirements for disclosure of financial information relating to discontinued operations and non-current assets that will soon be sold off.

The reason for requiring disclosure of information about discontinued operations is as follows:

- Closing down some operations will affect the future financial prospects of the entity.
- It is therefore appropriate that users of the financial statements should be provided with relevant information about the discontinuation. This will help them to predict the future performance of the entity.

This information can be produced by providing information about discontinued operations separately from information about continuing operations.

2.2 Definition of discontinued operations

IFRS 5 defines a discontinued operation as a component of an entity that either:

- has been disposed of in the period, or
- is classified as 'held for sale' (but has not yet been disposed of).

A 'component' of an entity is defined as operations and cash flows that can be clearly distinguished, operationally and for financial reporting purposes, from the rest of the entity. The component of the entity must:

- represent a separate major line of business or a significant geographical area of operations, or
- be a part of a single and co-ordinated plan to dispose of a separate major line of business or a significant geographical area of operations, or
- be a subsidiary company acquired exclusively with a view to re-sale.

If an entity disposes of an individual non-current asset, or plans to dispose of an individual asset in the immediate future, this is **not** classified as a discontinued operation **unless** the asset meets the definition of a 'component of an entity'. The asset disposal should simply be accounted for in the 'normal' way, with the gain or loss on disposal included in the operating profit for the year.

Non-current assets held for sale

Non-current assets 'held for sale' can be either:

- specific non-current assets, or
- a 'disposal group'. A **disposal group** is a group of cash-generating assets (and perhaps some liabilities) that will be disposed of in a single transaction.

A non-current asset (or a disposal group) should be classified as held for sale if its carrying amount will be recovered mainly through a sale transaction rather than through continuing use. For this to be the case:

- the non-current asset or disposal group should be **available for immediate sale**, in its present condition under terms that are usual and customary; and
- its sale should be **highly probable**.

For the sale to be highly probable:

- management must be committed to the sale
- an active programme to locate a buyer must have been initiated
- the asset or disposal group must be actively marketed for sale at a price that is reasonable in relation to its current fair value
- the sale should be expected to take place within one year from the date of classification as 'held for sale'
- significant changes to the plan or the withdrawal of the plan should be unlikely.

An operation cannot be classified as discontinued in the statement of financial position if the criteria for classifying it as discontinued are not met until **after the end of the reporting period**. For example, suppose that an entity with a financial year ending 30 June shuts down a major line of business in July and puts another major line of business up for sale. It cannot classify these as discontinued operations in the financial statements of the year just ended in June, even though the financial statements for this year have not yet been approved and issued.

An asset that has been **abandoned** cannot be classified as 'held for sale'.

Example

Entity R had the following assets at 31 March Year 4.

(1) A property that it offered for sale for $5 million during June Year 3. The market for this type of property has deteriorated and at 31 March Year 4 a buyer had not yet been found. Management does not wish to reduce the price because it hopes that the

market will improve. Shortly after the year end the entity received an offer of $4 million and the property was eventually sold for $3.5 million during May Year 4, shortly before the financial statements were authorised for issue.

(2) Plant with a carrying value of $2.5 million. At 31 March Year 4 the entity had ceased to use the plant but was still maintaining it in working condition so that it could still be used if needed. Entity R sold the plant on 14 May Year 4.

Can either of these assets be classified as 'held for sale' in the financial statements for the year ended 31 March Year 4?

Answer

Property

A non-current asset qualifies as 'held for sale' if it is available for immediate sale in its present condition and actively marketed for sale at a price that is reasonable in relation to its current fair value. The property had not been sold at the year end although it had been on the market for some time. It appears that the reason for this was that management were asking too high a price.

Therefore the property cannot be classified as 'held for sale'.

Plant

At the year-end management had not made a firm commitment to sell the plant. Even though the plant was sold just after the year-end, IFRS 5 prohibits the classification of non-current assets as 'held for sale' if the criteria are met after the end of the reporting period and before the financial statements are signed.

Therefore the plant cannot be classified as 'held for sale'.

2.3 The measurement of non-current assets and disposal groups held for sale

Assets held for sale and disposal groups should be **valued at the lower of**:

- their carrying amount, and
- fair value minus costs to sell.

If the value of the 'held for sale' asset is adjusted from carrying amount to fair value minus costs to sell, any impairment should be recognised in profit or loss for the period.

A non-current asset **must not be depreciated** (or amortised) while it is classified as 'held for sale' or while it is part of a disposal group that is held for sale.

2.4 Allocation of an impairment loss on a disposal group

IFRS 5 requires that if an impairment loss is recognised for a disposal group, the loss should be allocated to non-current assets in the disposal group in the following order:

- First, allocate the impairment loss to any goodwill in the disposal group
- If there is no goodwill in the disposal group, or if the impairment loss is greater than the goodwill in the impairment group, the remaining unallocated loss should be allocated to the other non-current assets in the disposal group pro rata on the basis of their carrying values.

Example

An entity has decided to dispose of a group of its assets in an asset sale, and the assets together form a disposal group that is held for sale. The assets in the disposal group are measured as follows:

	Carrying amount of assets:	
	At the end of the reporting period prior to classification as held for sale	**As re-measured immediately before classification as held for sale**
	$	$
Goodwill	20,000	20,000
Property, plant and equipment (carried at re-valued amounts)	60,000	52,000
Property, plant and equipment (carried at cost)	80,000	80,000
Inventory	25,000	21,000
Available for sale financial assets	20,000	17,000
Total	**205,000**	**190,000**

The entity should recognise an impairment loss of $15,000 (= $205,000 - $190,000) immediately before classifying the disposal group as held for sale.

Suppose that the entity estimates that the 'fair value less costs to sell' of the disposal group is $160,000. A disposal group should be measured at the lower of:

- the carrying amount of its assets, and
- fair value less costs to sell.

This means that there is a further impairment loss of $30,000 (= $190,000 - $160,000), and this is recognised immediately the disposal group is classified as held for sale.

- The first $20,000 of the impairment loss should be used to reduce the goodwill to $0.

- The remaining $10,000 of the impairment loss should be allocated to the non-current assets in the disposal group pro rata to their carrying value.

	Carrying amount as re-measured immediately before classification as held for sale	Allocated impairment loss	Carrying amount after allocation of impairment loss
	$	$	$
Goodwill	20,000	20,000	0
Property, plant and equipment (carried at re-valued amounts)	52,000	3,939	48,061
Property, plant and equipment (carried at cost)	80,000	6,061	73,939
Inventory	21,000	0	21,000
Available for sale financial assets	17,000	0	17,000
Total	**190,000**	**30,000**	**160,000**

This impairment loss of $30,000 will be included in the reported profit or loss from discontinued operations in the statement of comprehensive income for the year.

2.5 Presentation and disclosure

IFRS 5 states: 'An entity shall present and disclose information that enables users of the financial statements to evaluate the financial effects of discontinued operations and disposals of non-current assets (or disposal groups)'.

Disclosure in the statement of financial position

Non-current assets classified as held for sale must be disclosed separately from other assets in the statement of financial position.

Similarly, assets and liabilities that are part of a **disposal group held for sale** must be disclosed separately from other assets and liabilities in the statement of financial position. (The assets and liabilities in a disposal group should **not** be offset and presented as a single net amount).

Income statement disclosure

Information about discontinued operations (both operations already discontinued and those classified as held for sale) must be presented in profit or loss or in a note to the financial statements.

There must be a **single amount on the face of the statement of comprehensive income (or income statement)** for the total of:

- the after-tax profit or loss for the period from the discontinued operations, and
- the after-tax gain or loss on measurement to fair value (less costs to sell) or on the disposal of the asset or disposal group.

On the face of the income statement/statement of comprehensive income or in a note to the accounts, this total amount should be analysed into:

- the revenue, expenses and pre-tax profit for the period from the discontinued operations
- the related tax expense
- the pre-tax gain or loss on measurement to fair value (less costs to sell) or on the disposal of the asset or disposal group
- the related tax expense.

If this analysis is shown on the face of the income statement, it should be presented in a separate section relating to discontinued operations, separately from continuing operations.

For **comparative purposes**, the figures for the previous year should be re-presented, so that disclosures relating to discontinued operations in the prior period relate to all discontinued operations up to the end of the current year.

Note on discontinued operations and the statement of cash flows

IFRS 5 states that in the **statement of cash flows**, there should be separate disclosure of the net cash flows in the period attributable to operating activities, investing activities and financing activities of the discontinued operations. These disclosures may be presented either on the face of the statement or in the notes to the accounts.

Additional disclosures

Additional disclosures about discontinued operations must be included in the notes to the accounts. These include:

- a description of the non-current asset or disposal group
- a description of the facts and circumstances of the sale
- in the case of operations and non-current assets 'held for sale', a description of the facts and circumstances leading to the expected disposal and the expected manner and timing of the disposal.

Example

Information relating to discontinued operations might be presented as follows:

Income statement

ABCD Entity
Income statement for the year ended 31st December 20X6

	20X6	20X5
	$000	$000
Continuing operations		
Revenue	9,000	8,500
Cost of sales	(5,100)	(4,700)
Gross profit	3,900	3,800
Other income	50	100
Distribution costs	(1,200)	(1,000)
Administrative expenses	(1,400)	(1,200)
Other expenses	(150)	(200)
Finance costs	(300)	(300)
Profit before tax	900	1,200
Income tax expense	(300)	(400)
Profit for the period from continuing operations	600	800
Discontinued operations		
Profit for the period from discontinued operations	250	180
Profit for the period	850	980

Note

In this example, a single figure of $250,000 is shown for after-tax profit or loss from discontinued operations. This figure should be analysed in a note to the accounts, as explained earlier. Alternatively, the analysis could be given on the face of the income statement.

Statement of financial position

An entity has two disposal groups held for sale:

	Disposal group	
	Group 1	Group 2
	$000	$000
Property, plant and equipment	600	300
Liabilities	(50)	(20)
Net carrying amount	550	280

An amount of $50,000 relating to the assets of disposal group 1 has been recognised directly in equity, as a result of an asset revaluation.

The summarised statement of financial position of the entity might be as follows:

	$000
Assets	
Non-current assets	
Property, plant and equipment	2,000
Current assets	
Inventory	300
Receivables	400
Cash	20
	2,720
Non-current assets classified as held for sale	900
Total assets	3,620
Equity and liabilities	
Share capital	1,000
Reserves	1,900
Amounts recognised directly in equity relating to non-current assets held for sale	50
Total equity	2,950
Non-current liabilities: loan	400
Current liabilities	
Trade payables	200
Liabilities directly associated with non-current assets classified as held for sale	70
	270
Total liabilities	670
Total equity and liabilities	3,620

In the statement of financial position, the comparative figures for the previous year are not re-presented. The amount for discontinued operations in the previous year does not include discontinued items for the current year. The presentation in the statement of financial position therefore differs from the income statement presentation.

Note: In this summarised statement of financial position, the non-current assets classified as 'held for sale' are the sum of the non-current assets of disposal groups 1 and 2 ($600,000 + $300,000). Similarly the 'liabilities directly associated with non-current assets classified as held for sale' are the sum of the liabilities for disposal groups 1 and 2.

Related party disclosures: IAS 24

- Impact on the financial statements
- The objective of IAS 24
- Definitions
- Disclosure requirements

3 Related party disclosures: IAS 24

3.1 Impact on the financial statements

A user of financial statements will normally expect the financial statements to reflect transactions that have taken place on normal commercial terms ('at arm's length'). The user of the financial statements would want to be informed if:

- transactions have taken place that were not at 'arm's length', or
- there are parties that could enforce transactions on the entity that are not on an 'arm's length' basis.

For example, in a group of companies:

- an entity might sell goods to its parent or fellow-subsidiaries on more favourable terms than it would sell to other customers
- a parent company may make supplies to a struggling subsidiary on more favourable terms than it would to other companies. This would boost the apparent profitability of that subsidiary.

In both situations, the financial performance or financial position reported by the financial statements would be misleading. In each situation there is a special relationship between the parties to the business transactions. This is referred to as a 'related party relationship'.

IAS 24: *Related party disclosures* comments that a related party relationship could have an effect on the profit or loss, or on the financial position of an entity, because related parties might enter into transactions with each other on terms that other entities or individuals (unrelated parties) would not.

3.2 The objective of IAS 24

The **objective** of IAS 24 *Related party disclosures* is to ensure that an entity's financial statements contain sufficient disclosures to draw attention to the possibility that the entity's financial position, or profit or loss may have been affected by:

- the existence of related parties, and
- transactions and outstanding balances with related parties.

IAS 24 is a **disclosure** standard. It does not require the redrafting of financial statements. Such redrafting would be difficult as without the related party relationship the transactions might never have taken place, and even if they had, it may not be possible to determine at what amount.

Specified disclosures are required of:

- related party relationships, and
- related party transactions.

3.3 Definitions

IAS 24 provides a lengthy definition of a related party and also a definition of a related party transaction.

Related party

Related party: A party is related to an entity (it is a related party) in **any** of the following circumstances:

- The party controls the entity, or is controlled by it.
- It has significant influence over the entity.
- It has joint control over the entity.
- The parties are under common control.
- The party is an associate.
- The party is a joint venture in which the entity is a venturer.
- The party is a member of the key management personnel of the entity or its parent.
- The party is a **close family member** of any of the above.

A parent entity is related to its subsidiary entities (because it controls them) and its associated entities (because it exerts significant influence over them). Fellow subsidiaries are also related parties, because they are under the common control of the parent.

In considering each possible related party relationship the entity must look to the **substance** of the arrangement, and not merely its legal form. Although two entities that have the same individual on their board of directors would not meet any of the above conditions for a related party, a related party relationship would nevertheless exist if influence can be shown.

Some examples are given by IAS 24 of **likely exemptions**, where a related party relationship would usually not exist. However, the substance of the relationship should always be considered in each case. Examples of **entities that are usually not related parties** are:

- Two venturers that simply share joint control over a joint venture
- Providers of finance (such as a lending bank or a bondholder)
- Trade unions

- Public utilities
- Government departments and agencies
- Customers, suppliers, franchisors, distributors or other agents with whom the entity transacts a significant volume of business.

Close family members are those family members who may be expected to influence, or be influenced by that individual. They include:

- the individual's partner, children and dependants
- children or dependants of the individual's partner.

Related party transactions

A related party transaction is:

- a transfer of resources, services, or obligations between related parties
- whether or not a price is charged.

The following examples of related party transactions are given in IAS 24. (These are related party transactions when they take place between related parties.)

- Purchases or sales of goods
- Purchases or sales of property and other assets
- Rendering or receiving of services
- Leases
- Transfer of research and development costs
- Finance arrangements (such as loans or contribution to equity)
- Provision of guarantees
- Settlement of liabilities on behalf of the entity or by the entity on behalf of another party.

Example

In the following examples, identify related party relationships between all parties and state any additional factors to consider in order to form a conclusion:

(a) Entity HB holds a controlling interest in Daphne and Velma. Ronald is a wholly owned subsidiary of Daphne.

(b) Mr Z holds 75% of the voting capital of Flora and 40% of the voting capital of Donald.

(c) H and W (who are husband and wife) are the directors and majority shareholders of Flint. The company makes purchases from Boris, a company jointly controlled by W and their daughter, D. D is a director of Boris but holds no share in Flint.

Answer

(a) Entity HB

- HB is related to both Daphne and Velma (both subsidiaries) because of its controlling interest.
- Daphne and Velma are related because they are under the common control of HB.
- Ronald is related to Daphne because of its subsidiary status.
- Ronald is also related to HB as he is indirectly controlled by HB through HB's holding of Daphne.

(b) Mr Z

- Mr Z is related to Flora because of the subsidiary status of Flora.
- As an associate of Mr Z, Donald is also a related party
- Flora and Donald are not related. Although they are both owned by Mr Z, there is no common **control** because Mr Z only has a 40% stake in Donald.

(c) Flint Ltd

- H and W are both related to Flint, because they are key management of the entity
- D could be considered to be close family to H and W, but this is only true if it can be shown that she is influenced by them in business dealings (and there is insufficient information in this example to ascertain whether this is true).
- Boris is related to Flint as it is jointly controlled by a member of the key management of Flint. Therefore any business dealings between the two entities will need to be disclosed.

3.4 Disclosure requirements

IAS 24 requires disclosure in the notes to the financial statements of the following, **whether or not transactions have taken place** between those related parties:

- the **name of the entity's parent**
- if different, the name of the ultimate controlling party

Where transactions have taken place between the related parties, **irrespective of whether a price was charged**, the following should be disclosed:

- The nature of the related party relationship
- The amount of the transactions
- In respect of outstanding balances
  - the amount
  - their terms and conditions
  - any guarantees given or received
  - any provision for doubtful/irrecoverable debts
- The expense recognised in the period in respect of irrecoverable debts due from related parties.

The above disclosures should be given separately for each of the following categories of related party:

- The parent
- Entities with joint control or significant influence over the entity
- Subsidiaries
- Associates
- Joint ventures in which the entity is a venturer
- Key management personnel of the entity or its parent
- Other related parties

In addition, IAS 24 requires disclosure of **compensation to key management personnel**, in total, and for each of the following categories:

- Short-term employee benefits
- Post-employment benefits
- Other long-term benefits
- Termination benefits
- Share-based payments.

Example

An example of a note to the financial statements for related party transactions is shown below, for Large Public Company, a quoted UK company.

Trading transactions

	Sales to related parties	Purchases from related parties	Amounts owed by related parties	Amounts owed to related parties
	$m	$m	$m	$m
Associates		48		17
Joint ventures	57	14	12	

Non-trading transactions

	Loans to related parties	Loans from related parties
	$m	$m
Associates		11
Joint ventures	33	

IAS 18: Revenue

- The purpose of IAS 18
- Measurement of revenue
- Sale of goods: revenue recognition
- Rendering of services: revenue recognition
- Interest, royalties and dividends: revenue recognition
- IAS 18: disclosure requirements
- DP: Revenue recognition in contracts with customers

4 IAS 18: Revenue

4.1 The purpose of IAS18

For many business entities, revenue is the largest single item in their financial statements and it has a direct impact on reported profit or loss for the period. Without clear guidance from accounting standards, there would be some risk that entities might over-state their revenue for the period, perhaps by recognising revenue in profit or loss too early, in order to increase the reported profits.

The IASB Framework states that revenue is recognised in profit or loss when:

- there is an increase in future economic benefits related to an increase in an asset or a decrease in a liability, and
- this increase in economic benefits can be reliably measured.

IAS 18: *Revenue* deals in more detail with:

- revenue recognition – when revenue may be recognised in profit or loss, and
- the measurement of revenue.

IAS 18 defines revenue as 'income that arises in the ordinary course of activities … and is referred to by a variety of different names including sales, fees, interest, dividends and royalties.'

4.2 Measurement of revenue

IAS 18 states that revenue must be measured at 'the fair value of the consideration received or receivable'. Broadly speaking, this is the fair market price less any volume rebates (discount allowed for buying in large quantities) or 'trade discount allowed'.

- If a sale is a cash sale, the revenue is the immediate proceeds of the sale.
- If a sale is a normal credit sale, the revenue is the expected future receipt.

However, in some cases when the payment is deferred, the fair value might be less than the amount of cash that will eventually be received. For example, a company might sell goods and give the customer interest-free credit. Giving interest-free credit is a financing transaction, and if a period of credit is allowed to the customer, the revenue recognised should be the discounted present value of the future receipts.

The difference between the nominal sale value and the fair value of the consideration is recognised as interest income during the time period between the initial recognition of revenue in profit or loss and the time when the payment is eventually received.

Example

An entity sells an item to a customer for $58,320. The customer is allowed 24 months of interest-free credit. The sale is made on the last day of the entity's financial year. The discount rate appropriate for the transaction is 8%.

The discounted present value of the future receipt is $50,000 (= $58,320 × 1/(1.08)^2).

In this situation, the revenue from the sale will be recorded as $50,000 in the year of the sale, and a receivable of $50,000 will also be recorded.

In the following year, there will be additional interest income of $4,000, which is 8% of the amount receivable. This is included in finance income for the year, and the amount of interest is added to the amount receivable, so that the total amount receivable at the end of the year is $54,000.

In the following year, there will be interest income of $4,320 (= 8% × $54,000). This will be included in the finance income for the year and added to the amount receivable. At the end of the year, the amount receivable will be $58,320, which is the amount of the due payment.

4.3 Sale of goods: revenue recognition

IAS 18 specifies when revenue should be recognised for the sale of goods. An entity may recognise revenue from the sale of goods only when **all** of the following conditions have been met:

- The entity has transferred to the buyer the 'significant risks and rewards of ownership of the goods'. This normally occurs when legal title to the goods or possession of the goods passes to the buyer.
- The entity does not retain effective control over the goods sold, or retain a continuing management involvement to the degree usually associated with ownership.
- The amount of revenue can be measured reliably.
- It is probable that economic benefits associated with the transaction will flow to the entity.

- The costs incurred (or to be incurred) for the transaction can be measured reliably.

Examples

(1) Goods are sold by a manufacturer to a retailer, who has the right to return the goods if it is unable to sell them. (The goods are supplied on a 'sale or return' basis.)

Revenue should not be recognised by the manufacturer if receipt of payment from the customer is contingent on the customer being able to sell the goods. The manufacturer still retains significant risks of ownership. Revenue should be recognised when the customer sells the goods, and not before.

(2) A manufacturer of machinery ships machine parts to a business customer for installation. The machine has not yet been installed. The manufacturer will do the installation work and the cost of the installation work will be a significant part of the total cost of the contract.

Revenue should not yet be recognised because the seller still retains significant risks and rewards of ownership.

(3) Goods have been sold on credit to a customer in a country where there has been a major political change, and there is now a ban in that country on payments to other countries.

Revenue should not yet be recognised. It is not yet probable that the economic benefits associated with the transaction (payment by the customer) will flow to the seller.

(4) An entity receives $25,000 as an advance payment for goods that have not yet been manufactured.

Payment in advance is not recognised as revenue. The money received should be included as a current liability in the statement of financial position. (Debit Cash $25,000, Credit Payments received in advance $25,000).

Revenue recognition and substance

Financial statements must present fairly the effects of the transactions entered into by an entity. This means that preparers must observe the principle of 'substance over form' by recognising the economic substance of transactions where this is different from their legal form.

For example, A sells an asset to B for $100,000. However, A continues to use the asset in exactly the same way as before, even though B is now its legal owner. A has received $100,000 but IAS 18 does not allow A to recognise this amount as sales revenue. The significant risks and rewards of ownership have not yet passed to B. A still controls the asset and can use it in its business (a reward of ownership). No sale has taken place.

The substance of the transaction is that A has raised a loan which is secured on the asset. Therefore A must recognise a liability for $100,000.

4.4 Rendering of services: revenue recognition

When an entity provides a service to a customer, and the outcome of the transaction can be estimated reliably, revenue should be recognised by reference to the stage of completion of the transaction at the balance sheet date. (This means that revenue may be recognised for a service that has not yet been completed at the end of the reporting period).

The recognition of revenue by reference to the stage of completion of a transaction may be referred to as the **'percentage of completion method'**.

IAS 18 states that the outcome of a service transaction can be estimated reliably when **all** of the following conditions apply:

- The amount of revenue can be measured reliably.
- It is probable that the economic benefits associated with the transaction will flow to the service provider.
- The stage of completion of the transaction as at the end of the reporting period can be measured reliably.
- The costs already incurred for the transaction and the costs that will be incurred to complete the transaction can be measured reliably.

When these conditions are not met, revenue should be recognised only to the extent of the expenses recognised that are recoverable.

For example, suppose that a contract to develop new computer software for a customer has not been completed by the end of the reporting period. The revenue from the transaction will be $70,000 and costs of $12,000 have been incurred to date. It is not yet certain what stage of completion has been reached, nor what the further costs to completion will be. Revenue in the current period should be $12,000 and matching costs should be $12,000, so that there is neither a profit nor a loss in the current financial period.

4.5 Interest, royalties and dividends: revenue recognition

Revenue from interest, royalties and dividends should be recognised when it is probable that the benefits will flow to the entity and the amount of the revenue can be measured reliably.

IAS 18 states that revenue from these sources should be recognised as follows:

- **Interest**. Interest income should be recognised on a time proportion basis that takes into account the effective yield on the interest-earning asset.
- **Royalties**. Revenue from royalties should be recognised on an accruals basis, in accordance with the terms of the royalty agreement.
- **Dividends**. Revenue from dividends should be recognised when the right to receive the dividend is established.

Examples

(1) A training company has a financial year that ends on 31 December. One of its courses begins on 1 October Year 1 and runs for six months. Students pay a total fee of $12,000, consisting of $6,000 on enrolment and $1,000 per month at the beginning of each month for six months, beginning on 1 October when the course begins. How much revenue should be recognised in Year 1 and in Year 2 for each student?

(2) A car dealer has a financial year that ends on 31 December. On 30 November Year 1 it sold a car to a customer. The price was $40,000, but included in the deal was a three-year free service warranty which normally costs $3,000. The customer was required to pay $5,000 with the order and a further $20,000 when he took delivery of the car, which occurred on 1 January Year 2. The balancing payment of $15,000 is not due until 1 January Year 4. The company's cost of capital is 10%. How should the revenue from the sale transaction be recognised?

Answer

(1) Revenue should be recognised at an even accrued rate over the six-month period of the course. By the end of Year 1, three months (50%) of the course will have taken place, and so the revenue recognised in Year 1 should be just $6,000 (= total course fee of $12,000 × 50%).

Cash received from each student by 31 December should be $9,000 (= $6,000 deposit plus three months × $1,000. Of this, $3,000 should be accounted for at 31 December Year 1 as deferred income (a liability in the statement of financial position). Since this income is receivable within three months, there is no need to discount it to a present value.

Year 1

Debit: Bank	$9,000
Credit: Revenue	$6,000
Credit: Deferred income	$3,000

The deferred income is recognised as revenue in Year 2.

Year 2

Debit: Bank (three payments of $1,000)	$3,000
Debit: Deferred income	$3,000
Credit: Revenue	$6,000

(2) The sale does not occur when the customer pays a deposit in November. It occurs when the car is delivered and the customer takes possession. The deposit paid in Year 1 of $5,000 is therefore deferred income. Since the sale occurs on 1 January in Year 2, there is no need to discount the deferred income to a present value.

Year 1

Debit: Bank	$5,000
Credit: Deferred income	$5,000

The sale occurs in Year 2. However, there are two issues to consider. First, the customer has been given a free three-year warranty that normally sells for $3,000. The substance of the transaction is that the customer has purchased both a car and a service warranty, and these should be recognised and accounted for separately.

The sale of the three year warranty should be accounted for with revenue of $3,000 spread over the three year period of the warranty.

Second, there is a deferred payment of $15,000 payable after two years on 1 January Year 4. This should be recognised in Year 2 as revenue, but discounted to a present value. If the cost of capital is 10%, the present value is $12,397 (= $15,000 × 1/(1.10)^2).

Year 2

Debit: Deferred income (deposit in Year 1)	$5,000	
Debit: Bank (cash on delivery)	$20,000	
Debit: Receivable (deferred payment)	$12,397	
Credit: Deferred income (service warranty)		$3,000
Credit: Revenue (sale of car)		$34,397

There will be interest income in both Year 2 and Year 3 at 10% on the deferred receivable: $1,240 in Year 2 and $1,363 in Year 3.

4.6 IAS 18: disclosure requirements

Accounting standards commonly include disclosure requirements, setting out the information that entities must disclose. IAS 18 requires disclosure of:

- the accounting policies adopted for recognising revenue, and
- each significant category of revenue in the period, including revenue from:
  - the sale of goods
  - the rendering of services
  - interest
  - royalties
  - dividends.

In addition, there should be disclosure, for each significant category of income, of the amount of revenue arising from the exchange of goods or services.

4.7 DP: Revenue recognition in contracts with customers

Revenue is a key component of a company's financial statements. Revenue is an important indicator for providers of capital and is also important to financial statement preparers, auditors and regulators.

This discussion paper is the result of a joint project between the IASB and FASB (the US Financial Accounting Standards Board)

The aim of the joint project is primarily to clarify the principles for recognising revenue.

US GAAP on revenue recognition comprises more than a hundred standards and can produce conflicting results for economically similar transactions.

IFRS has two main revenue recognition standards (IAS 18 Revenue and IAS 11 Construction Contracts). These are inconsistent and vague, and can be difficult to apply beyond simple transactions. In particular, those standards provide limited guidance for transactions involving multiple components or multiple deliverables.

The aim of the project is to provide clearer guidance on when an entity should recognise revenue and reduce the number of standards to which entities have to refer. This should remove inconsistencies and improve the comparability and understandability of revenue for users of financial statements. The proposed approach would cause little (if any) change for many contracts.

The proposed approach

This discussion paper proposes a single, contract-based revenue recognition model.

This proposed model would only apply to contracts with customers. It might not be appropriate to apply the model to certain categories of contracts with customers (eg leases) and the boards will consider this as their deliberations proceed

Recognition

The DP proposes that revenue should be recognised on the basis of increases in an entity's net position in a contract with a customer. Revenue would be recognised when a contract asset increases or a contract liability decreases. That occurs when an entity performs by satisfying an obligation in the contract.

Identification of performance obligations

A company's performance obligation is a promise in a contract with a customer to transfer an asset (such as a good or a service) to that customer. That contractual promise can be explicit or implicit.

When an entity promises to provide a good, it is promising to transfer an asset to the customer.

When an entity promises to provide a service, it similarly is promising to transfer an asset, even though the customer may consume that asset immediately.

A company would account for performance obligations separately if the promised assets (goods or services) are transferred to the customer at different times. The objective of separating performance obligations is to ensure that an entity's revenue faithfully represents the pattern of the transfer of assets to the customer over the life of the contract. For example, if a photocopier were sold with a service agreement the revenue from each would be recognised separately as appropriate.

Satisfaction of performance obligations

Revenue would be recognised when a company satisfies a performance obligation.

In the case of a good, a company satisfies its performance obligation when the customer obtains control of the good so that the good is the customer's asset. Typically, that occurs when the customer takes physical possession of the good.

In the case of a service, a company satisfies a performance obligation when the customer has received the promised service.

Measurement

A company would have to measure its rights and its performance obligations in a contract in order to recognise it. Measurement of the rights would be based on the amount of the transaction price (ie the promised consideration).

CHAPTER 17

Provisions and events after the reporting period

Contents

IAS 10: Events after the reporting period

- Purpose of IAS 10
- Adjusting and non-adjusting events
- Accounting for adjusting events after the reporting period
- Disclosures for non-adjusting events after the reporting period
- Dividends. The going concern assumption
- Problems of accounting for events after the reporting period

1 IAS 10: Events after the reporting period

1.1 Purpose of IAS 10

The financial statements are prepared as at the end of the reporting period, but often the accounts are not authorised by the directors until some months later. During this time events may take place within the entity that should be communicated to the shareholders.

IAS 10: **Events after the reporting period** has two main objectives:

- to specify when an entity should adjust its financial statements for events that occur or become apparent after the reporting period, but before the financial statements are authorised for issue, and
- to specify the disclosures that should be given about events that have occurred after the reporting period but before the financial statements were authorised for issue.

IAS 10 also includes a requirement that the financial statements should disclose when the statements were authorised for issue, and who gave the authorisation.

1.2 Adjusting and non-adjusting events

IAS 10 sets out the following key definitions:

Events after the reporting period are events, favourable and unfavourable, that occur between the end of the reporting period and the date the financial statements are authorised for issue.

There are two types of event after the reporting period:

- Adjusting events. These are events that provide evidence of conditions that already existed at end of the reporting period.
- Non-adjusting events. These are events that have occurred due to conditions arising after the end of the reporting period.

1.3 Accounting for adjusting events after the reporting period

IAS 10 states that if an entity obtains information about an adjusting event after the reporting period, it should amend and update the financial statements to allow for this new information.

'An entity shall adjust the amounts recognised in its financial statements to reflect adjusting events after the reporting period.'

This might seem common sense. If conditions existed at the end of the reporting period, it is reasonable to expect that the financial statements should recognise those conditions, even though the facts did not become known until later.

IAS 10 gives the following examples of **adjusting events**:

- The settlement of a court case after the end of the reporting period, confirming that the entity had a present obligation as at the end of the reporting period as a consequence of the case.
- The receipt of information after the end of the reporting period indicating that an asset was impaired as at the end of the reporting period. For example, information may be obtained that indicates the need to make a provision for a bad debt against a trade receivable in the year-end statement of financial position.
- Similarly, evidence might be obtained after the end of the reporting period indicating that as at the end of the reporting period the net realisable value of some inventory was less than its cost, and the inventory should therefore be written down in value in the statement of financial position. The sale of inventory at less than cost soon after the end of the reporting period would provide such evidence.
- The determination after the end of the reporting period of the purchase cost of an asset, where the asset had already been purchased before the end of the reporting period, but the purchase price had not been finally agreed or decided. Similarly, the determination after the end of the reporting period of the sale price for a non-current asset, where the sale had been made before the end of the reporting period but the sale price had not yet been finally agreed.
- The discovery of fraud or errors showing that the financial statements are incorrect.

Example

At 31 December Year 1, Entity G is involved in a court case. It is being sued by a supplier. On 15 April Year 2, the court decided that Entity G should pay the supplier $45,000 in settlement of the dispute. The financial statements for Entity G for the year ended 31 December Year 1 were authorised for issue on 17 May Year 2.

The settlement of the court case is an adjusting event after the reporting period:

- It is an event that occurred between the end of the reporting period and the date the financial statements were authorised for issue.

- It provided evidence of a condition that existed at the end of the reporting period. In this example, the court decision provides evidence that the entity had an obligation to the supplier at the end of the reporting period.

Since it is an adjusting event after the reporting period, the financial statements for Year 1 must be adjusted to include a provision for $45,000. The alteration to the financial statements should be made before they are approved and authorised for issue.

1.4 Disclosures for non-adjusting events after the reporting period

Non-adjusting events after the reporting period are treated differently. A non-adjusting event relates to conditions that did not exist at the end of the reporting period; therefore the financial statements must not be updated to include the effects of the event. IAS 10 states quite firmly: 'An entity shall **not** adjust the amounts recognised in the financial statements to reflect non-adjusting events after the reporting period'.

However, IAS 10 goes on to say that if a non-adjusting event is **material**, a failure by the entity to provide a disclosure about it could influence the economic decisions taken by users of the financial statements. For **material non-adjusting events** IAS 10 therefore requires disclosure in a note to the financial statements of:

- the nature of the event, and
- an estimate of its financial effect, or a statement that such an estimate cannot be made.

(**Note**: There are no disclosure requirements for adjusting events themselves as they have already been reflected in the financial statements.)

IAS 10 gives the following examples of **non-adjusting events**:

- A fall in value of an asset, for example a large fall in the market value of some investments owned by the entity, between the end of the reporting period and the date the financial statements are authorised for issue. A fall in market value after the end of the reporting period will normally reflect conditions that arise after the reporting period has ended, not conditions already existing before then.
- The acquisition or disposal of a major subsidiary after the reporting period.
- The formal announcement after the reporting period of a plan to discontinue a major operation.
- Announcing or commencing the implementation of a major restructuring.
- The destruction of a major plant by a fire after the reporting period. The 'condition' is the fire, not the plant, and the fire didn't exist at the end of the reporting period. The plant should therefore be reported in the statement of financial position at its carrying amount as at the end of the reporting period. The fire, and the financial consequences of the fire, should be disclosed in a note to the financial statements.

1.5 Dividends and the going concern assumption

IAS 10 also contains specific provisions about proposed dividends and the going concern presumption on which financial statements are normally based.

If equity **dividends** are **declared after the end of the reporting period**, they should not be recognised as a liability in the statement of financial position, because they did not exist as an obligation as at the end of the reporting period.

Dividends proposed after the end of the reporting period should be disclosed in a note to the financial statements, in accordance with IAS 1.

There is one important exception to the normal rule that the financial statements reflect conditions at the end of the reporting period. A deterioration in operating results and financial position after the reporting period has ended might indicate that the **going concern assumption** is no longer appropriate. If management decide after the reporting period has ended that it intends to liquidate the entity or to cease trading, the financial statements for the year just ended should be prepared on some other basis (for example, on a break-up basis).

1.6 Problems of accounting for events after the reporting period

An entity may enter into a transaction shortly before the year end and then reverse the transaction soon after the year end. The aim is to improve the position shown in the year end accounts. This is known as 'window dressing'.

For example, a company may write cheques to suppliers on the last day of the year and enter the payments in the cash book. The cheques may not be sent out by post until the new financial year has started, so that the entity has not been required to pay actual money from its bank account. The effect of this may help to improve the reported liquidity position of the entity, as measured by its current ratio (ratio of current assets to current liabilities). If this ratio is already higher than 1.0, recording a payment to reduce cash and reduce trade payables will increase the ratio further. A higher current ratio indicates better liquidity.

Example

An entity has current assets of $20,000 and current liabilities of $15,000. On the last day of the year, the entity writes cheques to $5,000 of its trade payables but does not send the cheques to the suppliers until two weeks later.

After recording the payment transactions, current liabilities will be $10,000 and current assets will be $15,000, giving a current ratio of 1.5:1. Prior to the transaction, the current ratio was 1.3: 1.

Therefore, the effect has been to improve the liquidity position of the entity, because the current ratio has increased and it now appears that the entity has proportionally more assets to cover their liabilities.

Some commentators have argued that where transactions are deliberately intended to manipulate the reported financial position, disclosure should be required in the notes to the financial statements, in order to alert users. Disclosure of the facts and amounts would then allow the users to allow for the transaction when analysing the financial statements.

However, IAS 10 does not currently address this problem of 'window dressing' the financial statements and there is no requirement for such disclosures.

Provisions

- The history of accounting for provisions: 'creative accounting'
- The objective of IAS 37
- Recognition of provisions
- Measurement of provisions
- Accounting for specific provisions
- Provisions: disclosure requirements

2 Provisions

2.1 The history of accounting for provisions: 'creative accounting'

The introduction of IAS 37: **Provisions, contingent liabilities and contingent assets** in 1999 represented a significant change to the accounting for provisions. Previously there had been guidance on contingencies, but not provisions. The absence of accounting rules for provisions allowed entities to 'manipulate' their financial statements, especially their reported profit or loss in each year, by making provisions, increasing provisions or reducing provisions to suit management's reporting requirements.

Companies made provisions based simply on 'management intent' and used the argument of prudence to support their accounting treatment of provisions.

- Creating a provision would reduce profit in the current year.
- However, by creating a provision for expenses that would otherwise be charged in future years, a company was able to improve reported profits in future years.

Quite often management would 'change their mind' about the intention that had led to the creation of the provision, and the provision would be 'released back' to increase profit in a subsequent year.

Provisions might contain a mixture of items such as provisions for future reorganisation costs, redundancy costs, closure costs, warranty claims and staff re-training costs. It was apparent that companies were exploiting the absence of rules and using provisions to move profit from one year to the next.

Alternatively provisions might be created in a year of poor performance so as to report the 'bad news' in the current year so that future profits could be made to seem much better. This use of provisions was known as 'big bath accounting'.

Example

A company had a disappointing year in 20X1. As a result, the chief executive officer (CEO) resigned and a replacement CEO was appointed two months before the year-end. The CEO introduced several initiatives and performance is expected to slowly recover over the coming two years.

In order to make his appointment appear highly successful, the new CEO might want to create provisions to report a very bad year in 20X1 and blame this on his predecessor, and use the provisions to improve results in later years.

For example, this might be achieved by the creation in 20X1 of a $1 million provision for the cost of future restructuring plans.

In 20X2 the company might then decide to abandon the restructuring plans and so reduce the provision to $0, thereby increasing profit in 20X2. Using the illustrative figures below, this would allow the company to show a breakeven position in 20X2 under the management of the CEO following glosses in 20X1, and then to report even better results in 20X3.

	20X1	**20X2**	**20X3**
	$000	$000	$000
Original result	(2,000)	(1,000)	1,000
Provision	(1,000)		
Release of provision		1,000	
Reported results	(3,000)	0	1,000

2.2 The objective of IAS 37

The objective of IAS 37 was to eliminate the misleading use of provisions. It aims to ensure that appropriate conditions are applied to the recognition of provisions (and contingencies), and that suitable bases are used to measure the amount of provisions. In addition it requires that sufficient information should be disclosed in the notes to allow users to understand the various types of provision, their amounts and the timing of their creation and release.

As a result of IAS 37 provisions can still be made, but only where there is some degree of obligation (a real liability) on the part of the entity. A mere 'management intention' is no longer sufficient.

IAS37 also deals with contingent liabilities and contingent assets. (Rules on contingencies had previously existed in IAS 10 and so the introduction of IAS 37 presented less of an accounting problem.)

IAS 37 does not apply to provisions or contingencies covered by other accounting standards:

- construction contracts (IAS 11)
- income taxes (IAS 12)
- leases (IAS 17), except for onerous operating leases
- employee benefits (IAS 19)
- insurance contracts (IFRS 4), and
- contingent liabilities acquired as part of a business combinations (IFRS 3).

The notes in this section on provisions and in the next section on contingencies are based on the current version on IAS 37. An exposure draft was issued in 2005 proposing major changes to IAS 37. These are considered in a later section.

2.3 Recognition of provisions

A provision is a liability of uncertain timing or amount. As liabilities, provisions are included in the statement of financial position and increases or reductions in provisions are reported in profit and loss.

A liability should only be recognised when **all of** three conditions are met:

- The entity has a present obligation (legal or constructive) as a result of a past event.
- It is probable that an outflow of resources will be required to settle the obligation.
- A reliable estimate can be made of the amount of the provision.

Present obligation

There must be an obligation already in existence. Mere intention is not sufficient. The obligation may be legal or constructive.

- A **legal obligation** is one arising from a contract, or some other aspect of the law. For example, a company may sell goods with a two-year warranty if any defect arises after the date of sale. The company now has **legal obligation** (a contractual obligation) to make good by repair or replacement any defects that arise.

  Where details of a proposed new law have yet to be finalised, an obligation only arises when the legislation is virtually certain to be introduced ('enacted').
- A **constructive obligation** is one arising from the entity's actions, whereby
  - through established past practice, published policies, or a specific current statement, the entity has indicated to other parties that it will accept certain responsibilities, and
  - as a result, the entity has created a valid expectation that it will discharge those responsibilities.

For example, a retail store may have a policy of refunding purchases made by dissatisfied customers, even though it is only legally obliged to issue a refund if the goods are faulty. Its policy of making refunds is widely known. As a result of its conduct, the company has created a valid expectation amongst its customers that it will refund purchases. A constructive obligation therefore exists.

Past event

The event leading to the present obligation must be **past**, and must have occurred before the reporting date (end of the reporting period) when the provision is first recognised. No provision is made for costs that may be incurred in the future but where no obligation yet exists. For example, if an entity is planning a reorganisation

but does not yet have an obligation (legal or constructive) to undertake the reorganisation, it cannot create a provision for reorganisation costs.

For an event to be an 'obligating event', it must be shown that the entity had no realistic alternative to settling the obligation. This is the case only where the settlement can be enforced by law or, in the case of a constructive obligation, that a valid expectation has been created.

Example

Under new legislation an entity is required to fit smoke filters to its factories by 30 June Year 2. The entity has not fitted the smoke filters. In its accounts to 31 December Year 1, there is no present obligation as the legislation is not yet effective, and so an obligating event has not yet occurred. No provision for the cost of the smoke filters can be recognised in the accounts for Year 1.

Probable outflow of economic benefits

For a provision to exist, the outflow of benefits must be **probable**. 'Probable' is defined by IAS 37 as '**more likely than not**' (more than 50% probability). For example, an entity may have given a guarantee but may not expect to have to honour it. In such a situation, it cannot create a provision for the cost of expenses that it may have to incur under the terms of the guarantee. This is because a payment under the guarantee is not probable.

Reliable estimate of the obligation

IAS 37 also requires that a provision should not be recognised unless a reliable estimate of the amount of the provision can be made. A reasonable estimate can be based on a range of possible outcomes. In the extremely rare case where no estimate can be made, a provision should not be made and the liability should be disclosed instead as a contingent liability, in a note to the financial statements.

Example

In each of the following situations, consider whether a provision should be recognised, assuming that the reporting period ends on 31 December in each case:

(1) An entity in the oil industry cleans up contamination caused by its operations when required to do so under the laws of the particular country in which it operates. One country in which it operates has no legislation requiring clean up, and the entity has been contaminating the land for several years. At 31 December 20X4 it is virtually certain that a draft law requiring a clean-up of land already contaminated will be enacted shortly after the year end.

(2) The government has introduced a number of changes to the regulation of the financial services industry. As a result of these changes, entities will need to re-train a large proportion of their employees in order to ensure compliance with the financial services regulations. However, re-training is not a statutory

requirement. One entity affected by the new regulations had not done any re-training before the end of the reporting period.

(3) On 18 December 20X6 the board of an entity decides to close down a division. However, this decision was not communicated to any of those affected and no further steps were taken to implement the decision before the end of the reporting period.

(4) On 18 December 20X6 the board of an entity decides to close down a division. On 23 December a detailed plan for closing down the division was prepared by the board and announcements were made to employees concerning redundancies. In addition, letters were sent to customers advising them of the proposal and recommending alternative suppliers.

Answer

(1) By contaminating the land, the entity has created an obligation. There is virtual certainty that the legislation will be introduced, giving a legal obligation to the entity to clean up the land. This will result in a probable outflow of cash and resources to perform the clean-up and so a provision should be made for the best estimate of the clean-up operation.

(2) No provision should be created by the entity, because as at the end of the reporting period there has not been a past event giving rise to a present obligation. An obligation only arises where the settlement can be enforced by law or the entity has created a valid expectation in other parties. Neither applies in this situation.

(3) As there has not been an obligation created as at the end of the reporting period, no provision should be created. For a constructive obligation to arise, the entity must have communicated the plans to those affected (i.e. employees, customers and suppliers) and implementation must be planned to start shortly.

(4) In contrast to situation 3, an obligating event exists as at the end of the reporting period, because the entity has communicated the plans to its employees and customers. This gives rise to a constructive obligation, as the entity has created an expectation which will lead to a probable outflow of cash to settle redundancy payments and contract clauses. Therefore a provision should be made for the best estimate of the costs of closure.

2.4 Measurement of provisions

The amount recognised as a provision should be the best estimate as at the end of the reporting period of the expenditure required to settle the obligation. This estimate will be determined by the judgment of management, together with experience of similar transactions or reports by independent experts.

Risks and uncertainties should be taken into account in reaching the best estimate. Events after the reporting period will provide useful evidence.

However, entities should:

- **avoid** creating **excessive provisions** (which could be used as a way of manipulating profits between financial years), or
- **avoid underestimating** provisions.

The following guidelines apply to measuring a provision:

- In measuring a **single obligation**, the most likely outcome may be the best estimate of the liability.
- However, if there are other possibilities which are mostly higher or mostly lower than the most likely outcome, then the best estimate will be a higher or lower amount.
- When there is a **large population of potential obligations** (for example, a provision for multiple claims under guarantees) the obligation should be estimated by calculating an expected value. This is done by weighting all possible outcomes by their associated probabilities.
- If there is a considerable time lag before the settlement of the provision then the amount provided should be **discounted** to its present value.

Provisions should be reviewed at the end of each reporting period and adjusted to reflect the current best estimate. If it is no longer believed probable that the provision is needed, it should be reversed (reduced to zero) or reduced to a smaller amount.

Example

Entity G has a financial year ending 31 December. On 15 December Year 1 an employee was injured in the workplace and has sued Entity G for compensation under current health and safety legislation. Entity G's solicitors believe that the employee's claim has a 60% chance of success. The solicitors estimate that, if successful, the claim will be settled at $60,000.

Required

Consider whether or not Entity G should provide for the claim at 31 December Year 1 and, if so, at what amount.

Answer

If a provision is to be made:

- there must be a present obligation as a result of a past event
- it must be probable that an outflow of economic benefits will be required to settle the obligation, and
- it must be possible to make a reliable estimate of the amount of the obligation.

Applying this to the facts in the example:

(1) Entity G has a legal obligation under the health and safety legislation. The obligation has arisen from a past event, which is the accident on 15 December Year 1.

(2) It is probable that Entity G will have to pay the employee. A '60% chance of success' means that success is 'more likely than not'. (A probability above 50% meets the IAS 37 definition of 'probable'.)

(3) A reliable estimate can be made. This is $60,000.

Conclusion: A provision of $60,000 should be made at 31 December Year 1.

Example

An entity sells high-definition televisions with a 12-month warranty under which customers are covered for the cost of repairs or replacement of manufacturing defects found during the period after purchase. If every product sold required minor repairs, the annual cost would be $0.5 million. If every product was replaced, the annual cost would be $3 million.

Based on trading history, it is believed that 80% of all goods sold will have no defects, 15% will have minor defects and 5% will need replacing.

The warranty period covers just 12 months, and a provision should therefore be created for the expected value of $225,000 [(80% × $0 nil) + (15% × $0.5 million) + (5% × $3 million)].

Discounting

Where the provision will not be settled for some years and so the effect of the time value of money is material, the provision should be measured at its present value.

The discount rate used should be the pre-tax market rate that reflects the risks specific to the liability.

Reimbursements

Where some or all of the costs to settle the provision will be reimbursed by another party, the reimbursement should only be recognised when it is virtually certain that the reimbursement will be received.

- The reimbursement should be treated as a separate asset in the statement of financial position.
- The expense reported in profit or loss may be presented net of the reimbursement.

2.5 Accounting for specific provisions

The standard provides guidance on specific applications of the recognition and measurement rules for provisions.

Future operating losses

An entity may forecast that it will make a substantial operating loss in the next year or several years. If so, its directors might want to 'take all the bad news' immediately, and create a provision for the future losses.

Provisions cannot be made for future operating losses. This is because they arise from future events, not past events.

However, the expectation of future losses may indicate the need for an impairment loss to be recognised for some of the entity's assets.

Onerous contracts

An onerous contract is a contract where the costs of fulfilling/completing the contract now exceed the benefits to be received (the contract revenue).

A provision should be made for the additional costs of an onerous contract. (The 'additional costs' are the amount by which the costs are expected to exceed the benefits.)

Example

On 31 December Year 6 Entity H is half way through an eight-year operating lease on its factory when it moves to a new factory. Annual lease payments are $60,000. It cannot cancel the lease or sub-let the factory.

Required

Consider whether or not the conditions for making a provision are met and at what amount, if any, a provision should be made.

Answer

A present legal obligation exists as a result of a past event (the signing of the lease).

An outflow of resources is probable. (These are the rentals for the remainder of the term of the lease.)

The amount can be measured reliably ($60,000 × 4 years, discounted to a present value).

The discounted value of the future lease payments for four years may therefore be recognised as a provision.

Restructuring

An entity may plan to restructure a significant part of its operations. It expects the costs of restructuring to be high. A provision may be made for the future restructuring costs only if a present obligation exists.

A **constructive** obligation is likely to occur where, prior to the end of the reporting period:

- a detailed formal plan exists for the reconstruction
- and this plan has raised a valid expectation, in the mind of those people affected by the restructuring, that the reconstruction will occur.

This may mean, for example, that the board of directors has drawn up a formal plan of restructuring, and has announced that plan to the workforce or has made a public announcement about it.

Any provision for restructuring costs that is created:

- should include only the expected direct expenses arising from the restructuring, and
- should not include ongoing expenses such as:
  - the costs of retraining or relocating continuing staff
  - the cost of marketing
  - the cost of investing in new systems.

Environmental provisions and similar provisions

An entity may be required to 'clean up' a location where it has been working when production ceases. For example, an entity that operates an oil rig may have to repair the damage it has caused to the sea bed once the oil has all been extracted.

An entity does not automatically have to recognise a provision if it has caused environmental damage, even if it intends to clean up the site. The normal rules apply: an entity recognises a provision only where it has an **obligation** to rectify environmental damage as a result of a **past event**.

An entity has an obligation to 'clean-up' a site if:

- it is required to do so by law (a legal obligation); or
- its actions have created a **constructive obligation** to do so.

A constructive obligation might exist if (for example) an entity has actually promised to decontaminate a site or if it has adopted environmentally friendly policies and has made the public aware of this.

A provision can only be recognised if the environmental damage has **already happened (**a past event).

Example

An entity is about to begin to operate a coal mine. At the end of the reporting period the mine shaft has been prepared and all the necessary equipment has been constructed and is in place, but no coal has yet been extracted. Under local law, the entity is obliged to rectify all damage to the site once the mining operation has been completed (this is expected to be several years from now). Management estimates that 20% of the eventual costs of performing this work will relate to removing the equipment and various buildings and the remaining 80% will relate to restoring the damage caused by the actual extraction of coal.

Should a provision be recognised for the cost of restoring the damage?

Answer

The entity has a legal obligation to rectify the environmental damage caused by the actual digging of the mine shaft and construction of the site. An outflow of economic benefits is probable.

Therefore the entity should recognise a provision for the best estimate of removing the equipment and rectifying other damage which has occurred to date. This is expected to be about 20% of the total cost of restoring the site.

Because no coal has yet been extracted, the entity has no obligation to rectify any damage caused by mining. No provision can be recognised for this part of the expenditure (estimated at about 80% of the total).

Accounting for a provision for environmental costs

When an entity has an obligation to clean up environmental damage, it normally has to recognise a provision for expenditure which will take place many years in the future.

The estimated **full cost** of the expenditure should be recognised as soon as an obligation arises. However, the provision is discounted to its net present value if the time cost of money is material. (An examination question will make this clear and will give you the discount rate to use.)

As well as recognising a liability for future expenditure, an entity normally **recognises an asset**. Usually the entity cannot carry out its operations without agreeing to incur the expense of cleaning up any damage that it causes. This expenditure meets the definition of an asset, because it gives the entity access to future economic benefits in the form of sales revenue.

The double entry is Dr Asset; Cr Provision (rather than Dr Expense; Cr Provision). The asset is depreciated over its useful life in the same way as other non-current assets.

Example

Entity Z has constructed an oil rig which is due to become operational on 1st January Year 1. The entity has promised that when the oil rig is eventually decommissioned it will restore the sea bed and clean up any contamination that it has caused. It is estimated that the cost of decommissioning the oil rig will be $8 million and that decommissioning will take place in ten years' time. The risk free cost of capital for the company is 10%. The oil rig is depreciated on a straight line basis over its economic life of ten years.

Required:

Explain how the cost of decommissioning the oil rig should be treated in the financial statements for the year ended 31st December Year 1.

Answer

Entity Z has a constructive obligation to repair environmental damage as the result of a past event (the construction of the oil rig). Therefore it must recognise a provision for the decommissioning costs.

IAS 16 **Property, plant and equipment** states that the cost of an asset should include the estimated costs of dismantling and restoring a site, if the entity has an obligation to incur these costs. The decommissioning costs give Entity Z the right to future economic benefits in the form of revenues from extracting and selling oil. Therefore the decommissioning costs are also recognised as part of the cost of constructing the oil rig.

Because the costs will not be incurred for ten years, the estimated cost of $8 million is discounted to its present value. Discount factors can be found from tables. If you have to discount a provision in the examination, you will be given the discount factors that you need. In this example:

- At 1 January Year 1 the present value of $8 million is $1,912,000 (8 million × 0.239).
- At 31 December Year 1 the present value of $8 million is $2,104,000 (8 million × 0.263).
- The increase in the liability during Year 1 (called the unwinding of the discount) is recognised as a finance cost (similar to interest).

At 1 January Year 1 Entity Z recognises:

- a provision of $1,912,000
- an asset for the same amount.

The statement of comprehensive income for Year 1 includes in profit or loss:

- a finance cost of $192,000 (10% × 1,912,000) which is the unwinding of the discount; and
- depreciation of $192,000 (1,912,000 / 10).

In the statement of financial position at 31 December Year 1:

- the provision is measured at $2,104,000
- the asset is measured at its net book value of $1,720,000 (1,912,000 – 192,000).

Future repairs to assets

Some assets need to be repaired or to have parts replaced at intervals during their lives.

For example, suppose that a furnace has a lining that has to be replaced every five years. If the lining is not replaced, the furnace will break down.

Before IAS 37 was issued, entities would often recognise provisions for the cost of future repairs or replacement parts. These might be built up in instalments over the life of the asset or the relevant part of the asset.

IAS 37 effectively prohibits this treatment. The reasoning behind this is that an entity almost always has an alternative to incurring the expenditure, even if it is required by law (for example, for safety reasons). For example, the entity which has to replace the lining of its furnace could sell the furnace or stop using it, although this is unlikely in practice.

IAS 37 states that a provision cannot be recognised for the cost of future repairs or replacement parts unless the entity has an obligation to incur the expenditure. This is unusual. The obligating event is normally the actual repair or purchase of the replacement part.

Instead of recognising a provision, an entity should capitalise the expenditure and depreciate it over its useful life. This is the period until the next repair is required or the part needs to be replaced again. For example, the cost of the furnace lining would be capitalised and depreciated over five years. (IAS 16 **Property, plant and equipment** states that where an asset has two or more parts with different useful lives, each part should be depreciated separately.)

2.6 Provisions: disclosure requirements

Prior to the introduction of IAS 37, only outline information was given on provisions. It was not possible for the users of the financial statements to identify the creation, use and release of provisions, because only the overall change for the year was disclosed.

IAS 37 introduced stringent disclosure requirements to allow users to fully understand the impact of provisions on the period's financial statements.

For each class of provision (warranty, restructuring, refunds etc), an entity must disclose:

- the provision balance at the start and end of the period
- additional provisions made during the period
- amount of the created provision that was used in the period

- unused amounts reversed during the period, and
- the movement due to the unwinding of any discounting.

The entity must also give:

- a brief description of the need for the provision and the expected timing of its use
- an indication of any uncertainties surrounding the amount or timing of the outflows, and
- the amount of any expected reimbursement.

Contingent liabilities and contingent assets

- Definitions
- Recognising contingent liabilities or contingent assets
- Disclosures about contingent liabilities and contingent assets
- Summary: liabilities, provisions, contingent liabilities and contingent assets

3 Contingent liabilities and contingent assets

3.1 Definitions

Contingent liability

A contingent liability is **either of the following**:

A contingent liability is:

- a possible obligation
- arising from past events
- whose existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events.

A contingent liability is:

- a present obligation
- arising from past events
- which is not recognised as an actual liability (or provision) because
  - an outflow of economic benefits is not probable, or
  - the amount of the obligation cannot be estimated reliably.

A contingent liability arises when some, but not all, of the criteria for recognising a provision are met. For example, a contingent liability exists, but not a provision or an actual liability if:

- a reliable estimate cannot be made, or
- no legal obligation or constructive obligation exists: there is merely a **possible** obligation. Possible can be interpreted to mean less than 50% probability.

Example

Entity G is involved in a legal dispute with a customer, who is making a claim against Entity G for losses it has suffered as a consequence of a breach of contract. If Entity G's solicitors believe that the likelihood of the claim succeeding is **possible** rather than probable, and they estimate the possibility at about 30% to 40%. The claim should be treated as a contingent liability and not as a provision.

Contingent asset

A contingent asset is:

- a possible asset
- arising from past events
- whose existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events.

An example of a contingent asset might be a probable gain arising from a current legal action that has been taken against a third party, where the likelihood of success is considered to be quite high. The existence of the asset (the money receivable) will only be confirmed by the outcome of the legal dispute.

3.2 Recognising contingent liabilities or contingent assets

Unlike provisions, contingent liabilities and contingent assets:

- **are not recognised** in the financial statements, and
- are not recorded in the ledger accounts of an entity.

In some circumstances the existence of a contingent asset or a contingent liability is **disclosed** in the notes to the financial statements

- Contingent liabilities are possible future liabilities (likelihood less than 50%) and should be disclosed in a note to the financial statements **unless** the possibility of any outflow in settlement is remote (the meaning of 'remote' is not defined in IAS 37).
- **Contingent assets** are potential future assets and should be **disclosed where** an inflow in settlement is **probable**. 'Probable' is defined by IAS 37 as 'more likely than not'. (However if the probability is very high, the item should be reported as an actual asset and included in the statement of financial position.)

3.3 Disclosures about contingent liabilities and contingent assets

Where disclosure of a contingent liability or a contingent asset is appropriate, IAS 37 requires the following disclosures in notes to the financial statements:

- A brief description of the nature of the contingent liability/asset
- Where practicable:
  - an estimate of its financial effect
  - an indication of the uncertainties.
- For contingent liabilities, the possibility of any reimbursement.

3.4 Summary: liabilities, provisions, contingent liabilities and contingent assets

The following table provides a summary of the rules about whether items should be treated as liabilities, provisions, contingent liabilities or contingent assets:

	Liability	**Provision**	**Contingent liability**		**Contingent asset**
Present obligation/ asset arising from past events?	Yes	Yes	Yes	Only a possible obligation	Only a possible asset
Will settlement result in outflow/ inflow of economic benefits?	Expected outflow	Probable outflow – and a reliable estimate **can** be made of the obligation	Not probable outflow – or a reliable estimate **cannot** be made of the obligation	Outflow to be confirmed by uncertain future events	Inflow to be confirmed by uncertain future events
Treatment in the financial statements	Set up a liability	Set up a provision (a type of liability)	Disclose as a contingent liability (unless the possibility of outflow is remote)		Only disclose if inflow is probable

IAS 37: Applications and future developments

- IFRIC Interpretation 1: changes in existing decommissioning, restoration and similar liabilities
- IFRIC Interpretation 5: rights to interests in an environmental rehabilitation fund Disclosures about contingent liabilities and contingent assets
- IFRIC Interpretation 13: customer loyalty programmes
- IAS 37: The problems

4 IAS 37: Applications and future developments

A number of IFRIC Interpretations have been issued that relate to the application of IAS 37. These are summarised in this section.

4.1 IFRIC Interpretation 1: changes in existing decommissioning, restoration and similar liabilities

It was explained earlier that when an entity has an obligation to incur decommissioning costs, site restoration costs or environmental clean-up costs in the future, the present value of this future obligation should be recognised as a liability (a provision) and it should be added to the cost of the asset.

Debit: Asset
Credit: Provision for decommissioning costs.

The discount 'unwinds' each year (by the opening amount of the liability multiplied by the discount rate) and is reported as a finance cost expense in profit or loss and added to the liability (Debit: Expense, Credit: Liability).

IFRIC 1 deals with a situation where there is a change in the estimate of the present value of the decommissioning or restoration liability. A change in the estimate might occur because:

- the estimate of the actual future cost is changed, or
- the appropriate interest rate/discount rate changes
- there is a change in the estimated period of time remaining to when the costs will be incurred.

IFRIC 1 states that if the asset is measured using the cost model, any increase in the liability should be added to the cost of the asset and any decrease in the liability should be deducted. (However a deduction in the liability cannot reduce the asset to a negative carrying amount, and any excess should be taken to profit or loss for the period.)

The depreciation of the asset should be based on its revised cost of the asset and estimated remaining life. The finance cost for the unwinding of the discount should be based on the adjusted amount of the provision/liability.

If the change means an increase in the carrying cost of the asset, it might be appropriate to consider whether there has been any impairment to the asset.

(If the asset has been measured using the revaluation model, the basic rule is that any increase in the liability/provision should be recognised in profit or loss; and any reduction in the liability should be reported as other comprehensive income and added to the revaluation reserve for the asset.)

Example

Entity STV established an operating plant on 1 January Year 1. The initial cost of the plant was $12 million and it has a 40-year expected life. This initial cost included a provision for future decommissioning costs at the end of 40 years. These costs were estimated at $7.4 million, and had a present value of $1 million when discounted at the applicable rate of 5%.

After 10 years, the estimated costs of decommissioning have been revised and the present value of these future liabilities is now only $0.8 million.

By the end of 10 years, the provision for future decommissioning costs has risen, with the unwinding of the discount, to $1.63 million (= $1 million × 1.05^{10}). The change on the estimated liability therefore means that the liability is reduced by $0.83 million.

The carrying amount of the asset after 10 years, assuming straight line depreciation and a nil residual value, is $9 million (= $12 million × 30/40). The reduction in the provision/liability of $0.83 million should be deducted from this carrying amount, so that the revised carrying amount is $8.17 million.

- The asset should now be depreciated at the rate of $8.17 million/30 years = $272,000 per year.
- In the next year, the finance cost for unwinding the discount on the provision/liability will be $0.8 million × 0.05 = $40,000.

4.2 IFRIC Interpretation 5: rights to interests in an environmental rehabilitation fund

IFRIC 5 (Rights to interests arising from decommissioning, restoration and environmental rehabilitation funds) deals with a situation in which a fund is established by an entity or a number of different entities to provide for future decommissioning or environmental rehabilitation costs. Money is paid into the fund and invested. The entity or entities are subsequently able to draw on money from the fund to meet their future obligations when these arise.

IFRIC 5 states that in such a situation, an entity that is a contributor to such a fund should report the liability for the future obligation separately from its interest in the benefits from the fund.

- The future obligation is reported as a provision and valued at present value (with the discount unwinding each year).

- The entity's interest in the fund should be reported separately under the provisions of IAS 37. If it is virtually certain that the entity will receive benefits from the fund, these should be reported as an actual asset.

4.3 IFRIC Interpretation 13: customer loyalty programmes

An entity might offer incentives to its customers to buy its goods and services by offering credits or points. The customers might then be able to use the points they have earned to claim free goods or price discounts on goods when they make future purchases. The rewards for customer loyalty might be provided:

- By the entity itself, for example when a supermarket company gives points to customers for purchases they make in its stores
- By a third party, such as free air miles provided by an airline company. The airline company provides the rewards, but the air miles are earned for purchases by customers from other entities.

IFRIC 13 deals with the problem of how to account for rewards granted to customers under such schemes, including when to recognise the revenue from sales under IAS 18.

In principle, when an entity gives its customers points for purchasing its goods, the money that it receives now from current sales is partly related to future purchases by customers when they claim their reward in the future.

- One method of accounting for this would be to defer recognition of some of the revenue earned 'now' until the customers claim their rewards, and recognise the deferred revenue as revenue associated with those rewards.
- A second approach would be to recognise the cost of future purchases by customers under a reward scheme as part of the cost of the sales where the points or credits are originally earned.

IFRIC 13 opts for the first method.

When an entity gives its customers points or credits for a sale, a part of the consideration received from the sale should be deferred as a liability or provision for the cost of the future rewards:

Debit: Cash
Credit: Provision for future rewards
Credit: Revenue (balance).

The amount of the deferred consideration at a 'fair value'.

When customers claim their rewards, the provision can be released to revenue. The amount recognised as revenue =:
Total provision × (Credits or points claimed in the period/Total number of credits or points expected to be redeemed).

Example

A supermarket has a customer loyalty programme, and customers are given loyalty points when they make purchases. Customers can use the points to claim price reductions on future purchases.

In one period, the entity grants 100,000 loyalty points and it estimates the value of each loyalty point to be $0.01. The entity believes that only 80% of these loyalty points will actually be claimed. Actual consideration received from sales in the period was $100,000. For this period, a provision of $800 for future rewards should be recognised (= 80% × $100,000 × 0.01), and revenue for the period should be $99,200.

Suppose that in the next period 30 points are redeemed. There should be a transfer of $300 from the provision to revenue (= $800 × 30/80) and the provision will be reduced to $500.

Suppose that in the following year, 51 points are redeemed and the entity now believes that 90% of the points will be redeemed. The cumulative deferred compensation recognised to date should now be $800 × 81/90 = $720. In the previous period $300 was recognised, so $420 should be recognised as revenue in this period. The provision is now reduced from $500 to $80.

Example

A car dealer operates a customer loyalty scheme by giving free air miles to customers when they buy cars. The car dealer pays an airline company $0.009 for each air mile, but estimates that the fair value of each air mile is $0.01.

During one period, the car dealer issues 1,000,000 air miles under the loyalty scheme.

- Since the airline company accepts an obligation to offer the free air miles to customers of the car dealer, the car dealer is entitled to recognise the fair value of the air miles awarded ($10,000) as soon as the cars are sold.
- The car dealer also incurs a liability to pay the airline $90,000 for the air miles.
- The profit from the customer loyalty scheme in the period is therefore $10,000.

4.4 IAS 37: The problems

Although IAS 37 has gone a considerable way towards reducing the use of provisions to 'manipulate' reported profits in the accounts, there is still occasional abuse of the rules.

Example

A report was released in 2005 on Nortel Networks Corporation in the US which revealed that companies were still using provisioning to manipulate profits. In 2001 Nortel reported a large liability for restructuring costs as it dramatically down-sized its operations in 2001 and 2002. In 2002 senior management realised that they had an excess of $303 million in the restructuring provision, which it reversed back to increase profits. They chose to wait to release the provision until the first half of 2003 as employees had the opportunity to earn large bonuses if Nortel reported profits in 2003, but a similar incentive did not exist in 2002.

Another problem with IAS 37 is the distinction between provisions and contingent liabilities. Provisions have to be recognised in the financial statements, whereas contingencies are simply disclosed in a note.

The IASB has therefore carried out a review of IAS 37, but this is not currently in the exam syllabus for P2.

CHAPTER 18

Other accounting standards

Contents

IAS 2: *Inventories*

- Definition of inventory
- Valuation: lower of cost and net realisable value
- Measuring the cost of inventory
- Disclosure requirements for inventory

1 IAS 2: *Inventories*

You should already be familiar with IAS 2: *Inventories* from your previous studies. For P2 you do not need to learn anything new about inventories, but IAS 2 is an examinable document. A brief revision of the requirements of the standard is therefore given here.

1.1 Definition of inventory

Inventories are:

- Assets held for sale. For a retailer, these are items that the business sells – its stock-in trade. For a manufacturer, assets held for sale are usually referred to as 'finished goods'
- Assets in the process of production for sale ('work-in-progress' for a manufacturer)
- Assets in the form of materials or supplies to be used in the production process ('raw materials' in the case of a manufacturer).

There are several rules in IAS 2 dealing with the valuation (measurement) of inventory in the statement of financial position.

1.2 Valuation: lower of cost and net realisable value

IAS 2 *Inventories* states that inventories should be valued at the **lower** of:

- **cost** and
- net realisable value.

Cost consists of all the costs of purchase, plus the costs of conversion and other costs incurred in bringing the inventories to their present location and condition.

- Costs of purchase include the cost of the item itself (less any trade discounts) plus import duties, transport costs and other handling costs.
- Costs of conversion are the 'internal costs' incurred in getting the inventory into its current state, such as the internal costs incurred in producing finished goods. They include both direct costs (such as labour and expenses) and a share of production overheads, where production overhead absorption rates are **based on normal levels of activity.**

Net realisable value (NRV) is the estimated selling price of the item minus:

- all the (estimated) costs to make the item ready for sale, and
- all the (estimated) costs necessary to make the sale.

IAS 2 comments that the practice of writing down inventories below cost to their net realisable value is consistent with the view that assets should not have a carrying value in the statement of financial position that exceeds the amount expected to be realised from their sale or use.

1.3 Measuring the cost of inventory

IAS 2 allows three methods for measuring the cost of inventories.

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

Actual cost is used where items can be individually traced. This is usual for high-value items. For example, cars for sale in a car dealer's showroom will normally be valued at actual cost in the financial statements of the car dealer.

Where it is not possible to identify actual cost, a choice is allowed between FIFO or AVCO. The chosen method should be applied consistently to all similar types of inventories.

1.4 Disclosure requirements for inventory

IAS 2 requires the following disclosures in notes to the financial statements.

- The accounting policy adopted for measuring inventories, including the cost valuation method used.
- The total carrying amount of inventories, classified appropriately. (For a manufacturer, appropriate classifications will be raw materials, work-in-progress and finished goods.)
- The amount of inventories carried at net realisable value or NRV ('fair value minus costs to sell').
- The amount of inventories written down in value, and so recognised as an expense during the period.
- Details of any circumstances that have led to the write-down of inventories to NRV.

IAS 11: *Construction contracts*

- Definition of a construction contract
- The accounting problem with construction contracts
- Recognising revenue and costs of a contract in the financial statements
- IAS 11: Disclosure requirements
- IFRIC Interpretation 12: Service concession arrangements

2 IAS 11: Construction contracts

2.1 Definition of a construction contract

A construction contract is a contract specifically negotiated with a client for the construction of:

- a single asset such as a bridge, building, pipeline or road, or
- a number of related assets. For example, an oil refinery might be made up of several assets, such as buildings, pipelines, oil tanks and so on.

2.2 The accounting problem with construction contracts

IAS 11: *Construction contracts* sets out how an entity that is constructing an asset under a construction contract should deal in its financial statements with the revenues and costs arising from that contract.

The work on a major construction contract is likely to cover at least two accounting periods (and is often more than two accounting periods). The main problem with the accounting for construction contracts is therefore to decide how to allocate the revenue and costs of the contracts between the different accounting periods.

IAS 11 states that revenue and costs should be **matched** to accounting periods. This means that in each accounting period, a proportion of the overall (estimated) profits on the contract are taken to profit or loss.

Provided that estimates are made on a reasonable basis, then the amounts taken to profit or loss in each year, in accordance with IAS 11, will reflect the underlying position – which is that profits are earned over the life of the construction contract, not on the date that the contract is finally completed.

2.3 Recognising revenue and costs of a contract in the financial statements

The following rules apply to the recognition of the revenue and costs for a construction contract in the financial statements of the contractor.

Contract revenue

Contract revenue is the amount payable by the customer. All of the contract price, or a large part of it, may be a fixed amount (a price agreed in the terms of the contract). Provided that the outcome of the contract can be estimated reliably, revenue is taken to profit or loss as the contract progresses. The two most common methods of recognising revenue in each accounting period are the costs basis and the sales basis.

- **The costs basis**. Revenue is taken to profit or loss in line with the percentage of total costs incurred to date. (This is the more common method in examination questions.)
- **The sales basis**. Revenue is taken to profit or loss in line with 'work certified' to date by a third party.

As a contract progresses, at periodic intervals, an independent expert such as a surveyor may inspect the work, and issue a certificate stating the amount or value of the work done so far. The most recent certificate issued by the independent expert provides a basis for judging the proportion of the contract work that has been completed.

Contract costs

Contract costs are:

- the direct costs of the contract (such as labour costs, costs of materials, depreciation of plant used in construction), and
- a reasonable proportion of indirect costs (such as insurance costs, general design costs that are not attributable to specific contracts, and other general overheads).

Measuring revenue and cost in each period

To calculate the figures for contract revenue and contract costs to be included in profit or loss, the following steps should be taken:

Step 1: Calculate the total profit expected on the contract.

	$
Contract price	X
Minus: Costs to date	(X)
Estimated future costs	(X)
Total expected profit/(foreseeable loss)	X/(X)

If the contract in total shows a **loss**, the **whole loss** should be written off and taken to profit or loss **immediately**.

If the outcome of the contract is uncertain, possibly because it is too early in the life of the contract to make a reasonable estimate, there should be no profit and no loss for the contract. (In Step 3 below, a nil profit is obtained for a contract in its early stages by making revenue equal to the costs for the contract so far.)

Step 2: Calculate the proportion of the work completed to date using either the costs basis or the sales basis. An examination question will indicate which basis to use.

Step 3: The figures to include in profit or loss are normally calculated in the following order:

- first, a figure for revenue, and
- next, the figure for profit.
- Costs are then a balancing figure, equal to the difference between revenue and profit (or loss).

For a long-term contract, figures are calculated first of all for total revenue, total profit and total costs to date. The revenue, profit and costs for the current financial period are then calculated as the difference between:

- the total revenue, profit and costs to date, and
- the total revenue, profit and costs as at the end of the previous financial period.

	Year 1	Year 2	Year 3
	$	$	$
Cumulative profit to year end	X	X	X
Minus: Amounts taken to profit in previous years	-	(X)	(X)
Profit this year (balancing figure)	X	X	X

Summary: possible situations

The following table outlines the possible revenue and cost measurement principles:

Situation	Revenue measurement	Cost measurement
Profitable	Stage (%) of completion	Stage (%) of completion
Expected loss	Stage (%) of completion	Balancing figure to capture the full loss
Uncertain	Revenue to equal costs	Costs incurred in the period

2.4 IAS 11: Disclosure requirements

IAS 11 requires disclosure of the following information about construction contracts:

- The amount of contract revenue recognised as revenue in the period.
- The methods used to determine the amount of revenue and the stage of completion of contracts in progress (for example, the costs basis)
- For each contract in progress at the end of the reporting period, the total costs incurred and profits recognised (net of any losses recognised) to date

In relation to the statement of financial; position, IAS 11 requires disclosure of the following items:

- The amount of advances received (amounts received from customers before the related work has been carried out).
- The amount of retentions (amounts not paid by the customer until the contract is completed to his satisfaction).

- The gross amount due from customers or the gross amount due to customers for contract work. This is calculated as follows:

	$	$
Costs incurred	X	X
Plus recognised profits to date/(or minus recognised losses)	X/(X)	X/(X)
Minus progress billings	(X)	(X)
= Inventories: Due from customers on contracts	X	—
Non-current liabilities: Due to customers on contracts	—	(X)

(Note: 'Progress billings' are the amounts that the customer has been invoiced already, during the progress of the contract to date.)

Note the calculations carefully: (1) Costs incurred (2) plus profits taken to date (3) minus amounts billed to the customer (4) equals inventory in the statement of financial position.

Receivables may also include **amounts recoverable on contracts** where progress billings exceed cash received from the customer. This amount may include retentions, disclosed above. For example, if progress billings have been $3 million but the customer has paid only $2.5 million of the amounts billed, there will be a receivable for $0.5 million in the statement of financial position, for 'amounts recoverable on contracts'.

Example

A construction contractor has a fixed price contract for $9,000 to build a bridge. The initial amount of revenue agreed in the contract is $9,000. The contractor's initial estimate of contract costs is $8,000. It will take three years to build the bridge.

By the end of year 1, costs incurred were $2,093 and the anticipated costs to complete the project were $5,957.

In year 2, costs incurred to date were $6,168 and the estimated total costs had risen to $8,200. As a result the customer approves a variation in the contract revenue to cover the over-run on costs (the excess costs above the original estimate). This results in an increase in contract revenue of $200.

At the end of year 2, costs incurred include $100 for standard material stored at the site. This material will be used in year 3 to complete the project.

The contract is completed in year 3, and the final costs incurred were $8,200.

Payments were made in stages. An advance payment of $2,500 was made at the start of year 1. A progress payment of $4,000 was made in Year 2. The final payment (including the $200 variation) was made at the end of year 3.

The contractor determines the stage of completion of the contract by calculating the proportion that the contract costs incurred for work performed to date bear to the latest estimated total contract costs:

Stage of completion % = (Contract costs incurred to date/Estimated total contract costs) × 100%.

Required

(a) Calculate the revenue, costs and profit to recognise in profit or loss in each year

(b) Calculate the amounts to be disclosed in the statement of financial position at the end of each year.

Answer

(a) Profit or loss

Key data provided in question

	Year 1	Year 2	Year 3
	$	$	$
Initial revenue agreed in the contract	9,000	9,000	9,000
Variation	-	200	200
Total contract revenue	**9,000**	**9,200**	**9,200**
Costs incurred to date	2,093	6,168	8,200
Anticipated costs to complete Year 1 (8,050 – 2,093): Year 2 (8,200 – 6,168)	5,957	2,032	0
Total estimated costs	**8,050**	**8,200**	**8,200**
Estimated profit (revenue less costs)	**950**	**1,000**	**1,000**

Stage 1: Calculate the attributable revenue

Revenue is recognised according to the percentage completion which is based on costs incurred to date as a percentage of total estimated costs.

	Year 1	Year 2	Year 3
	$	$	$
Costs incurred to date	2,093	6,068	8,200
Total estimated costs	8,050	8,200	8,200
Stage of completion (note)	**26%**	**74%**	**100%**
Attributable revenue to date (% completion × total revenue)	(26% × 9,000)	(74% × 9,200)	
	2,340	6,808	9,200
Minus: revenue recognised to date	-	2,340	6,808
Revenue for the year	**2,340**	**4,468**	**2,392**

Note: The percentage completion in year 2 is based on costs incurred to date of $6,168 less the $100 of inventory carried forward to year 3.

Stage 2: Calculate the attributable profit

If the project is expected to be profitable, profit will be recognised according to the stage of completion. If the project is expected to be loss-making, the loss must be recognised in full.

	Year 1	Year 2	Year 3
Stage of completion	26%	74%	100%
Estimated profit (see Key data)	950	1,000	1,000
Cumulative attributable profit to date (% completion × estimated profit)	247	740	1,000
MInus: profit recognised to date	-	247	740
Profit for the year	**247**	**493**	**260**

Stage 3: Determine cost of sales

Cost of sales will be the costs charged to the contract in the year

	Year 1	Year 2	Year 3
Costs incurred to date (excluding inventory in Year 2)	2,093	6,068	8,200
Minus: Costs recognised to date	-	2,093	6,068
Cost of sales for the year	**2,093**	**3,975**	**2,132**

Extract from the statement of comprehensive income (or income statement)

	Year 1	Year 2	Year 3
Revenue for the year	2,340	4,468	2,392
Cost of sales for the year	2,093	3,975	2,132
Profit for the year	**247**	**493**	**260**

(b) Statement of financial position disclosures

The **gross amount due from or to customers** will be recognised as an asset or liability in the statement of financial position. The amount due comprises:

- costs incurred
- plus recognised profits or minus recognised losses
- minus amounts billed to customers.

	Year 1	Year 2	Year 3
Costs incurred to date (excluding inventory in Year 2)	2,093	6,068	8,200
Plus: Profit recognised to date	247	740	1,000
	2,340	6,808	9,200
Minus: Cumulative amounts billed	2,500	6,500	9,200
Asset/(Liability)	**(160)**	**308**	**0**

Extract from the statement of financial position

	Year 1	Year 2	Year 3
Current assets			
Gross amounts due from customers		308	
Inventories of raw materials		100	
Current liabilities			
Gross amounts due to customers	160		

2.5 IFRIC Interpretation 12: Service concession arrangements

In many countries, organisations in the public sector (state sector) are responsible for infrastructure projects for public services - such as roads, bridges, tunnels, prisons, hospitals, airports, water distribution facilities, energy supply and telecommunication networks.

However in some countries, the government enters into contracts with companies or other private sector entities for the development, financing, operation and maintenance of infrastructure. The infrastructure may already exist, or it may be constructed during the period of the service arrangement.

These arrangements are covered by IFRIC Interpretation 12. Arrangements within the scope of IFRIC Interpretation 12 typically involve a private sector entity (an operator):

- constructing an item of infrastructure for the public service, such as a state hospital
- upgrading it (for example, by increasing its capacity), and
- operating and maintaining it for a specified period of time.

A feature of these arrangements is the public service nature of the obligation that is undertaken by the operator. The service arrangement contractually obliges the operator to provide the services to the public on behalf of the government.

IFRIC 12 provides guidance on accounting by operators for these types of concession agreements.

Accounting treatment

The operator should recognise and measure revenue from the contract in accordance with IASs 11 and 18 for the services it performs.

- If the operator performs more than one service (i.e. construction or upgrade services and operation services) under a single contract, the consideration for each service should be allocated by reference to the relative fair values of the services delivered.
- If the operator provides construction or upgrade services the consideration received or receivable by the operator shall be recognised at its fair value.

The operator shall recognise a financial asset (under IAS 32, 39 and IFRS 7) to the extent that it has an unconditional contractual right to receive cash or another financial asset from the customer

The operator should recognise an intangible asset (under IAS 38) to the extent that it receives a right (e.g. a licence) to charge users for their use of the public service. A right to charge users of the public service is not an unconditional right to receive cash because the amounts are contingent on the extent that the public uses the service

The operator should account for revenue and costs relating to operation services in accordance with IAS 18.

The operator may have contractual obligations it must fulfil as a condition of its licence:

- to maintain the infrastructure to a specified level or standard
- to restore the infrastructure to a specified condition before it is handed over to the customer (government) at the end of the service arrangement.

These contractual obligations to maintain or restore infrastructure should be recognised and measured in accordance with IAS 37, at the best estimate of the expenditure that would be required to settle the present obligation as at the end of the reporting period.

IAS 41: *Agriculture*

- Scope and definitions
- Accounting treatment
- Government grants

3 IAS 41: *Agriculture*

3.1 Scope and definitions

Scope

IAS 41: *Agriculture* covers the following **agricultural activities**:

- biological assets
- agricultural produce at the point of harvest, and
- government grants for agriculture (in certain situations).

IAS 41 does not apply to:

- the harvested agricultural product (IAS 2 *Inventory* applies)
- land relating to the agricultural activity (IAS 16 or IAS 40 applies)
- intangible assets related to agricultural activity (IAS 38 *Intangible assets* applies).

Definitions

The following definitions are relevant to IAS 41:

- **Biological asset** – a living animal or plant, such as sheep, cows, rice, wheat, potatoes and so on.
- **Biological transformation** means the processes of growth, production, degeneration and procreation that cause changes in the quality or the quantity of a biological asset
- **Agricultural activities** – the management by an entity of the biological transformation of biological assets
  - for sale, or
  - into agricultural produce, or
  - into additional biological assets.
- **Agricultural produce** is the harvested product of the entity's biological assets.
- **Harvest** – the detachment of produce from a biological asset or the cessation of a biological asset's life.

Example

A farmer has a field of lambs ('**biological assets**'). As the lambs grow they go through **biological transformation**. As sheep they are able to procreate and lambs will be born (**additional biological assets**) and the wool from the sheep provides a source of revenue for the farmer ('**agricultural produce'). ** Once the wool has been sheared from the sheep ('**harvested**'), IAS 2 requires that it be accounted for as regular inventory.

Further examples

Biological assets	Agricultural produce	Harvested products
Trees in a plantation forest	Logs	Lumber
Plants	Harvested cane	Sugar
Dairy cattle	Milk	Cheese
Vines	Grapes	Wine
Bushes	Leaf	Tea or tobacco

3.2 Accounting treatment

Recognition of a biological asset or agricultural produce

An entity should recognise a biological asset or agricultural produce when (and only when):

- the entity controls the asset as a result of past events
- it is probable that future benefits will flow from the asset to the entity, and
- the fair value or cost of the asset can be measured reliably.

(Note: the probability of future benefits can be an important factor in the recognition of these items.)

Measurement

- A **biological asset** should be measured initially and subsequently at the end of each reporting period at its **fair value minus ultimate selling costs** (unless the fair value cannot be measured reliably). The gain or loss arising on initial recognition and subsequent revaluation should be included in profit or loss for the period in which it arises.
- **Agricultural produce** harvested from an entity's biological assets is measured at its **fair value minus estimated ultimate selling costs**. The gain or loss on initial recognition is included in the profit or loss for that period.
- Ultimate selling costs include commissions to brokers and dealers, levies to regulators, transfer taxes and duties.
- Fair value is the quoted price in an active market. It is presumed that fair values can be measured reliably for biological assets. If this is not so, the biological asset should be measured at its cost minus any accumulated depreciation or impairment.

- Once the fair value becomes available, the entity should measure the asset at fair value minus ultimate selling costs. This could arise where a vineyard owner buys some vines that have no value until they are several years old and start to produce grapes.

Example

Using the earlier example of a sheep farmer, lambs should initially be measured when they are born at their fair value minus costs to sell.

As they grow and their value changes, this gain or loss should be reflected in the biological asset value and also in profit or loss.

The sheep may be used for obtaining wool. Once the wool has been sheared from the sheep, as an agricultural produce the wool should be valued at fair value minus costs to sell.

If the wool is then turned into yarn or carpet its value is then transferred to inventory and IAS 2 will provide any further accounting rules.

3.3 Government grants

Agricultural entities (for example, farms) often benefit from government grants in the form of cash payments. An unconditional grant relating to a biological asset that is being measured at fair value should be recognised as income when the grant becomes receivable.

A grant may be dependent on certain conditions being met. For example, the entity may be asked not to engage in a specific agricultural activity. In such cases, the grant should be recognised only when the conditions are met.

If the biological asset has been measured at cost because fair value could not be measured reliably, then the requirements of IAS 20: *Accounting for government grants* should be applied.

IFRIC 17: Distribution of non cash assets to owners

- Background
- Key features

4 IFRIC 17: Distribution of non cash assets to owners

4.1 Background

IFRS does not provide guidance on how an entity should measure distributions to its owners (commonly referred to as dividends).

This is not a problem when an entity makes a cash distribution but sometimes an entity distributes assets other than cash (non-cash assets) as dividends.

4.2 Key features

A liability is recognised when it is no longer at the discretion of the entity. This is the point at which those persons who have the authority to approve distributions give such approval.

The liability is initially recognised at the fair value of the assets to be distributed.

At the end of each reporting period and immediately before settlement, the liability is remeasured to reflect any changes in the fair value of the underlying asset. The changes are recognised in equity.

At settlement date, the difference between the carrying amount of the assets distributed and the liability is recognised in profit or loss as a separate line.

Example

23rd November 2010

X Plc declares that it will distribute its investment property to its owners on 28th February 2011**.**
X Plc uses the cost model in accounting for its investment properties.
The fair value of the investment property was $10m.

Dr	Equity (retained earnings)	$10m	
	Cr Dividend payable		$10m

31st December (X Plc's reporting date)
The fair value of the investment property was $11m.

Dr	Equity (retained earnings)	$1m	
	Cr Dividend payable		$1m

28th February 2011
The investment property is distributed to the owners
The fair value of the investment property was $11.5m.
The carrying amount of the investment property was $9.5m.

Dr	Equity (retained earnings)	$0.5m		
	Cr Dividend payable			$0.5m

Dr	Dividend payable	$11.5m		
	Cr Investment property			$9.5m
	Cr P&L			$1.5m

CHAPTER 19

Specialised entities

Contents	
1	Small and medium sized entities (SMEs)
2	Specialised, not-for-profit and public sector entities
3	ED 2009/8: Rate regulated activities

Small and medium-sized entities (SMEs)

- Reporting requirements of SMEs
- Arguments against the use of IFRSs by SMEs
- Arguments in favour of the use of IFRSs by SMEs
- Considerations in developing standards for SMEs
- IFRS for SMEs

1 Small and medium-sized entities (SMEs)

1.1 Reporting requirements of SMEs

International accounting standards are written to meet the needs of investors in international capital markets. Most companies adopting IFRSs are large listed entities. The IASB has not stated that IFRSs are only aimed at quoted companies, but certainly the majority of adopters are large entities. In many countries IFRSs are used as national GAAP which means that unquoted small and medium-sized entities (SMEs) have to apply them.

There is an argument that all entities should apply the same accounting standards in order to give a fair presentation of the affairs of the entity. However in some cases, many of the IFRSs are complex and can be difficult for SMEs to apply, particularly in areas such as financial instruments. Additionally, not all the information required by IFRSs for disclosure is needed by the users of the SME's financial statements.

Some commentators therefore suggest that SMEs and public entities should be allowed to use simplified or differing standards as the nature of their business is different from large quoted entities.

The users of financial statements of SMEs are different from the users of the financial statements of quoted companies. The only 'user groups' that use the financial statements of an SME are normally:

- its shareholders/owners
- senior management, and
- possibly, government departments and agencies.

A SME is often owned and managed by a small number of entrepreneurs, and may be a family-owned and family-run business. Large companies, in contrast, are run by professional boards of directors, who must be held accountable to their shareholders.

Because there are big differences between SMEs and large quoted companies, it is not clear whether there is any reason why SMEs should comply with IFRSs. There are arguments in favour of using IFRSs for SMEs, and arguments against.

1.2 Arguments against the use of IFRSs by SMEs

There are several reasons why SMEs **should not** adopt IFRSs for the preparation of their financial statements.

- Some IFRSs deal with subjects that are of little or no relevance to SMEs, such as accounting standards on consolidation, associates, joint ventures, deferred tax, construction contracts and standards that deal with complex issues of fair value measurement.
- The costs of complying with IFRSs can be high. Large companies are able to bear the cost, which might not be significant relative to their size. For SMEs, the cost is proportionately much higher, and it is doubtful whether the benefits of complying with IFRSs would justify the costs.
- There are not many users of financial statements of SMEs, and they use the financial statements for a smaller range of decisions, compared to investors in international capital markets. So would it be a waste of time (as well as cost) to comply with IFRSs?

1.3 Arguments in favour of the use of IFRSs by SMEs

There are also reasons why SMEs **should** adopt IFRSs for the preparation of their financial statements.

- If SMEs use different accounting rules and requirements to prepare their financial statements, there will be a 'two-tier' system of accounting. This could make it difficult to compare results of larger and smaller companies, should the need arise. Confidence in the quality of financial reporting might be affected adversely.
- If SMEs prepared financial statements in accordance with their national GAAP, it will be impossible to compare financial statements of companies in different countries. If SMEs grow in size and eventually obtain a stock market quotation, they will have some difficulty in the transition from national GAAP to IFRSs.
- It has also been argued that full statutory accounts for SMEs would be in the public interest, and might help to protect other stakeholders in the company (such as suppliers, customers, lenders and employees).

1.4 Considerations in developing standards for SMEs

The aim of developing a set of accounting standards for SMEs is that they allow information to be presented that is relevant, reliable, comparable and understandable. The information presented should be suitable for the uses of the managers and directors and any other interested parties of the SME. Additionally, many of the detailed disclosures within full IFRSs are not relevant and the accounting standards should be modified for this. The difficulty is getting the right balance of modification, too much and the financial statements will lose their focus and will not be helpful to users.

1.5 IFRS for SMEs

Project history

June 2004: Publication of the discussion paper (DP) Preliminary Views on Accounting Standards for Small and Medium Sized Entities

February 2007: Publication of the ED

July 2009: Publication of the IFRS for SMEs

The standard consists of 230 pages of text, arranged into 35 chapters that cover all of the recognition, measurement, presentation and disclosure requirements for SMEs. There is no cross reference to other IFRS (with one exception relating to financial instruments).

Definitions

Small and medium-sized entities are entities that:

- do not have public accountability, and
- publish general purpose financial statements for external users. Examples of external users include owners who are not involved in managing the business, existing and potential creditors, and credit rating agencies.

An entity has public accountability if:

- its debt or equity instruments are traded in a public market or it is in the process of issuing such instruments; or
- it holds assets in a fiduciary capacity for a broad group of outsiders as one of its primary businesses (eg banks and insurance companies).

The decision as to which entities are required or permitted to apply the standard will lie with the regulatory and legislative authorities in each jurisdiction.

Key features of the IFRS for SMEs

A complete set of financial statements of an entity reporting under the IFRS for SMEs is similar to that required by full IFRS and comprises:

- a statement of financial position
- either a single statement of comprehensive income, or a separate income statement and a separate statement of comprehensive income
- a statement of changes in equity
- a statement of cash flows
- notes including a summary of significant accounting policies
- comparative information.

The IFRS for SMEs imposes a lesser burden on SMEs due to:

- some topics in IFRSs being omitted because they are not relevant to typical SMEs
- the simplification of many of the recognition and measurement requirements available in full IFRSs
- substantially fewer disclosures.

Omitted topics

The IFRS for SMEs does not address the following topics:

- earnings per share
- interim accounting
- segment reporting
- special accounting for assets held for sale

Simplifications

Investments in associates and joint ventures

- can be measured at cost unless there is a published price quotation (when fair value must be used).
- Jointly controlled entities can be accounted for using the cost model, the equity method or the fair value model (proportionate consolidation is not allowed)

Investment properties

- must be measured at fair value (cost model not allowed, unless fair value cannot be measured reliably without undue cost or effort)

Property, plant and equipment

- revaluation not allowed
- residual value, useful life and depreciation need to be reviewed only if there is an indication they may have changed since the most recent annual reporting date (full IFRSs require an annual review).

Borrowing costs

- must be recognised as expenses (cannot be capitalised)

Intangible assets

- revaluation not allowed
- research and development costs must be recognised as expenses (cannot be capitalised)

Goodwill and other indefinite life intangible assets

- amortised over their estimated useful lives (ten years if useful life cannot be estimated reliably).

Business combinations

- acquisition costs are capitalised
- goodwill is amortised over its useful life (10 years if this can't be estimated reliably)

Financial instruments:

- Financial instruments meeting specified criteria are measured at cost or amortised cost. All others are measured at fair value through profit or loss.
- Simplified hedge accounting rules

Defined benefit plans:

- all actuarial gains and losses must be recognised immediately either in profit of loss or other comprehensive income.
- all past service cost must be recognised immediately in profit or loss.

Specialised, not-for-profit and public sector entities

- Types of entity
- Objectives of specialised entities
- Accounting standards and specialised entities
- Exam approach

2 Specialised, not-for-profit and public sector entities

2.1 Types of entity

Most of this study text is about the financial statements of profit-making entities, such as limited liability companies.

Other types of entity also prepare and publish financial statements. These entities include:

- **Not-for-profit entities:** such as charities, clubs and societies. Each of these organisations is set up for a specific purpose. For example, a charity might be set up to campaign for the protection of the natural environment or to help the poor.
- **Public sector entities**: these include central government bodies; local government bodies; and other organisations that operate for the benefit of the general public, such as state schools and hospitals. A public sector entity is owned by the state or by the general public.

Many different types of entity could be described under these headings. These entities are different from limited liability companies, partnerships and sole traders in one vital respect. They do not primarily exist to make a profit.

In practice, the terms '**specialised entity**', '**not-for-profit entity**' and '**public benefit entity**' are often used interchangeably.

2.2 Objectives of specialised entities

The main objective of large listed entities is to maximise their profits in order to provide a return to their owners (investors) in the form of a dividend. This may not be their only objective (for example, they may provide employment to the local community, or aim to operate in a socially responsible way), but it is their **main** objective.

The objective of owner managed businesses (small privately owned entities) is also to make a profit.

In contrast, the main objective of a specialised entity is to carry out the activities for which it has been created. Again, this may not be the only objective, because all entities need some form of income. Many large charities, for example, carry out trading activities. However, making a profit is not the **main** aim. In fact, most not-for-profit entities will aim to break even, rather than to generate a surplus of income over expenditure.

In some public sector entities, performance is measured in terms of whether the entity provides value for money from the resources it has available. Assessment of performance will look at how well the resources have been used and it is often done using the 3 E's – economy, effectiveness and efficiency.

Economy means buying goods and services at a cheap price, so that the entity is not paying too much for its input costs, which could include accommodation, staff and other items.

Efficiency means operating so that inputs are used in the best possible way to provide a maximum output. In the case of a hospital, it may be making sure that the required service is provided at the lowest cost and wastage is kept to a minimum.

Effectiveness means that an organisation has met its goals by using the right resources at the right time.

2.3 Accounting standards and specialised entities

International accounting standards are designed for profit-making entities.

Whether they are relevant to not-for-profit entities will depend on the way in which they have to report and the information that they have to provide. There is a great deal of variation from organisation to organisation and from country to country.

In some countries, charities and public sector bodies are required to follow accounting standards specifically designed for the purpose (in the UK these are called Statements of Recommended Practice.) Alternatively, the form and content of financial statements and the accounting treatments to be followed may be prescribed by law. IASs and IFRSs are probably largely irrelevant for these entities.

Some not-for-profit entities may be able to draw up accounts in any form that its members or officers wish. Many not-for-profit entities prepare accounts on a cash basis, rather than on an accruals basis. Public sector bodies may also use cash accounting. (This was the case in the UK until fairly recently.) IASs and IFRSs require accruals accounting.

In some countries, public sector bodies and many charities are increasingly expected to apply commercial-style accounting practices. Even for those entities that are not formally required to adopt them, IASs and IFRSs are a useful source of information on current best practice.

2.4 Exam approach

In the exam, you may be given a scenario involving a not-for-profit entity or public sector entity and asked to advise on a particular transaction. In many ways your advice should be no different for a not-for-profit entity as for a commercial profit-making entity, but you will need to be aware of the context of the question and the fact that the objectives of a not for profit entity differ from a standard trading entity.

Users of the financial statements of a not-for-profit entity are almost always interested in the way that the entity manages and uses its resources.

For example:

- A charity may be managed by trustees on behalf of its supporters and those who benefit from its activities.
- A public sector organisation is managed by elected officials on behalf of the general public.

Additionally, if you have to interpret any information relating to not-for-profit and public sector entities then make sure you are aware who the users of that information are and what they will be interested in.

Typically, users will want to know whether:

- the entity has enough finance to achieve its objectives
- the money raised is being spent on the activities for which it was intended
- the public are receiving value for money (in the case of a public sector entity)
- services are being provided economically, efficiently and effectively (in the case of a public sector entity)
- the level of spending is reasonable in relation to the services provided.

Additionally, standard ratios may not be suitable for these entities so you may have to look at other measures, such as non-financial rations including:

- the average time that hospital patients wait for treatment
- the number of schools built in an area
- serious crimes per 1,000 of the population
- number of complaints by members of the public in a given period
- number of visits made to museums and art galleries in an area.

ED 2009/8: Rate regulated activities

- Background
- Proposed guidance

3 ED 2009/8 Rate regulated activities

3.1 Background

Many governments have established regulatory mechanisms and bodies to govern the provision of essential services such as electricity, gas etc. The regulatory mechanisms often provide price protection to consumers whilst allowing companies to earn a fair return.

Prices are often set in advance, based on estimated costs and volumes and a target rate of return. The regulatory mechanism might also allow for the later determination of actual costs and volumes. A company might then be allowed to recover costs incurred through future rate increases. Alternatively, a company might be required to return amounts to the consumer through future rate decreases. This gives rise to gives rise to rights or obligations which may qualify as assets or liabilities.

Illustration

X Plc is a regulated gas supplier. Flooding has caused significant damage to its infrastructure. The regulatory mechanism allows X Plc to recover the costs of flood damage costs from consumers over the five subsequent annual periods.

This right is clearly of benefit to X Plc. However it is unlikely that it would satisfy the definition of an asset under existing IFRS.

In July 2009 the IASB issued an ED to address this issue. The ED contained proposals to allow for assets and liabilities that arise from some rate-regulated activities to be recognised under IFRS.

3.2 Proposed guidance

The ED clarifies in what circumstances regulated entities should recognise assets or liabilities as a result of rate regulation, defines regulatory assets and regulatory liabilities, sets out criteria for their recognition, specifies how they should be measured and specifies disclosures.

The ED applies only to rate-regulated activities that meet the following two criteria:

- an authorised body is empowered to establish rates that bind customers
- the price established by regulation (the rate) is designed to recover the specific costs the entity incurs in providing the regulated goods or services and to earn a specified return (cost-of-service regulation).

The ED requires an entity:

- to recognise a regulatory asset or regulatory liability if the regulator permits the entity to recover specific previously incurred costs or requires it to refund previously collected amounts and to earn a specified return on its regulated activities by adjusting the prices it charges its customers
- to measure a regulatory asset or regulatory liability at the expected present value of the cash flows to be recovered or refunded as a result of regulation, both on initial recognition and at the end of each subsequent reporting period
- to present current and non-current regulatory assets and regulatory liabilities, without offsetting, separately from other assets and liabilities.

CHAPTER 20

Performance measurement

Contents

Users of financial statements

- Users and their information needs
- Limitations of the financial statements
- The information needs of management
- Ratio analysis as a tool

1 Users of financial statements

1.1 Users and their information needs

The IASB Framework outlines seven different groups of users of financial statements. Each user group has different information needs, but as a general rule financial statements prepared in accordance with IFRSs should provide all user groups with most of their needs.

The table below lists the user groups, indicates the information that they require from published reports and accounts, and suggests which items in the financial statements will be of most interest to each group.

User	Information needs	Items of interest
Investors/ potential investors	▪ Risks and returns relating to their investment ▪ Security of dividend payments ▪ Information to make decisions about buying, selling or holding shares ▪ Future growth prospects.	▪ Trend analysis: changes in revenue, costs and profits over the past few years ▪ Dividend cover ▪ Events and announcements after the reporting period ▪ Share price ▪ Corporate governance reports. Narrative business review.
Employees	▪ Stability of the company (job security and job prospects) ▪ Information about the company's ability to pay bonuses or higher salaries.	▪ Profitability and cash position ▪ Increases in salaries (%) relative to increases in profit and dividends ▪ Directors' remuneration
Lenders (banks, bondholders)	▪ Whether the entity has sufficient cash flow to repay loans ▪ The entity's ability to pay interest ▪ The adequacy of collateral/ security for loans and bonds	▪ Cash flow ▪ Total borrowing by the entity: financial gearing ▪ Interest cover ▪ New charges created over the entity's assets

Suppliers	▪ The entity's ability to settle its liabilities ▪ The entity's ability to survive and continue as a customer	▪ Net current assets ▪ Growth record
Customers	▪ The entity's ability to survive and continue as a supplier	▪ Growth record ▪ Cash flow
Government	▪ The entity's contribution to the economy ▪ Regulation of activities ▪ Taxation ▪ Obtaining government statistics	▪ Revenue and profit ▪ Market share
General public	▪ Environmental and social awareness ▪ Contributions to the local economy	▪ Environmental and social reports ▪ Directors' report ▪ Narrative business review

Note

Management are not included as a user group because they should have access to much more detailed information about the company's financial position and performance, from internal reports and budgets.

1.2 Limitations of the financial statements

The financial statements provide a starting point for understanding the entity's performance. However they have a number of limitations, which are explained below.

Historical information

Published accounts are historical in nature, and report the past performance of the company. Past performance does not guarantee future performance. However, there is very little information in the audited financial statements about the future prospects of the company.

A Chairman's statement, a directors' report and a business review or Operating and Financial Review are produced by companies in some countries. These narrative reports often include information about changes to the business and the outlook for the next few years. However, these often provide insufficient information and can not always be relied on to provide an 'unbiased' view of the company's future prospects.

Users of financial statements, particularly shareholders and other investors, may use trend analysis to analyse a company's performance over the past few years, and predict future performance from past trends. Stock market announcements by a company and press releases by the company to the media, together with general economic information, can also be used to try to predict future performance.

The effect of inflation

Inflation affects the information in financial statements prepared under the historical cost convention. When the rate of inflation is fairly high, information in the financial statements may be unreliable.

- For many companies, many of the assets in the statement of financial position are undervalued because in a period of fairly high inflation the replacement cost of the assets will be substantially higher than their carrying values (at net book value, based on historical cost).
- IAS 16 and IAS 39 allow certain assets to be re-valued in the statement of financial position whilst others are carried at historical cost.

In a period of inflation, the reported profit is also misleading when the historical cost convention is applied. The reported profit does not take account of the higher cost of replacing inventory that has been sold or non-current assets that have reached the end of their useful life.

Access to information

Most users will not have access to the forecasts and projections produced by management as part of their monthly management accounts. This information would be invaluable to investors who want to assess the future prospects of the company.

Some users of financial information may be in a position to ask a company to provide this information. For example:

- a bank will want to see the cash flow forecasts and business plans of a company before agreeing to lend it money
- the government may have a statutory right to demand detailed financial information from a company, for example about its sales, in order to compile national statistics.

Insufficient detail

IFRSs specify the disclosures of information that entities should provide in their financial statements.

Much of the detailed information is aggregated into a total figure, and companies generally provide only the minimum level of disclosure required by IFRSs. Some international accounting standards require the disclosure of details, such as IFRS 5 **Non-current assets held for sale and discontinued operations**. These help with the interpretation of performance, but the disclosures are still not given in sufficient detail to satisfy the needs of all users.

Some standards include voluntary disclosure requirements. For example, IAS 7 recommends analysis of operating cash flows under the direct method. However, most companies choose not to provide any more information than is absolutely necessary, and most use the indirect method.

Creative accounting

Over recent years, the rules in the IFRS accounting framework have been strengthened, and the opportunities for 'window dressing' of the financial statements have been reduced. Even so, there are still some opportunities for companies to 'manipulate' the figures in their financial statements, to improve their reported position and their financial ratios. This is known as creative accounting.

For example, some accounting standards still allow a choice of accounting treatment. For example, IAS 16 allows the use of the cost model or revaluation model for non-current assets. A company will be tempted to select the policy that shows the 'best' results.

There are also a number of areas where accounting standards provide no rules or where the rules on the accounting treatment of an item are unclear. This allows companies to design their own accounting treatment, until such time as rules are introduced or strengthened.

Even when standards do exist, the management of entities may be allowed to use their judgement when applying an accounting policy or making an estimate. For example, judgement is needed to decide whether the conditions have been met for capitalisation of development costs (IAS 38).

Scope of the audit

In addition to the financial statements, the annual report and accounts published by companies include other information that may be of relevance to users. This information may include:

- an operating and financial review, or a business review
- a Chairman's statement
- a directors' report
- a corporate social responsibility report (or social and environmental report). However, many companies publish an annual corporate social responsibility report as a separate document.

The company itself is able to decide the content of these reports and the amount of detail that they provide. As a general rule, a company will only want to publish positive news and not the 'bad news'. The information in these reports is not subject to a full audit and so the audit opinion does not extend to them. (Auditors are required to read the content of the reports, to ensure that it does not undermine the credibility of the financial statements. If problems are found, the auditors will seek adjustment from management but if this refused there is generally little that the auditor can do.)

Note: In the EU, the recent EU accounts modernisation directive introduced a requirement for listed companies to produce an annual business review. National governments will give guidance or establish rules about what this review should contain, but it will not be subject to audit.

1.3 The information needs of management

The management of a company needs much more information about the financial performance and position of their company than other user groups. They need reports more regularly, and often they need access to information immediately through on-line IT systems. They also need information in sufficient detail and suitably analysed.

Management have access to this amount of information and detail through the reporting systems of the company, and in budgets, forecasts, business plans, strategy documents and monthly management accounts. Detailed reports on inventory levels, slow-moving items and the ageing of outstanding receivables should also be available from the management information systems of the company.

However, the quality of the management information is only as good as the system that provides it. Poor management information (information that is inaccurate and unreliable, provided too late or irrelevant) can lead to wrong decisions being made by management.

The management of an entity may also have access to information about competitors, such as market share statistics (if these are collected by industry regulators or the government). The financial statements of competitors are also a valuable source of information about their profit margins, sales growth and possible weaknesses.

1.4 Ratio analysis as a tool

It is difficult to assess a company's financial performance by analysing the financial results for one year. Better information is obtained by making comparisons with financial performance in the previous year, or perhaps over several periods (trend analysis).

For example, if a company's revenue has increased by 15%, it might be expected that gross profit should also increase by at least 15%, and that receivables should increase by 15%. To sustain the growth in operations, some increase in non-current assets and inventory levels – perhaps a 15% increase – should also be expected.

Ratio analysis is a key tool used for performance analysis, because ratios summarise financial information, often by relating two or more items to each other, and they present financial information in a more understandable form. Ratios also identify significant relationships between different figures in the financial statements.

For example, knowing that the profit of a company is $50,000 is not particularly useful information on its own, because the expected amount of profit should be dependent on the size of the business and the amount of its sales turnover. If the company generated a profit of $50,000 from $150,000 of sales, then it has performed well. However, if a profit of $50,000 has been made from sales of $5 million, then the profit level is much weaker. The profit margin (the ratio of profit to sales) is a basic and widely-used ratio for analysing the strength of a company's financial performance.

A ratio on its own does not provide useful information. Ratios are useful because they provide a basis for **making comparisons**. Comparisons might indicate that performance or the financial position is better or worse than it should be, or is getting better or worse than in the past.

For example, suppose that a company measures its profit margin in the current year as 20%. Is this good or bad? To evaluate performance, the current year profit margin of 20% should be interpreted, by comparing it with:

- last year's profit margin, or the company's profit margin for the past few years
- the budgeted profit margin (available to investors, perhaps, through company announcements)
- the industry average (the average profit margin for companies in the industry)
- the profit margin reported by individual competitors.

For example, if the budgeted profit margin was 25%, an actual profit margin of 20% might suggest that management have under-performed in the period.

Note that a ratio does not **explain** why any under-performance or out-performance has occurred. Ratios are used to indicate areas of good or weak performance, but management then have to investigate to identify the cause.

Example

A company achieved a profit margin of 6% in the year just ended. This was less than the budgeted profit margin of 10%, and less than the profit margin in the previous year, which was 8%.

The actual profit margin of 6% indicates disappointing performance, but management should investigate the cause or causes. For example, they might find that any of the following reasons might explain the low profit margin:

- Increased competition has forced down sales prices and so reduced profit margins.
- Advances in technology have lowered costs but prices have come down even more.
- Raw material costs have risen and the higher costs could not be passed on to the customers.
- There have been higher employment costs due to pay rises for manufacturing employees, but these could not be passed on to the customers.
- The company buys most of its supplies from foreign countries, and adverse movements in exchange rates for its purchases have increased costs and reduced profit margins.
- There has been a change in the company's sales mix, and the company has sold a larger proportion of cheaper and lower-margin products than expected.

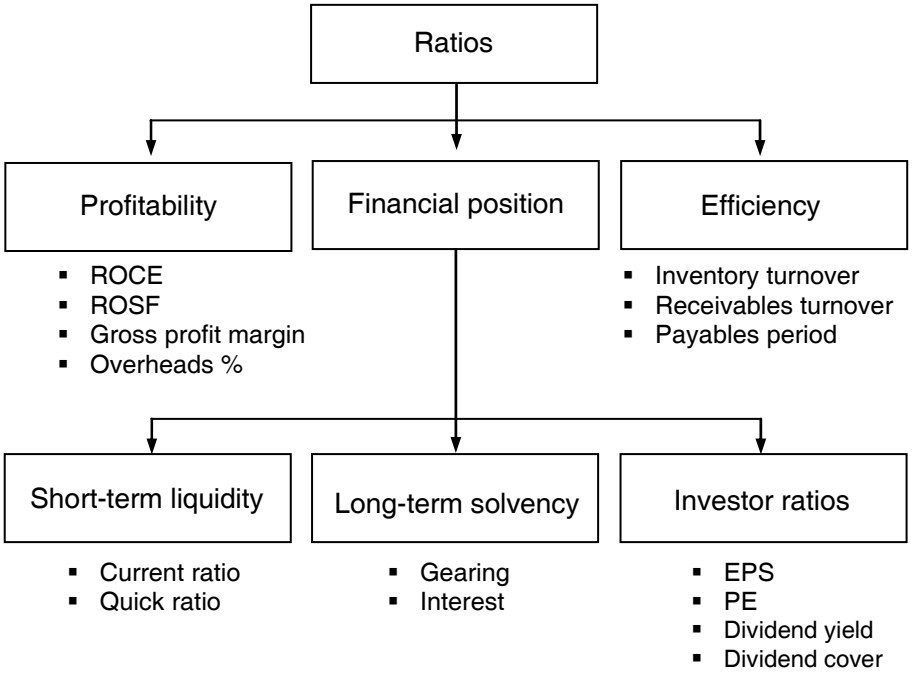
Financial measures of performance

- Categories of financial ratios
- Profitability ratios
- Efficiency ratios
- Short-term liquidity ratios
- Long-term solvency ratios
- Investor ratios
- Limitations of financial ratios

2 Financial measures of performance

2.1 Categories of financial ratios

The basic financial ratios should already be familiar to you. Ratios can be divided into five categories:



The main ratios will be considered in more detail. For the purpose of your examination, you need to know how to calculate each ratio, but you must also understand why each ratio, or each category of ratios, might be of particular interest to a specific user group.

An examination question may ask you to provide an analysis of financial statements for a particular user. It will not tell you which ratios to calculate. Instead, you will have to decide for yourself which ratios may provide useful information for that user. Therefore you should learn to identify and select the appropriate ratios for each user group, and then analyse what the ratio appears to show, from the point of view of that user.

2.2 Profitability ratios

This category of ratios measures the performance of the company in terms of the return (profit) earned on the capital employed in the business. These ratios are relevant for measuring the success of management in using the resources under their control. They also allow customers and suppliers to assess whether the company has the ability to continue operating successfully in the future.

Return on (total) capital employed (ROCE)

The return on capital employed ratio measures profit before interest and tax with the total capital employed in the business. It is therefore a measure of the success of the company in making use of its invested capital.

$$\frac{\text{Profit before interest and tax}}{\text{Share capital} + \text{reserves} + \text{debt capital}} \times 100\%$$

Remember that when a ratio is calculated, it is important to compare 'like with like'. The figure above the line must be properly comparable with the figure below the line. 'Profit before interest and tax' relates to the profit earned on all the capital of the business, including its debt capital and any non-controlling interests in subsidiaries.

The figure below the line should therefore include all equity capital (including non-controlling interests) and all long-term debt capital.

Return on shareholders' funds (ROSF)

The return on shareholders' funds (ROSF) or return on shareholders' capital (ROSC) measures the return on the capital invested by shareholders. It measures how efficiently the company is using the capital that only shareholders have provided, to obtain profits.

In a company with no preference shares and no non-controlling interests, this ratio is calculated as follows.

$$\frac{\text{Profitbeforetax}}{\text{Sharecapital} + \text{reserves}} \times 100\%$$

When a company has non-controlling interests or preference shares, you need to decide on the most suitable method of calculating the ratio. Remember that the figure above the line must be comparable with the figure below the line. For example, if you are measuring the return on capital for equity shareholders in the parent company, the most suitable ratio would be:

$$\frac{\text{Profit } \textit{after} \text{ tax attributable to equity shareholders in the parent company}}{\text{Share capital} + \text{reserves attributable to equity shareholders of the parent company}} \times 100\%$$

Using ROCE or ROSF

- It is not necessary to calculate both these ratios. The ratio that you calculate should be the ratio that is of the greatest interest to the particular user or user group. For example, management may be most interested in ROCE, but an equity investor would be interested in ROSF.
- ROCE or ROSF could be compared to real interest rates that are currently available to investors in the market. For example, if a company has a ROCE of 3% when interest rates of 5% are available in the bond markets, a shareholder might be advised to consider selling his shares. However, it is important to remember that bond yields are returns calculated from the market price of bonds; whereas ROCE and ROSF are calculated from financial statements and are not market rates of return.
- Bank overdrafts might be included as part of capital employed in the ROCE ratio, because many companies 'roll over' their overdraft facility and use it as long-term funding. When a bank overdraft is large, the interest cost of the overdraft might be high, and it would therefore be appropriate to include the bank overdraft 'below the line' in capital employed, because the overdraft interest is included 'above the line' in profit before interest and tax.
- A company may be able to 'manipulate' its ROCE or ROSF ratios by using accounting policies or financing strategies, such as:
  - using operating leases or finance leases
  - choosing to re-value non-current assets or choosing the historical cost model
  - timing the acquisition of non-current assets or the timing of new financing so as to have the minimal adverse impact on ROCE.

Gross profit percentage

The gross profit margin is the ratio of gross profit to sales income. Gross profit is sales minus the cost of sales.

$$\frac{\text{Grossprofit}}{\text{Sales}} \times 100\%$$

Analysing the gross profit margin can often provide useful information for users of financial statements.

- This ratio should normally remain fairly constant from one year to the next. Even a fairly small change in the ratio might indicate that something of significance has happened.
- Variations between years may be attributable to
  - a change in sales prices
  - a change in sales mix
  - a change in purchase/production costs
  - an exceptional write-off of inventory
  - exceptional expenses or lost revenues (such as the consequences of a strike by employees).

Overhead percentage

Overhead percentage ratios measure the ratio of overhead costs to sales revenue. The main overhead costs are administrative expenses and sales and distribution costs.

$$\frac{\text{Overheads}}{\text{Sales}} \times 100\%$$

Even when the gross profit margin is constant, the net profit margin may be affected by changes in the overhead cost ratios.

- An analysis of overhead costs is more meaningful if total overhead costs can be analysed into variable overheads and fixed overheads
- The ratio of variable overhead costs to sales revenue should remain constant from one year to the next, unless something of significance happens (such as a major increase in variable overhead costs)
- The ratio of fixed overhead costs to sales revenue should decrease as the company grows and increases its annual revenue. However, when a company grows, fixed cost spending also increases, so the decline in the fixed costs/sales ratio might not be 'dramatic' and substantial.
- The overhead costs to sales ratios are affected by exceptional items, such as company reorganisation and the cost of settlement of lawsuits/ legal disputes.

2.3 Efficiency ratios

Cash flow is the lifeblood of an entity. Cash is needed to maintain operations by paying suppliers and employees, and to allow the company to grow. Cash income and spending can be controlled to some extent through management of the cash operating cycle (management of 'working capital').

The operating cycle (also called the cash cycle) refers to the continuous cycle of business activities, whereby an entity spends cash to acquire materials, labour and other resources, and eventually recovers its cash (with a profit) by selling goods or services to customers and collecting payment.

For a manufacturing entity, the operating cycle begins when the entity buys raw materials on credit and turns the materials into finished goods. The finished goods are then sold on credit, generating trade receivables. The entity then collects the cash from the customers. The cash cycle is the average length of time between paying cash to suppliers and receiving cash from customers.

Problems arise when cash income is not being generated by operations quickly enough. When this happens, the entity may have difficulty with paying cash to its suppliers. Alternatively, it needs to set aside much more capital than necessary for working capital.

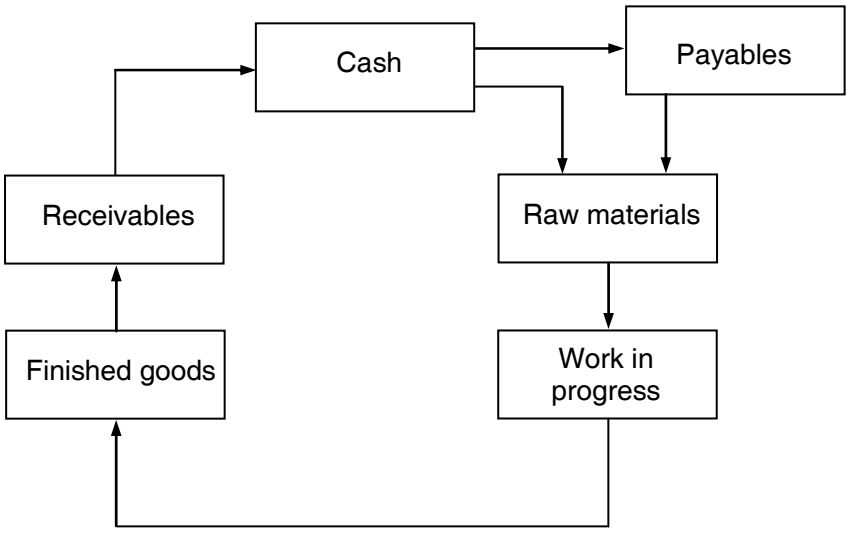
Poor working capital management and an inefficient cash cycle mean inadequate cash flows. Examples of poor management include:

- holding excessive levels of inventory

- allowing customers extended periods of credit (not collecting receivables on time).

When an entity ties up capital in excessive working capital (inventory and trade receivables) its ROCE will be lower than it should be, and it may need to borrow money to meet its obligations.

An entity with cash flow difficulties may be able to overcome its problems by improving working capital management, without the need to go to a bank for a loan, and without trying to take extra trade credit from suppliers.



Several working capital efficiency ratios are useful for assessing the efficiency of working capital management and management of the operating cycle/cash cycle.

Lenders will also be interested in these ratios, because they may help to indicate any problems with cash flow management that may affect the ability of an entity to settle its current liabilities.

Inventory turnover

Inventory turnover is a measure of how quickly an entity uses its inventory. It is also a measure of how slowly an entity uses its inventory, and how long items are held in inventory before they are eventually used or sold.

Inventory turnover may be measured as 'x times a year'.

$$\frac{\text{Cost of sales}}{\text{Average inventory}}$$

This shows the number of times the average level of inventory is sold in the year. A low turnover indicates inefficient use of resources, because cash is tied up in inventory. The slower inventory turnover, the greater the risk of obsolescence. A high turnover indicates good inventory management. However, when inventory turnover is too high, there could be 'stock-out' or 'inventory-out' problems.

It is also important to realise that the expected speed of inventory turnover varies between different types of business. For example, a supermarket may expect a very high inventory turnover (especially for fresh food items), whereas a car dealer's turnover will be much slower.

Inventory turnover may also be measured as an average number of days, rather than as 'x times a year'.

$$\frac{\text{Average inventory}}{\text{Cost of sales}} \times 365 \text{ days}$$

This calculates the number of days a company takes to sell its average holding of inventory. A short turnover period indicates good inventory management.

For a better understanding of inventory turnover, separate turnover ratios could be calculated for:

- raw materials
- work in progress (the production cycle), and
- finished goods

For an entity that has a seasonal business, with some months of high sales and some months of low sales, it may be appropriate to calculate inventory turnover ratios at different times of the year (for each season).

Receivables turnover

The receivables turnover ratio is usually measured in days. It is the average time that it takes an entity to collect amounts due from customers. (It is sometimes called 'debtor days' or 'days sales outstanding'.) An estimate for the receivables turnover can be obtained from financial statements:

$$\frac{\text{Average trade receivables}}{\text{Credit sales}} \times 365 \text{ days}$$

The receivables turnover should be consistent with the industry average, and should not be unreasonably long. Many entities give 30 days' credit to their customers, and sometimes more, perhaps as much as 90 days or even longer. The ratio should therefore be interpreted with care. Even so, a high turnover ratio (a long average receivables collection period) could indicate collection problems and poor working capital management.

- The ratio should ideally use credit sales 'below the line', but the financial statements do not provide an analysis of sales into cash sales and credit sales. Therefore total sales must normally be used, and this may produce an unrealistic ratio.
- The ratio can be compared to the normal credit period offered to customers by the entity.
- A change in the ratio from one year to the next may be due to:

- A change in settlement terms for credit customers, to encourage new business
- the introduction of debt factoring, which will reduce the average receivables collection period
- exceptional factors, such as one large new customer being offered extended credit.

For an entity that has a seasonal business, with some months of high sales and some months of low sales, it may be appropriate to calculate receivables turnover ratios at different times of the year (for each season).

Payables payment period

The payables payment period is similar to receivables turnover, but it is the average payment period to suppliers, rather than the average receivables collection period from customers. It is normally measured in days.

$$\frac{\text{Average trade payables}}{\text{Credit purchases}} \times 365 \text{ days}$$

The figure above the line should be trade payables, and should exclude other current liabilities, such as tax payable and interest payable. The figure below the line should ideally be the figure for annual purchases on credit. However, this figure is not available from the financial statements, and the figure for the annual cost of sales should be used instead. However, this produces an estimate for the average payment period that is 'less accurate'.

A high ratio (long average payment period) might indicate efficient management, because trade credit from suppliers is a form of free finance to fund the working capital cycle. However, there may be situations when a long payables payment period is a sign of poor working capital management or financial distress.

- If an entity takes too long to pay its suppliers, and possibly fails to settle its liabilities on time, relationships with suppliers could be damaged.
- Taking a free credit period to settle liabilities may mean the company is losing a prompt payment discount and so may indicate inefficient management.
- A high ratio could also occur when the entity has insufficient cash to settle its liabilities, and is therefore in some financial difficulty.

For an entity that has a seasonal business, with some months of high purchases and some months of low purchases, it may be appropriate to calculate the average payables payment ratios at different times of the year (for each season).

2.4 Short-term liquidity ratios

Liquidity means access to cash when it is needed. Short-term liquidity ratios are used to assess the ability of an entity to have sufficient cash, normally from its normal business cycle/cash cycle, to settle payments when they become due. The

ratios can be used together with information in the statement of cash flows to analyse the liquidity (and cash flows) of the entity.

Current ratio

Liquidity comes from current assets, including cash. In the normal course of the cash cycle, current assets such as trade receivables should produce cash in the near future. The need for liquidity comes from the need to settle current liabilities.

The current ratio is simply a ratio that compares short-term sources of cash (current assets) with short-term needs for cash (current liabilities).

$$\frac{\text{Current assets}}{\text{Current liabilities}}$$

An 'ideal' current ratio varies between different industries. For example, companies that operate supermarkets should have a very low current ratio, because they sell many items quickly for cash, but take normal trade credit from suppliers. In other industries, slow inventory turnover and long credit periods may be normal, so that a typical current ratio for a well-managed company may be high.

As a very rough guide, an 'ideal' current ratio may be 1.5:1 or 2:1. A ratio of less than 1:1 could indicate liquidity problems, because the entity might be unable to obtain cash from normal business activities to settle its current liabilities.

It is important to monitor changes in the current ratio from one year to the next, to assess whether liquidity is improving or getting worse.

Quick ratio (acid test ratio)

The current ratio includes inventory within current assets. For some entities, inventory may take many months to sell and inventory turnover could be very slow. In such cases, inventory is not a liquid asset and will not generate cash within a fairly short period of time in order to pay off the current obligations due in the next month or so.

The quick ratio or acid test ratio is similar to the current ratio, but it excludes inventory from current assets.

$$\frac{\text{Current assets less inventory}}{\text{Current liabilities}}$$

By eliminating inventory, the quick ratio measures a worst-case-scenario. It can be used to ask the question: Does the entity appear to have sufficient cash and near-cash assets (including receivables) to provide the money to settle all current liabilities on time?

'Ideally' the quick ratio should be about 0.8:1 to 1.0:1. (A high quick ratio might indicate excessive holdings of cash!) However, the quick ratio in well-managed entities can vary between companies in different industries.

Notes on the current ratio and quick ratio

The following points might be helpful for interpreting an entity's short-term liquidity ratios:

- A low ratio may indicate liquidity problems, particularly when the ratio is significantly lower than in previous years.
- However, a high ratio may indicate poor working capital management, due to:
  - large amounts of capital tied up in inventory or receivables, or
  - problems with debt collection (and so excessive receivables), or
  - obsolete inventory that has not yet been written off, or
  - excessive amounts of cash in the bank, earning low rates of interest (or possibly no interest at all).
- You should consider the main elements of the short-term liquidity ratios – inventory, receivables, cash (or bank overdraft) and trade payables, possibly using the working capital efficiency ratios. This may help you to assess whether liquidity is either too low or too high.
- Remember that as a general guide, a 'normal' current ratio should be 1.5:1 (quick ratio 0.8:1), but this will depend on the industry of the entity. For example, a house builder will have very high levels of finished goods and work in progress and so a higher figure would be expected.
- If the liquidity ratios seem very low, you may need to consider whether the entity can obtain cash from other sources, if needed, to settle short-term liabilities. For example, an entity may have an unused ('committed') overdraft facility that it can use in case of need.

2.5 Long-term solvency ratios

'Gearing' examines the financing structure of a business and indicates to shareholders the level of financial risk to which the company is exposed because of its long-term capital structure.

A company finances its net assets with a combination of equity and reserves and long-term debt. An entity is 'high geared' when a large proportion of its long-term capital is in the form of debt. High financial gearing is seen as a high-risk strategy, because earnings (and dividends) are more sensitive to changes in the company's performance (profit before interest and tax) when gearing is high.

An assessment of long-term solvency ratios is therefore relevant to investors and lenders. These ratios, and changes in the ratios over time, can help them to assess the credit risk in their investment.

Example

A company has the following long-term capital:

- $400,000 $1 equity shares
- $400,000 10% debt capital

The interest on the debt capital is fixed. A fall in annual profit before interest and tax (PBIT) could affect its ability to pay the interest. Any fall in PBIT would also affect the earnings available for distribution to the equity holders.

The following table shows how EPS – and solvency – may be affected by a decline in PBIT, for a company with fairly high gearing. A tax rate of 30% is assumed.

	Year 1	**- 50%**	**- 75%**
	$	$	$
PBIT	100,000	50,000	25,000
Interest	(40,000)	(40,000)	(40,000)
Profit/(loss) before tax	60,000	10,000	(15,000)
Tax at 30%	(18,000)	(3,000)	4,500
Earnings	42,000	7,000	(10,500)
Shares	400,000	400,000	400,000
EPS	$0.105	$0.0175	$(0.026)

In year 1 the company makes $100,000 resulting in earnings per share (EPS) to the equity holders of 10.5 cents. If the PBIT of the company drops by 50% to $50,000 the EPS drops by 83.3% from 10.5 cents to 1.75 cents.

If the performance drops by 75% the entity makes a loss and the EPS is negative.

A fall in EPS will affect the share price. In addition, a company with high gearing is often seen by investors as a company with 'volatile' earnings, and the shares of these companies often trade on a lower P/E multiple (a lower P/E ratio) than companies with a lower gearing.

Gearing ratio

The gearing ratio (or leverage ratio) is usually calculated as follows:

$$\frac{\text{Debt}}{\text{Equity}} \text{ or } \frac{\text{Debt}}{\text{Debt} + \text{Equity}} \times 100\%$$

Debt = Loans + Preference shares

Equity = Equity share capital + reserves + non-controlling interest

Notes on financial gearing

The following issues might be relevant if you are required to analyse the financial gearing of a company:

- A highly geared company, with a substantial proportion of its capital in the form of debt, is seen by investors as 'more risky'. Higher risk means that investors are likely to expect a higher return from their investment, as compensation for the higher risk.
- High gearing is acceptable if it is accompanied by stable annual profits (PBIT) or increasing profits.
- A highly-geared company may find it more difficult to raise additional debt capital, because lenders will demand either security for their loans/bonds, or will demand a much higher yield/interest rate.
- Gearing, measured from the figures in the financial statements, is affected by accounting policy decisions such as the revaluation of non-current assets and the choice between finance leases and operating leases.

In recent years, at least until the 'credit crunch' in 2008, some companies deliberately increased their financial gearing by borrowing more. Some companies borrowed and used the money to buy back and cancel equity shares. The reasons for this have been:

- a confidence that the annual profits (PBIT) of the company will be stable or will increase, and
- the comparatively low cost of debt compared with the cost of equity.

Interest rates were low, and there is tax relief on interest payments. Higher gearing meant that if profits before interest continued to rise, EPS would rise at an even faster rate. Increasing financial gearing was therefore a way of increasing EPS.

The 'credit crunch' from 2008 meant that banks became much more reluctant to lend, and some companies found that their access to debt finance was severely restricted. To raise finance, increasing equity and reducing gearing (by issuing new shares or by retaining profits) became necessary – and the rate of business growth declined.

Interest cover

The interest cover ratio measures the ability of a company to meet its obligations to pay interest on debt. The assumption is that a company should be able to pay interest charges out of its profits. The ratio therefore compares profit before interest and tax with the annual interest charges.

$$\frac{\text{Profit before interest}}{\text{Interest}}$$

It is a measure of the security of the interest payments. A high interest cover suggests a sensible financing structure (although a very high ratio might suggest that gearing could safely be increased, and that the company should borrow more low-cost debt instead of higher-cost equity).

An interest cover of 2 times or less generally indicates that the company might have difficulty paying its interest if there is a fall in its profits. (An interest cover ratio of less than three times may also be considered 'risky', especially if the ratio is lower than in previous years.)

2.6 Investor ratios

Investor ratios are relevant to equity shareholders looking to earn dividends and/or capital growth from their investment in a company's shares. The ratios are also of interest to other investors, who may be considering whether to buy shares in the company. Four widely-used ratios are:

- earnings per share
- the P/E ratio
- dividend yield
- dividend cover.

Earnings per share (EPS)

The calculation of EPS was described in an earlier chapter. Investors hope for an increase in EPS ('earnings growth') from one year to the next

Price earnings ratio (P/E)

This ratio measures the share price as a multiple of EPS. Investors use the P/E ratio to make comparisons of share prices between companies, and to assess whether a company's shares seem under-priced or over-priced relative to share prices of other companies.

$$\text{P/E ratio} = \frac{\text{Current market share price}}{\text{EPS}}$$

A high P/E indicates the stock market's belief that the company will grow and hence the share price has been set at a high level relative to its current earnings.

However, a company may also have a high P/E ratio when its earnings have collapsed, but investors expect a recovery in earnings in the next year or so. The expectation of a recovery means that investors are willing to pay a high P/E multiple to buy the shares.

Note, however, that the P/E ratio is calculated from the **current** market price but the annual EPS in the most recent financial statements. Since the earnings figure may be 'out of date', the P/E ratio may be misleading.

Dividend yield

The dividend yield measures the annual cash return (dividends) that equity shareholders are receiving on their investment.

$$\text{Dividend yield} = \frac{\text{Net dividend per share} + \text{tax credit}}{\text{Current market share price}} \times 100\%$$

Where there is no system of tax credits on dividend payments, the figure for dividends is simply the annual cash dividends paid to shareholders.

- The dividend yield can be compared with the return from other types of investment, and the yield from shares in other companies.
- The ratio measures the company's dividend policy, not its performance. A company may pay a low dividend because the company has reinvested its profits to achieve growth in earnings and dividends in the future. The share price might be high (and the yield is therefore low) because investors are willing to invest for the longer term in expectation of future growth.
- Similarly, a company with low profits may pay high dividends to keep shareholders satisfied. Even so, the share price might be fairly low because profits and earnings are low. As a result, the dividend yield will be relatively high.

Dividend cover

The dividend cover ratio measures the earnings of a company relative to the size of its dividend payments. Dividends are paid out of earnings, and dividends are therefore more 'secure' when the dividend cover is high.

$$\text{Dividend cover} = \frac{\text{EPS}}{\text{Net dividend per share}}$$

However, if shareholders expect a company to pay out a large proportion of its profits as dividends, they would want the dividend cover to be low.

2.7 Limitations of financial ratios

Most of the data for calculating financial ratios comes from the financial statements.

- The reliability of ratios is therefore affected by the reliability of the financial statements themselves.
- In addition, when ratios are used to compare different companies, the comparability is affected if companies use different accounting policies to prepare their financial statements.

In addition, when comparing a ratio against that of a competitor or the industry average, it is important to remember that, even within an industry, companies can have different characteristics. It is very important to remember this when you are analysing the financial statements of a company, and possibly comparing its performance and financial position with other companies.

Some of the factors you may need to consider are set out below.

Size of company

Large companies should be able to benefit from economies of scale and so should be more profitable than smaller companies in the same industry and market. Larger companies should also attract better management, so (in theory) the business should be run more efficiently, and so should achieve higher profit margins.

Market area

Companies operating in the same industry may achieve very different results because they operate in different sectors or segments of the market. For example, two companies selling furniture might have very different profit margins because they operate in different parts of the market. One company may be selling antique furniture at high profit margins and the other may be selling self-assembly furniture in larger volumes but with lower profit margins.

Stage in the supply chain

Companies operating in the same industry may operate at different stages in the supply chain. A supplier of raw materials, a manufacturer and a retailer would be expected to have very different financial ratios, even though they may operate in the same industry.
For example, it would be difficult to compare the financial ratios of a timber supplier, a furniture manufacturer and a furniture retailer.

Timing of transactions

The timing of a key transaction can distort financial ratios. For example, a company may acquire a subsidiary at the end of the financial year. The subsidiary would then be consolidated in the group statement of financial position but its profits would not be included in group profit or loss because they are all pre-acquisition profits.

Ratios that compare profit figures with items in the statement of financial position will therefore be distorted, unless a suitable adjustment is made to allow for the transaction.

Year end date

In most countries, companies are allowed to decide for themselves what their financial year-end date should be. The choice of dates can affect the financial ratios. For example a manufacturer of ski equipment will probably have some very busy trading months (during the ski-ing holiday season) and some very quiet months. If it selects the end of the high-selling season as its year-end, its inventory levels will be abnormally low and its receivables balance may be abnormally high.

Such 'distortions' in the financial statements can be eliminated by calculating ratios using a monthly average for any measures taken from the statement of financial position, such as inventory, receivables and trade payables.

Management strategy

Financial ratios should be interpreted in the context of all other relevant information that is available about the company. For example, management may have decided on a strategy of cutting profit margins in the short term in order to win market share. This would affect the current profit margin, but in the long run should result in higher sales and more profits.

This point is well illustrated by the following case study.

Example

Philip Morris is the largest tobacco company in the US. However, in the early 1990s its main brand, Marlboro, suffered a large drop in market share. The company increased the prices of Marlboro cigarettes, hoping to maintain profits. However, this strategy was not successful, because customers were unwilling to pay the higher prices for premium brands, when cheaper brands were selling at much lower prices. So on 'Marlboro Friday' (2nd April 1993) Philip Morris began a price war and overnight cut the price of its Marlboro cigarettes by 20%.

$10 billion was immediately wiped off the market value of the company, but the price war changed market behaviour. Customers switched back to the lower-priced premium brands such as Marlboro and the cheap cigarette brands were largely destroyed. American Tobacco decided to quit the market altogether. By 1995 Marlboro had regained its lost market share and its profits and its share price had fully recovered.

Financial ratios and examination technique

- Approach to questions
- Avoiding pitfalls

3 Financial ratios and examination technique

Examination questions on financial ratio analysis usually require a certain amount of examination technique to construct a good answer. The following guidelines suggest the approach you should take and indicate the mistakes and pitfalls to avoid.

At this level, you are unlikely to get a question that asks you just to calculate ratios. It is more likely that you will get a question that asks you to consider the accounting treatment of particular items in the financial statements and the effect that this will have on the entity's ratios.

For example, if an entity has incorrectly treated a sale and repurchase transaction as a 'genuine' sale and not as a loan secured on an asset, then there will be a significant effect on the entity's ratios. For example, the gearing ratio will not show the true position of the entity's debt as it will exclude the secured loan. Return on capital employed will also be affected as the incorrect treatment of the transaction removes the asset from the statement of financial position, thus increasing ROCE.

Additionally, consider the points below which provide specific guidance on aspects of the question that you may have to answer.

3.1 Approach to questions

Analyse the requirement

Start by recognising the person or organisation who has asked for the financial analysis.

- Who is the user?
- What information is the user interested in? Why has the user requested the report?
- How should the information be presented to the user – in the form of a memo or a more formal report? Don't forget there are presentation marks available for well-presented reports.

Background information

Establish some of the basic 'background' information.

- What industry does the company operate in?
- Note the financial year end. This may possibly be significant.

- Is the business seasonal? If so, seasonal trading may 'distort' the year-end figures in the statement of financial position, particularly for inventory, receivables, cash and payables.
- Have there been any key transactions during the year that may affect comparisons with previous years? For example, has the company raised a substantial amount of new finance, or has it acquired a major new subsidiary, entered a new market with a new product, or disposed of a business operation?

Review of the financial information

Before calculating **any** financial ratios, perform a thorough review of the financial information provided. Look for items that will affect the measurement of key financial ratios.

Statement of financial position:

- Non-current assets.
  (1) Have there been any revaluations? Check the revaluation reserve. Has it changed since the previous year? (This can also be checked by looking at other comprehensive income in the statement of comprehensive income.)
  (2) Capital expenditure. Has the company incurred significant capital expenditure. Look at the increase in non-current assets since the previous year. How has the expansion been financed? Look at share capital and reserves, and at levels of debt.
- Investments.
  (1) Has the company invested in a new industry?
  (2) Has the company acquired a new subsidiary or invested in a new associate or joint venture? If so, consider the timing of the acquisition – if an acquisition happened in mid-year the subsidiary's profits will have been included in profit or loss for only six months but it will be included in full in the year-end group statement of financial position.
- Working capital.
  (1) Has the total working capital increased or decreased in proportion with the increase or decrease in sales turnover (compared with the previous year)?
  (2) Look at the amounts of current assets and current liabilities. Does the company have net current assets or net current liabilities?
- Loans.
  (1) Have any loans been repaid in the year? If so, how was the repayment financed?
- Share capital and reserves
  (1) Have there been any new issues of shares during the year? If so, is it clear why the new shares were issued? For example, have new shares been issued to raise money to repay debt? Or to finance an expansion of the business?
  (2) Have there been any significant changes in reserves during the year?

Statement of comprehensive income: profit or loss items

Compare sales growth with profit growth. Are they about the same rates of growth? If not, you may need to think about reasons for the different growth rates.

- Interest. Is the interest charge high in relation to the amount of debt in the statement of financial position? If it is high, has any debt been repaid in year?
- Dividends. Look at the amount of dividend payments, the dividend cover, and the trend in dividend payments over the past few years.
- Did the company make a profit or a loss?
- Are there any unusual 'one-off' items in profit or loss? If so, what are they?

You should have an expectation in your mind about the measurements and ratios that you should expect to find. If the actual measurements or ratios are different from what you expect, you may need to think about the reasons for the unexpected results.

For example, you may expect the company to be profitable. If it made a loss, you will need to look for the reasons.

Calculate financial ratios

Having reviewed the financial information, you should calculate relevant key ratios.

- Present the ratios you have calculated as an appendix to your memo or report.
- Show the formulae and numbers you have used to calculate the ratios. Do not just write down the ratio by copying it from your calculator. The examiner will want to see where your figure came from, to make sure that you understand what you are doing.
- Be selective. Only calculate a ratio if it will add to your answer. Do not simply calculate as many ratios as possible.
- Go for variety in the ratios you select.
- If the examination question provides some financial ratios, look for ratios that have not been given. Could any of the 'missing' ratios be significant?

Further information

An examination question might ask for suggestions about what further information might be helpful. If so, set up your answer as an appendix to your memo or report, and build your answer as you work through your answer to the question. Examples of information that might be 'missing' include the following:

- Additional information to calculate further ratios, such as the share price for calculating the P/E ratio or dividend yield
- Segmental analysis
- Industry average figures, for making comparisons with similar companies in the same industry
- Changes in management policy (such as changes in the credit terms offered to customers)
- The accounting policies used

- Reasons for specific changes not explained by the information given in the question.

Writing your answer

Make comments that are relevant to the question. Always think about the requirements of the question when you write your answer. You will not earn marks for anything that is not relevant.

- Make sure you answer all the requirements of the question. If you don't you will lose marks.
- Use short sentences and bullet points.

3.2 Avoiding pitfalls

There are a number of common mistakes in writing answers to an interpretation question.

- Most marks in the exam are likely to be for specific, relevant comments rather than solely for computations. **Do not calculate too many ratios** as it is time-consuming and you will not have time to write your answer. Be selective and only calculate a ratio if it will add value to your answer.
- Good points can be identified by looking at absolute changes in the figures between one year and the next. For example, if sales have increase 25%, it would be expected that inventory, receivables and payables should have increased in line with the increase in sales.
- Use all the information. Some valuable information about the company is usually given in the introductory paragraph in an examination question. Make sure that you read and use this information.
- When making comparisons, make sure that the 'benchmark' you select for the comparison is suitable. For example, if two companies are being compared:
  - Are they the same size?
  - Do they operate in exactly the same area of the market?
  - Are their financial statements for the same time period?
- When making an observation about differences (such as differences in comparison with another company, or the previous year), suggest reasons for the difference. Don't just make an observation without making a comment. For example, stating that "There has been a fall in non-current asset" has no value on its own. A better answer would be "Non-current assets have decreased despite a rise in sales." You might then go on to comment that non-current assets are being over-used and are not being replaced, perhaps because of the poor cash position of the company.
- The highest marks will be awarded for linking together the information that you analyse. For example: "Interest charges have remained more or less the same as in the previous year, despite a decrease in the debt in the statement of financial position. This may be explained by the company repaying a large amount of debt shortly before the year end."

- Structure your answer around each of the requirements in the question. In many cases, profitability and long term solvency could be used as main headings within your answer.
- Use the company name in your answer. This will help you to focus your mind on the circumstances of the company, and avoid writing about financial ratios in general terms (and so failing to answer the question).

CHAPTER 21

Other issues

Contents

Convergence with IFRS and improvements to IFRSs

- Convergence with IFRS: background
- Advantages and disadvantages of harmonisation
- Improvements in IFRSs: 2008 exposure draft

1 Convergence with IFRS and improvements to IFRSs

1.1 Convergence with IFRS: background

IAS 1 **Presentation of Financial Statements** states that 'An entity whose financial statements comply with IFRSs shall make an explicit and unreserved statement of such compliance in the notes (to the financial statements). Financial statements shall not be described as complying with IFRSs unless they comply with all the requirements of IFRSs.'

The IASC is not able to force countries to adopt IFRS and so it has been left to individual countries to decide to what extent business entities should be required to use IFRS. Within the European Union (EU), all companies listed on an EU stock market were required to use IFRSs when preparing their group accounts for financial periods beginning on or after 1 January 2005. Therefore, the first set of IFRS accounts produced by these companies was for the financial year to 31 December 2005 (or their first year-end date after 31 December 2005).

The EU did not want to transfer all authority for the implementation of accounting standards to the IASB. It therefore introduced an endorsement mechanism. All IFRSs must be reviewed by the EU before they are approved for use by listed companies within the EU. To date, all IFRSs have been adopted with the exception of certain parts of IAS 39.

Only listed EU groups are required to use IFRS. The decision for all other entities has been left to the individual member states of the EU. In the UK, for example, all companies are **permitted** to use international accounting standards for financial periods beginning on or after 1 January 2005, in both individual company accounts as well as in consolidated accounts. Therefore non-listed companies and the individual companies within listed groups have the choice to move to IFRS or to continue using UK accounting standards.

The US has also embrace IFRSs. There is currently a project between the IASB and the US standards setter, the FASB, for convergence of IFRSs with US GAAP. The two accounting boards have a short-term convergence project which has covered topics including impairment, research and development, borrowing costs, segment reporting, government grants and investment properties. Already, the IASB issued IFRS 8 *Segment reporting*, which is based on the equivalent US standard.

Other areas that are under discussion are business combinations, consolidations, fair value measurement, liabilities and equity, performance reporting, revenue recognition and retirement benefits. For many of these topics that IASB has issued discussion papers to amend the current treatment and harmonise with US GAAP.

This is a long term project which will continue over the next few years.

1.2 Advantages and disadvantages of harmonisation

There are some strong arguments in favour of the harmonisation of accounting standards in all countries of the world, and in particular for the convergence of US GAAP and IFRSs. However, there are also some arguments against harmonisation - even though these are probably not as strong as the arguments in favour.

Advantages of harmonisation

1 Investors and analysts of financial statements can make better comparisons between the financial position, financial performance and financial prospects of entities in different countries. This is very important, in view of the rapid growth in international investment by institutional investors.

2 For international groups, harmonisation will simplify the preparation of group accounts. If all entities in the group share the same accounting framework, there should be no need to make adjustments for consolidation purposes.

3 If all entities are using the same framework for financial reporting, management should find it easier to monitor performance within their group.

4 Global harmonisation of accounting framework may encourage growth in cross-border trading, because entities will find it easier to assess the financial position of customers and suppliers in other countries.

5 Access to international finance should be easier, because banks and investors in the international financial markets will find it easier to understand the financial information presented to them by entities wishing to raise finance.

Disadvantages of harmonisation

1. National legal requirements may conflict with the requirements of IFRSs. Some countries may have strict legal rules about preparing financial statements, as the statements are prepared mainly for tax purposes. Consequently, laws may need re-writing to permit the accounting policies required by IFRSs.
2. Some countries may believe that their framework is satisfactory or even superior to IFRSs. This has been a problem with the US, although currently is not as much of an issue as in the past.
3. Cultural differences across the world may mean that one set of accounting standards will not be flexible enough to meet the needs of all users.

Additionally, there are issues on the implementation of IFRS to consider. For some entities, they will need to amend computer and accounting systems to deal with differing formats of accounting statements and different recognition methods of assets and liabilities.

There may an impact on accounting ratios as assets and liabilities are restated in accordance with IFRSs. For example, a company with significant development costs will have to capitalise these in accordance with IAS 38. In the previous jurisdiction they may have been able to write them off as an expense. This increase in assets will

affect the return on capital employed ratio. Any other performance ratios that change may affect the analysts' view of performance and could affect internal performance measures such as profit related pay. Analysts will need to be informed about the changes so they can continue to assess the performance of the business. Additionally, employee performance plans may need to be amended so there is no change in the underlying nature of the bonus scheme. An entity may also need to look at the need for additional staff training.

1.3 Improvements in IFRSs: 2008 exposure draft

The IASB issued an exposure draft in 2008 entitled 'Improvements to IFRSs' and with a sub-title 'Proposed Amendments to International Financial Reporting Standards'.

The exposure draft (ED) was issued as part of the annual improvements project of the IASB, and similar EDs may well be issued in the future with a similar purpose.

The purpose of the ED was to provide a 'streamlined process' for dealing with a number of non-urgent but necessary amendments to a number of different IFRSs. In other words, the purpose of the ED was to set out a number of proposed minor changes to several IFRSs and to introduce the changes if the response to the ED was favourable.

This avoided the need for issuing a separate ED for each IFRS, with each ED containing minor proposed changes.

The IFRSs for which minor changes were proposed were:

- IFRS 2
- IFRS 5
- IFRS 8
- IAS 7
- IAS 18
- IAS 38
- IAS 38
- IAS 39.

For example the proposed change to IAS 7 *Statement of cash flows* was to specify that if expenditure is incurred with the object of generating future cash flows, but the expenditure does not create an asset, the cash flow should be included in cash flows from operating activities and should not be included in investment cash flows.

The proposed amendment to IFRS 5 was to include a minor clarification about the required disclosures in the financial statements relating to non-current assets held for sale.

For the purpose of the P2 examination, you should be prepared to discuss the nature of this type of exposure draft, and the benefit of a streamlined process' for combining minor amendments to different IFRSs into a single exposure draft.

First-time adoption

- IFRS 1: First-time adoption
- Opening statement of financial position of a first-time adopter
- Opening IFRS statement of financial position: exemptions from IFRSs
- Presentation and disclosure by a first-time adopter

2 First-time adoption

2.1 IFRS 1: First-time adoption of International Reporting Standards

A first-time adopter of IFRSs is an entity that presents IFRS financial statements for the first time, and **fully** complies with the requirements of IFRSs.

The special requirements for a first-time adopter are set out in IFRS 1.

- A first-time adopter must adjust its statement of financial position produced under 'local GAAP' to a statement of financial position produced using IFRSs.
- This adjustment should be made by 'retrospective application' of the IFRSs.
- In order to make adjustments to move from a statement of financial position prepared under local GAAP to a statement of financial position prepared with IFRSs, a number of prior year adjustments must be made for all the accounting policy changes. These adjustments are made in the financial statements by adjusting the opening reserves in the first-time adopter's opening IFRS statement of financial position. These adjustments are usually made to the accumulated profits reserve (retained profits reserve).

2.2 Opening statement of financial position of a first-time adopter

The retrospective application of IFRSs means that adjustments are made to the first-time adopter's opening statement of financial position. This is the entity's statement of financial position **at the date of transition to IFRSs**.

IFRS 1 defines the date of transition to IFRSs as 'the beginning of the earliest period for which an entity presents full comparative information under IFRS in its first IFRS financial statements.'

IFRS 1 also states that an entity must use the same accounting policies in its opening IFRS statement of financial position and throughout all the financial periods presented in its first IFRS financial statements. These should be the IFRSs that apply as at the reporting date for the first IFRS financial statements (and any previous versions of IFRSs that may have applied at earlier dates should not be used).

Example

A company was a first-time adopter of IFRS and prepared its first IFRS financial statements for the year to 31 December 2005. In its financial statements, it prepared comparative financial information for the previous financial year.

The previous financial year is the year to 31 December 2004.

The date of transition to IFRS is the beginning of this period, which is 1 January 2004.

The opening IFRS statement of financial position of this first-time adopter is therefore 1s January 2004. The adjustments made by retrospective application of IFRSs must therefore be made to a statement of financial position as at this date.

However, the entity is not required to present this opening IFRS statement of financial position in its financial statements for the year to 31 December 2005. It is only required to present its normal comparative information for the previous financial year, although the comparative information is prepared using IFRSs for the year to 31 December 2004.

The IFRSs used to prepare all the information for the first IFRS financial statements should be the IFRSs that apply at 31 December 2005.

2.3 Opening IFRS statement of financial position: exemptions from IFRSs

The general rule in IFRS 1 is that in the opening IFRS statement of financial position, a first-time adopter must:

- recognise all assets and liabilities whose recognition is required by IFRSs
- not recognise assets or liabilities if IFRSs do not permit such recognition
- re-classify items recognised under the previous GAAP as one type of asset, liability or component of equity if IFRSs require that they should be classified differently
- apply IFRSs in measuring all assets and liabilities.

However, IFRS 1 lists a number of exemptions where these general rules should not be applied (or need not be applied).

- A first-time adopter may elect to use one or more available exemptions from the application of IFRSs. (One of these is an exemption that allows an entity to choose to use a 'deemed cost' for items of property, plant and equipment. 'Deemed cost' is either the fair value of the asset as at the date of transition to IFRS, or a previous GAAP revaluation at or before that date.)
- IFRS 1 prohibits the retrospective application of some IFRSs for the opening IFRS statement of financial position. For example, IFRS 1 states that estimates made under IFRSs for the date of transition to IFRS must be 'consistent with' estimates made by the entity under the previous GAAP, unless there is objective evidence that these estimates were in error.

Example

Suppose that the date of transition to IFRS for ABC Company is 1 January 2004. Information came to light in June 2004 showing that an estimate for accrued expenses at 31 December 2003 should have been different. According to IAS 10 *Events after the reporting period* the information reveals an adjusting event, and the statement of financial position as at 31 December 2003 should be altered.

IFRS 1 states that this is not permitted. Unless the estimate of accrued expenses for the statement of financial position as at 31 December 2003 was clearly an error, no adjustment should be made. Instead, the entity should account for the new information in its financial statements for the year to 31 December 2004.

2.4 Presentation and disclosure by a first-time adopter

IFRS 1 requires that a first-time adopter must include at least one year of comparative information in its first IFRS financial statements. (This is why the date of transition to IFRS cannot be later than the beginning of the previous financial year).

IFRS 1 also requires a first-time adopter to disclose the following reconciliations:

- A **reconciliation of equity** that was reported under the previous GAAP with the equity reported under IFRSs, for both of the following dates: (1) the date of transition to IFRS and (2) the end of the last financial period in which the entity presented its financial statements under the previous GAAP.

  For example, suppose that a first-time adopter presents just one year of comparative information, and prepared its first IFRS financial statements for the year to 31 December 2005. The reconciliation of equity between 'old GAAP' and IFRSs should be made for both 1 January 2004 and 31 December 2004.
- A **reconciliation of the profit or loss** reported under the previous GAAP and the profit or loss using IFRSs, for the entity's most recent financial period before adopting IFRSs.
- If the entity recognises **impairment losses** for the first time in its opening IFRS statement of financial position, it should provide the information that would have been required by IAS 36 **Impairment of assets** if the impairment losses had been recognised in the financial period beginning with the date of transition to IFRS.

Example

Reconciliation of equity

A simplified example of a reconciliation of equity is shown below.

	Previous GAAP	Effect of transition to IFRSs	IFRSs
Property, plant and equipment	2,000	300	2,300
Intangible assets	400	(50)	350
Total non-current assets	2,400	250	2,650
Trade and other receivables	1,200	0	1,200
Inventory	800	(70)	730
Cash	50	0	50
Total current assets	2,050	(70)	1,980
Total assets	4,450	180	4,630
Loans	800	0	800
Trade payables	415	0	415
Current tax liability	30	0	30
Deferred tax liability	25	220	245
Total liabilities	1,270	220	1,490
Total assets less total liabilities	3,180	(40)	3,140
Issued capital	1,000	0	1,000
Revaluation reserve	0	190	190
Retained earnings (balance)	2,180	(230)	1,950
Total equity	3,180	(40)	3,140

Q&A

Practice questions

Contents

Reporting performance, post balance sheet events, provisions, contingencies, related party disclosures

Performance measurement

1 Environmental reporting

(a) "Just as the corporate report now includes a statement on corporate governance, perhaps in the future a statement of environmental cost or expenditure could be disclosed, in order to avoid suggestions that a company may not be showing the full cost to society of its operations, and that the lack of accounting rules for environmental items penalises the environmentally responsible business." **Alan Pizzey February 1998**

Required

You are required to provide suggestions of information that might be disclosed in an environmental report.

(b) At a manufacturing site, $8million must now be spent to reduce pollution, because new local laws have been introduced. The cost of legal damages against the company for pollution that it has caused in the past total $5million.

Required

Discuss the required accounting treatment of these costs.

2 P and Q

Company P, a parent company, owns one third of the ordinary shares of Company Q, a jointly-controlled entity. Company P uses the proportionate consolidation method in respect of its interest in Company Q.

During the current reporting period, Company P made a loan to Company Q of $600,000.

Which of the following treatments should be adopted in the consolidated statement of financial position of the Company P Group in respect of the loan receivable from Company Q?

(a) The loan is eliminated on consolidation and will not appear in the consolidated statement of financial position.

(b) One third of the amount of the loan is eliminated on consolidation and the remainder ($400,000) appears in the consolidated statement of financial position as a loan receivable from the venture.

(c) The full amount ($600,000) appears in the consolidated statement of financial position as a loan receivable from the venture.

(d) The full amount of the loan is reported in the consolidated statement of financial position as an addition to the cost of the investment in the venture.

3 P, S and A

The statements of financial position of three entities P, S and A are shown below, as at 31 December Year 5. However, the statement of financial position of P records its investment in Entity A incorrectly. The investment in A is shown at cost, instead of in accordance with the equity method of accounting and the requirements of IAS 28.

	P	S	A
	$	$	$
Non-current assets			
Property, plant and equipment	450,000	240,000	460,000
Investment in S at cost	320,000	-	-
Investment in A at cost	140,000	-	-
	910,000	240,000	460,000
Current assets			
Inventory	70,000	90,000	70,000
Current account with P	-	60,000	-
Current account with A	20,000	-	-
Other current assets	110,000	130,000	40,000
Total assets	1,110,000	520,000	570,000
Equity and reserves			
Equity shares of $1	100,000	200,000	100,000
Share premium	160,000	80,000	120,000
Accumulated profits	650,000	140,000	250,000
	910,000	420,000	470,000
Long-term liabilities	40,000	20,000	30,000
Current liabilities			
Current account with P	-	-	20,000
Current account with S	60,000	-	-
Other current liabilities	100,000	80,000	50,000
	1,110,000	520,000	570,000

Additional information

- P bought 150,000 shares in S several years ago when the fair value of the net assets of S was $340,000.
- P bought 30,000 shares in A several years ago when the fair value of A's net assets was $370,000.
- There has been no change in the issued share capital or share premium of either S or A since P acquired its shares in them.

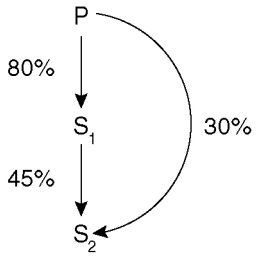
- There has been impairment of $20,000 in the goodwill relating to the investment in S, but no impairment in the value of the investment in A.
- At 31 December Year 5, A holds inventory purchased during the year from P which is valued at $16,000 and P holds inventory purchased from S which is valued at $40,000. Sales from P to A and from S to P are priced at a mark-up of one-third on cost.
- None of the entities has paid a dividend during the year.
- P uses the **partial goodwill method** to account for goodwill and no goodwill is attributed to the non-controlling interests in S.

Required

Prepare the consolidated statement of financial position of the P group as at 31 December Year 5.

4 Group and NCI

Calculate the group interest and the non-controlling interest in the two subsidiaries, S1 and S2, in the group shown below, for use in the one-stage method of consolidation for complex groups.



5 H, S and T

The summary statements of financial position of Entity H, Entity S and Entity T as at 31 December Year 6 are as follows:

	Entity H	Entity S	Entity T
	$000	$000	$000
Investment in S at cost	444	-	-
Investment in T at cost	-	109	-
Sundry net assets	256	521	250
	700	630	250
Share capital: ordinary shares of $1 each	200	200	50
Accumulated profits	500	430	200
	700	630	250

Entity H acquired 160,000 shares of Entity S on 1 January Year 2, when the net assets of S were $480,000. Entity S acquired 35,000 shares in Entity T on 1 January Year 3, when the net assets of T were $150,000.
The accumulated impairment of the goodwill arising on the acquisition of the shares in S is $26,000.

Required

Prepare the consolidated statement of financial position for the H group as at 31 December Year 6. The H Group uses the **partial goodwill method** to account for acquisitions and no goodwill is attributed to the non-controlling interests in S or T.

6 Disposal

At 31 December Year 1, Hoo owned 90% of the shares in Spool. At this date the carrying amount of the net assets of Spool in the consolidated financial statements of the Hoo Group was $800 million. None of the assets of Spool are re-valued.

On 1 January Year 2, Hoo sold 80% of the equity of Spool for $960 million in cash.

The remaining shares in Spool held by Hoo are estimated to have a fair value of $100 million.

Required

Explain how the disposal of the shares in Spool should be accounted for in the consolidated financial statements of the Hoo Group.

7 Step acquisition and partial disposal

(a) On 1 January Year 1, H purchased 25% of the equity of AS for $80 million. H then acquired an additional 40% of the equity of AS for $160 million on 30 June Year 1. At this date it was estimated that the fair value of the original 25% shareholding in S was $95 million.

During the year S did not issue any new shares or make any distribution to its shareholders.

The carrying value of the net assets of AS were as follows:

	$ million
At 1 January Year 1	260
At 30 June Year 1	300

H decides to use the fair value method to measure the non-controlling interests, and estimates that the value of goodwill in AS attributable to the non-controlling interest at 30 June Year 1 is $15 million.

The financial year of H ends on 30 June.

Required

For the consolidated financial statements of H for the year to 30 June Year 1, state:

(i) the total gain or profit attributable to the investment in AS for the year

(ii) total amount of goodwill arising with the acquisition

(iii) the value of the non-controlling interest in AS.

(b) On 1 January Year 2, P acquired 80% of the equity of S for $620 million in cash. On 30 June Year 2 it sold 10% of the equity in S for $94 million. S did not issue any shares or make any distribution to its shareholders in the year to 31 December Year 2. P uses the partial goodwill method to account for the acquisition of S and no goodwill is attributed to the non-controlling interest.

The net assets of S were as follows, at carrying value:

	$ million
At 1 January Year 2	700
At 31 December Year 2	900

At 31 December Year 2, P carries out an impairment review and decides that the goodwill in its investment in S has been impaired by $8 million.

Required

(i) Explain how the disposal of the shares in S should be accounted for.

(ii) From the information given above, show much profit or loss would be recognised in the consolidated statement of comprehensive income for the year to 31 December Year 2, and how much of this is attributable to the equity owners of P.

8 The Edgeley Group

You are provided with the following information relating to the Edgeley Group of companies.

(1) On 1 January Year 4, Edgeley acquired 80% of the ordinary share capital and voting rights of Cheadle.

(2) Cheadle had acquired 75% of the ordinary share capital and voting rights of Wilmslow on 1 January Year 2.

(3) The summarised statements of financial position of these three companies at 31 December Year 4 were as follows:

	Edgeley	**Cheadle**	**Wilmslow**
	$m	$m	$m
Property, plant and equipment	1,840	863	520
Investment in Subsidiary (at cost)	1,452	500	-
Inventory	350	212	108
Receivables	213	127	82
Bank	234	26	19
	4,089	1,728	729

Trade payables	262	151	92
Taxation payable	112	47	27
Ordinary share capital	500	200	100
Accumulated profits	3,215	1,330	510
	4,089	1,728	729

(4) At acquisition the following information was known:

Company	Date	Ordinary share capital	Retained profit
		$m	$m
Cheadle	1 January Year 2	200	560
Cheadle	1 January Year 4	200	800
Wilmslow	1 January Year 2	100	240
Wilmslow	1 January Year 4	100	320

(5) During Year 4 the following intra-group trading took place:

Selling company	Buying company	Sales at transfer price	Profit on sales
Cheadle	Edgeley	$280m	40% on cost

25% of these transfers are held as inventory at 31 December Year 4

Required

Prepare the consolidated statement of financial position of the Edgeley Group at 31 December Year 4. Edgeley uses the **partial goodwill method** to account for all acquisitions and no goodwill is attributable to non-controlling interests.

9 The A Group

The summarised statements of financial position of A and its two subsidiaries B and C at 31 December Year 3 are shown below:

Summarised statements of financial position at 31 December Year 3

	A	B	C
	$000	$000	$000
Investment in subsidiaries:			
B	1,164		
C	1,120		
Other net assets	2,516	1,260	1,400
	4,800	1,260	1,400

Ordinary share capital			
($1 shares)	1,500	500	400
Accumulated profits	3,300	760	1,000
	4,800	1,260	1,400

The summarised income statements for A and B for the year ended 31 December Year 4 are as follows:

	A	**B**
	$000	$000
Profit before tax	1,200	250
Taxation	(360)	(60)
Profit after tax	840	190
Dividends paid	(50)	(20)
Retained profit for year	790	170
Retained profit at start of year	3,300	760
Retained profits at end of year	4,090	930

Additional information:

(i) A acquired 80% of the ordinary share capital of B on 1 January Year 0 when the reserves of B were $420,000.

(ii) A acquired 90% of the ordinary share capital of C on 1January Year 1 when the reserves of C were $320,000.

(iii) On 1 January Year 4, A disposed of 350,000 shares in C for $1,925,000. This transaction has not yet been accounted for by A. The remaining investment in shares of C at this date had a fair value of $44,000.

(iv) There were no changes in the issued share capital of the subsidiaries since acquisition by A.

(v) None of the companies re-value any of their non-current assets.

(vi) The A Group uses the **partial goodwill method** of accounting for acquisitions and no goodwill is attributed to non-controlling interests. There has been no impairment of goodwill.

Required

Prepare A's consolidated income statement and show the movement on consolidated equity reserves for the year to 31 December 2 Year 4 and a consolidated statement of financial position as at that date.

10 Herbert

You are given the following information:

(a) The details of the investments held by Herbert in Sarah and Amanda are as follows:

	Date	Price paid by Herbert	Ordinary share capital acquired	Retained profits at date of acquisition
		$000		
Sarah	1 January Year 0	34,000	80%	$10 million
Amanda	1 January Year 2	10,000	33 1/3%	$5 million

(1) Each ordinary share has identical voting rights.

(2) Share capital and retained profits represented the full amount of the shareholders' interest at these dates.

(b) The summarised income statements of Herbert, Sarah and Amanda for the year to 31 December Year 4 were as follows:

	Herbert	Sarah	Amanda
	$'000	$'000	$'000
Sales revenue	290,000	110,000	60,000
Cost of sales	(162,000)	(51,000)	(23,500)
Gross profit	128,000	59,000	36,500
Distribution costs	(48,800)	(12,400)	(9,000)
Administrative expenses	(16,200)	(8,600)	(8,000)
Investment income	9,000		
Profit before tax	72,000	38,000	19,500
Income tax	(25,000)	(12,000)	(9,000)
Profit after tax	47,000	26,000	10,500

(c) During the year Sarah and Amanda paid dividends to their shareholders of $10m and $3m respectively.

(d) It is group policy use the **partial goodwill method** to account for non-controlling interests, and value non-controlling interests at a proportionate share of the net assets of the subsidiary. It is also group policy to perform an impairment review on goodwill at the end of each reporting period.

(e) Details of inter-company trading profits in inventory were as follows:

Transaction details	Inventory still held as at	Profit on the inventory balance $
Sarah to Herbert	1 January Year 4	10 million
Sarah to Herbert	31 December Year 4	20 million
Amanda to Sarah	31 December Year 4	30 million

It is the group's accounting policy to eliminate the intra-group inventory profits made by the subsidiary against the profits attributable to both the owners of the parent company and the non-controlling interests.

(f) Retained profits of Herbert, Sarah and Amanda at 1 January Year 4 were respectively $106 million, $24 million and $9 million.

(g) The directors of Herbert are currently planning to restructure their investments. No firm decisions have yet been taken. The two main possibilities currently under discussion are:

(i) Sale of all or part of the shares in Sarah, which is expected to make losses in future periods; and

(ii) Acquisition of a 75% interest in Jeremy, which will give Herbert control. Jeremy operates in the country of Ovonia. Until recently, Ovonian law required company boards to have a majority of government appointed nationals and prevented monies from being remitted outside the country. Some recent administrations have also imposed stringent controls on cross-border trade. The current administration has repealed these laws. The political situation in Overonia is extremely unstable, with frequent changes of government.

The managing director of Herbert is concerned about the impact of these restructuring proposals on the consolidated financial statements of the group. In particular, he believes that Sarah should not be included in the consolidated financial statements for the year ended 31 December Year 4, on the grounds that the subsidiary is likely to be sold in the near future. He also believes that Jeremy need not be consolidated as a consequence of the difficulty of obtaining the necessary information within a reasonable time.

Required

(a) Write a memorandum to the managing director of Herbert, which:

(i) responds to his suggestion that Sarah should not be consolidated;

(ii) explains the conditions under which subsidiary undertakings are excluded from consolidation and the required accounting treatment for excluded subsidiary undertakings. You should reach a conclusion on the appropriate accounting treatment of the proposed investment in Jeremy.

(b) Prepare the consolidated income statement for the Herbert Group for the year ended 31 December Year 4.

11 Abbeville

Abbeville was incorporated 35 years ago by Gill and Steve Jones (who are still the sole shareholders) to import food and wine from France. The company has been very successful. Three wholly-owned subsidiary companies, Narbonne, Bonneville and Lynette, were set up by Abbeville some years ago to deal with some specialised areas of the trade.

To grow the organisation, Gill and Steve feel that the company should expand across the wider European Union market. On this basis, a business combination is proposed with Northcote, a company which specialises in importing food from Italy and Germany. The finance director has just resigned from Northcote and the other directors, including the chief executive, are food and drink specialists but have little accounting knowledge.

A joint meeting was arranged with the directors of both Abbeville and Northcote to discuss various proposals to change the structure of Abbeville and the proposed combining of the two companies. The proposals are as follows:

(a) A holding company, Gourmet Delights, is to be set up by Gill and Steve for the Abbeville group. The ordinary shares in Abbeville are to be exchanged on a share for share basis with Gourmet Delights. The same share exchange will be carried out with Northcote to effect the merger.

(b) The shareholding of Abbeville in Narbonne is to be sold or de-merged, either wholly or in part.

(c) Lynette is to become a wholly-owned subsidiary of Bonneville. This reorganisation will be effected by the issue of 200,000 $1 ordinary shares in Bonneville. This part of the group might then be sold or de-merged.

In the case of group reorganisations by way of share exchange, local company law allows the carrying value of the investment transferred to be maintained at its value in the books of the transferor.

The following information was presented at the meetings:

(i) Statements of financial position as at 30 September Year 4

	Abbeville	**Narbonne**	**Bonneville**	**Lynette**
	$000	$000	$000	$000
Net tangible assets	2,200	1,500	1,300	840
Investments:				
Narbonne	1,000	-	-	-
Bonneville	580	-	-	-
Lynette	450	-	-	-
	4,230	1,500	1,300	840

Share capital ($1 ordinary shares)	3,500	1,000	580	450
Other reserves	200	100	300	90
Accumulated profits	530	400	420	300
	4,230	1,500	1,300	840

(ii) Estimated results

Profit after tax for year ended				
30 September Year 5	720	(150)	185	160

(iii) Estimated fair values

Fair values of net tangible assets at				
30 September Year 4	6,300	1,875	1,750	1,500

The finance director of Abbeville has instructed you as his accountant to prepare certain information for the directors of both Abbeville and Northcote explaining the proposed reorganisation.

Required

(a) Prepare the entity statements of financial position of Abbeville and of Bonneville, reflecting the reorganisation and the acquisition of Lynette by Bonneville.

(b) (i) Prepare the consolidated statement of financial position of the Abbeville Group, as at 30 September Year 4, on the basis that Abbeville disposes of 35% of its shareholding in Narbonne for $700,000 on 30 September Year 4. Ignore any taxation implications.

(ii) If Abbeville disposes of 75%, rather than 35%, of its shares in Narbonne on 30 September Year 4 for $1,650,000, advise on the accounting implications for the consolidated accounts of the Abbeville Group if the fair value of its remaining investment in Narbonne is $400,000. Use the data in the question to illustrate your answer. Ignore tax and assume the 75% of shares are sold to a large number of different investors.

(iii) Explain the effect on the consolidated profit or loss of the Abbeville Group for the year to 30 September Year 5 of the disposal of 75% of the shares in Narbonne for $1,650,000 on 30 September Year 4, assuming that the 75% shareholding is purchased by a single buyer.

(c) If the share for share exchange between Gourmet Delights and Abbeville were to take place, the directors expressed their intent to account for the combination using merger accounting (pooling of interests). You have informed them that this method is no longer available and they have asked you to explain the key differences in the accounting approach which they should adopt in order to comply with IFRS 3.

12 Orlando

Orlando is an entity whose functional currency is the US dollar. It prepares its financial statements to 30 June each year. The following transactions take place on 21 May Year 4 when the spot exchange rate was $1 = €0.8.

- Goods were sold to Koln, a customer in Germany, for €96,000.
- A specialised piece of machinery was bought from Frankfurt, a German supplier. The invoice for the machinery is for €1,000,000.
- The company receives €96,000 from Koln on 12 June Year 4.
- At 31 June Year 4 it still owns the machinery purchased from Frankfurt. No depreciation has been charged on the asset for the current period to 30 June Year 4.
- The liability for the machine is settled on 31 July Year 4.
- Relevant $/€ exchange rates are:
  - 12 June Year 4 $1 = €0.9
  - 30 June Year 4 $1 = €0.7
  - 31 July Year 4 $1 = €0.8

Required

Show the effect on profit or loss of these transactions for:

(a) the year to 30 June Year 4

(b) the year to 30 June Year 5.

13 Mancaster and Stockpot

Part A

You are required to:

(1) Define and explain the following terms as used in IAS 21 **The effects of changes in foreign exchange rates**.

  (a) Functional currency

  (b) Presentation currency.

(2) Outline the factors to be considered when determining the functional currency of an overseas subsidiary.

Part B

The statements of financial position of Manchester and its subsidiary Stockpot at 31 March Year 4 and their income statements for year ended on that date are set out below:

Statements of financial position at 31 March Year 4

	Mancaster		Stockpot	
	$000	$000	€000	€000
Non-current assets:				
Property, plant and equipment	20,000		30,000	
Investments (notes 1 and 2)	5,500		-	
		25,500		30,000
Current assets:				
Inventories	10,000		18,000	
Trade receivables	10,000		15,000	
		20,000		33,000
Total assets		45,500		63,000
Capital and reserves:				
Share capital ($1/€1 Shares)		9,000		15,000
Accumulated profits		12,500		10,000
		21,500		25,000
Non-current liabilities (note 4)		10,000		20,000
Current liabilities				
Trade payables	7,900		10,400	
Bank overdraft	6,100		7,600	
		14,000		18,000
Total equity and liabilities		45,500		63,000

Income statements – year ended 31 March Year 4

	Mancaster	Stockpot
	$000	€000
Revenue	50,000	60,000
Cost of sales (notes 2 and 5)	(25,000)	(30,000)
Gross profit	25,000	30,000
Other operating expenses	(15,000)	(16,000)
Operating profit	10,000	14,000
Investment income (note 3)	1,500	-
Interest payable	(1,000)	(2,000)
Profit before tax	10,500	12,000
Tax	(3,600)	(4,200)
Profit after tax	6,900	7,800

Statement of changes in equity – year ended 31 March Year 4

	Mancaster		Stockpot	
	Share capital	Reserves	Share capital	Reserves
	$000	$000	€000	€000
Balance at 1 April Year 3	9,000	9,500	15,000	6,600
Profit for the period		6,900		7,800
Dividends paid		(3,900)		(4,400)
Balance at 31 March Year 4	9,000	12,500	15,000	10,000

You are provided with the following additional information:

(1) Investments represent the acquisition of 11.25 million shares in Stockpot on 31 March Year 0. The retained profits of Stockpot on this date stood at €5 million. Any goodwill arising on the acquisition is to be treated as a foreign currency asset. Stockpot operates as a reasonably autonomous entity on a day-to-day basis although Mancaster does control the long-term strategy of Stockpot.

(2) Exchange rates have been as follows:

Date	€ to $1
31 March Year 0	3.0
31 March Year 3	2.4
31 March Year 4	2.2
Average for Year 4	2.3

(3) Investment income represents dividends received from Stockpot.

(4) The non-current liabilities represent long-term borrowings.

Required

(a) Translate the statement of financial position of Stockpot into the presentation currency of dollars and prepare the consolidated statement of financial position of the group at 31 March Year 4.

(b) Translate the income statement of Stockpot into dollars and prepare the consolidated income statement of the group for the year ended 31 March Year 4, starting with revenue and ending with retained profit for the year.

14 Statement of cash flows

Part A

The following information relates to the most recent financial year of an entity:

Required

Calculate the cash flow from operating activities using:

(a) the direct method

(b) the indirect method.

	$000
Cash received from customers	15,424
Increase in inventory	194
Cash payments to suppliers	5,824
Increase in receivables	72
Operating profit before tax	6,022
Cash paid to and on behalf of employees	2,200
Other operating cash payments	511
Depreciation charges	899
Increase in trade payables	234

Part B

In the table below, insert a tick to indicate the heading under which each item is most likely to appear in a statement of cash flows prepared in accordance with IAS 7.

Item	Operating activities	Investing activities	Financing activities
Cash payment to buy shares in an associate			
Cash proceeds from the sale of intangible assets			
Income tax repayments received			
Payment of patent royalties			
Repayments of finance lease obligations			
Cash payments to acquire property, plant and equipment			
Dividend income received			
Interest paid			

Part C

Entity A acquired 90% of the shares of Entity B on 31 March Year 5. The fair values of Entity B's assets at that date were:

	$000
Tangible non current assets	50
Inventories	30
Cash	10
	90

The purchase consideration consists of $55,000 in cash plus 60,000 ordinary shares of $1, valued at par.

Required

Prepare a statement summarising the net effect of the acquisition on group cash flow for the period, to include as a note to the group statement of cash flows.

15 Bella

The financial statements of Bella include the following:

Statements of financial position as at 31 March.

	Year 6		Year 5	
	$000	$000	$000	$000
Assets				
Non-current assets				
Property, plant and equipment	12,900		8,000	
Intangible assets	800		300	
		13,700		8,300
Current assets				
Inventories	280		100	
Trade and other receivables	1,290		1,350	
Cash	55		45	
		1,625		1,495
Total assets		15,325		9,795
Equity and liabilities				
Capital and reserves				
Issued capital ($1 ordinary shares)	1,900		1,100	
Share premium	95		30	
Accumulated profits	11,407		7,540	
		13,402		8,670

Non-current liabilities				
Long-term loans	600		500	
		600		500
Current liabilities				
Bank overdraft (repayable on demand)	313		-	
Trade and other payables	430		275	
Interest payable	40		25	
Current tax payable	540		325	
		1,323		625
Total equity and liabilities		15,325		9,795

Statement of comprehensive income for the year ended 31 March Year 6 (extract).

	$000
Operating profit	4,677
Interest payable	(60)
Profit before tax	4,617
Tax expense	(400)
Profit for the period	4,217

The following occurred during the year.

(1) Dividends of $350,000 were paid.

(2) New plant was purchased for $6 million.

(3) Old plant which had a net book value of $800,000 was sold for $700,000.

(4) Shares were issued for cash during the period.

Required

Prepare a statement of cash flows for the year ended 31 March Year 6 using the indirect method.

16 Bishop Group

You are provided with the information set out below relating to a group of companies.

Consolidated income statement for Bishop Group
for the year ended 31 December Year 2

	20X2	20X1
	$000	$000
Revenue	19,308	18,173
Cost of sales	(4,315)	(4,620)
Gross profit	14,993	13,553
Distribution costs	(6,439)	(6,126)
Administrative expenses	(5,705)	(6,719)
Profit before tax and finance costs (note 1)	2,849	708
Finance income	90	75
Finance costs (note 2)	(350)	(230)
Profit before taxation	2,589	553
Income tax expense (note 3)	(800)	(125)
Profit for the year	1,789	428
Attributable to:		
Equity holders of the parent	1,369	318
Non-controlling interest	420	110
	1,789	428

Summary statement of changes in equity for the year to 31 December Year 2

	Issued capital	Share premium	Foreign currency translation	Retained earnings	Total	NCI	Equity
B/fwd 1January	7,500	77	2,100	4,905	14,582	2,500	17,082
Issue of shares	3,500	324			3,824		3,824
Profit for year				1,369	1,369	420	1,789
Dividends				(600)	(600)	(295)	(895)
Exchange gain			700		700	175	875
C/fwd 31 Dec	11,000	401	2,800	5,674	19,875	2,800	22,675

Notes: NCI = non-controlling interest
Exchange gain = exchange gain on translation of subsidiary

Consolidated statement of financial position as at 31 December Year 2

	Year 2	Year 1
	$000	$000
Non-current assets		
Tangible assets	11,720	7,520
Investments	3,000	2,700
Current assets		
Inventories	6,135	5,740
Receivables	5,720	4,380
Cash at bank and in hand	820	169
	27,395	20,509
Equity and liabilities		
Ordinary share capital	11,000	7,500
Share premium	401	77
Foreign currency translation	2,800	2,100
Retained earnings	5,674	4,905
Equity attributable to owners of parent	19,875	14,582
Non-controlling interest	2,800	2,500
Total equity	22,675	17,082
Current liabilities		
Payables	1,420	1,760
Tax	700	167
Obligations under finance leases	110	50
Non- current liabilities		
Loans	1,200	800
Obligations under finance leases	740	250
Provisions for liabilities and charges		
Deferred tax	550	400
	27,395	20,509

Notes to the accounts

(1)	Operating profit is stated after charging	$000	$000
	Depreciation: Owned assets	960	840
	Assets held under finance leases	240	120
		1,200	960

(2)	Finance costs	$000	$000
	Loan interest	120	80
	Finance charge on finance leases	205	132
	Exchange rate losses on long-term loans	25	18
		350	230

(3)	Taxation on profits on ordinary activities	$000	$000
	Tax on income at 30%	600	90
	Deferred tax	150	35
	Under provision in respect of previous years	50	-
		800	125

(4)	Foreign exchange differences	$000	$000
	Gains arising on re-translation	700	400

The exchange rate gain relates to the translation of an 80% owned overseas subsidiary, Louise, under the closing rate method. The gain comprises:

	$000
Non current assets	424
Inventories	117
Receivables	339
Cash	53
Trade payables	(58)
	875
Attributable to NCI	(175)
Attributable to owners of parent company	700

(5) During the year non current assets additions of $700,000 were acquired under finance leases. Payments on finance leases are made in arrears. The net book value of non current assets disposed of was $720,000, with sale proceeds of $810,000.

Required

(a) Prepare the group statement of cash flows of Bishop in accordance with IAS 7 together with any required notes for the year ended 31 December Year 2.

(b) Explain why external users of financial statements benefit from receiving a statement of cash flows.

17 The Grape Group

The draft statements of financial position and income statements of the Grape Group at 31 March Year 4 and 31 March Year 3 are as follows:

	Notes	Year 4	Year 3
		$000	$000
Non-current assets			
Intangible assets		24	-
Property, plant and equipment	(1)	13,515	12,990
Investments – associated undertakings		1,966	1,920
		15,505	14,910
Current assets			
Inventory		11,657	10,530
Receivables		7,209	6,936
Cash at bank and in hand		5,190	1,728
		24,056	19,194
		39,561	34,104
Capital and reserves			
Share capital		8,100	7,425
Share premium		1,989	1,470
Accumulated profits		13,200	8,700
		23,289	17,595
Non-current liabilities	(2)	6,900	7,890
Current liabilities	(3)	9,372	8,619
		39,561	34,104

Income statement: Year to 31 March	Year 4	Year 3
	$000	$000
Sales revenue	74,100	59,400
Cost of sales	(54,138)	(42,240)
Gross profit	19,962	17,160
Distribution costs	(5,889)	(4,869)
Administrative expenses	(4,092)	(3,384)
Operating profit	9,981	8,907
Income from interests in associates	139	144
Loss on sale of tangible non-current assets	(18)	-
Interest expense	(552)	(651)
Profit before tax	9,550	8,400
Income tax expense	(2,950)	(2,400)
Profit after tax	6,600	6,000

Notes

(1) **Property, plant and equipment**

	Year 4	Year 3
	$000	$000
Cost		
At 1 April	20,598	19,416
Additions	1,875	2,022
Disposals	(429)	(840)
At 31 March	22,044	20,598
Depreciation		
At 1 April	7,608	6,984
Charge for year	1,176	936
Disposals	(255)	(312)
At 31 March	8,529	7,608
Net book value	13,515	12,990

(2) **Non-current liabilities**

	Year 4	Year 3
	$000	$000
8% Loan notes	6,900	6,900
10% Unsecured loan notes	-	990
	6,900	7,890

(3) **Current liabilities**

	Year 4	Year 3
	$000	$000
Accounts payable	6,422	6,219
Income tax	2,950	2,400
	9,372	8,619

You are provided with the following additional information:

- Interest on the 8% loan note is payable half-yearly on 30 September and 31 March.
- Income tax is payable nine months after the year-end.
- Dividends of $2.1m and $2.4m were proposed for Year 3 and Year 4 respectively.
- During the year, the Grape Group acquired 100% of the ordinary share capital of Pip. The purchase was financed by $346,000 in cash and the issue of 54,000 ordinary shares of $1 each. The ordinary shares had a market

value of $152,000. The following figures related to Pip at the date of acquisition:

	$000
Property, plant and equipment	315
Inventory	139
Receivables	85
Cash at bank and in hand	3
Payables	(68)
	474
Share capital	180
Reserves	294
	474

(4) The share capital consists of $1 ordinary shares.

Required

Prepare a statement of cash flows and related notes for the Grape Group for the year ended 31 March Year 4.

18 IMPS

A division of IMPS has the following non-current assets, which are stated at their carrying values at 31 December Year 4:

	$m	$m
Goodwill		70
Property, plant and equipment:		
Land and buildings	320	
Plant and machinery	110	
		430
		500

Because these assets are used to produce a specific product, it is possible to identify the cash flows arising from their use. The management of IMPS believes that the value of these assets may have become impaired, because a major competitor has developed a superior version of the same product and, as a result, sales are expected to fall.

The following additional information is relevant:

Forecast cash inflows arising from the use of the assets are as follows:

Year ended 31 December:	
	$m
Year 5	185
Year 6	160
Year 7	130

(i) The directors are of the opinion that the market would expect a pre-tax return of 12% on an investment in an entity that manufactures a product of this type.

(ii) The land and buildings are carried at valuation. The surplus relating to the revaluation of the land and buildings that remains in the revaluation reserve at 31 December Year 4 is $65 million. All other non-current assets are carried at historical cost.

(iii) The goodwill does not have a market value. It is estimated that the land and buildings could be sold for $270 million and the plant and machinery could be sold for $50 million, net of direct selling costs.

Required

(a) Calculate the impairment loss that will be recognised in the accounts of IMPS.

(b) Explain how this loss will be treated in the financial statements for the year ended 31 December Year 4.

19 Prima

Prima is a listed company with a year end of 31 December. It operates two businesses, the first is the rental of luxury yachts and the second is a chain of luxury holiday villas in Europe. The directors have requested your advice on the following matters.

Holiday villas

Prima's policy is to carry the holiday villas at their re-valued amount, which, based on the most recent valuation in 20X0, was $20m (historical cost was $10m). Prima is unsure how frequently a revaluation of such properties is required and so has instructed a surveyor to provide an up-to-date valuation as at 31 December Year 4. This valuation has provided the following information:

	$ million
Replacement cost	17
Value in use	28
Open market value	25

One of the villas has received very few bookings over the past two years and so a decision was reached to exclude it from the Year 5 brochure. It is currently up for

sale. The villa has a carrying value of $1.25m. Its value in use is only $0.85m and its expected market value is $1m, before expected agents and solicitor's fees of $50,000. The directors are unsure as to the accounting treatment of this villa. A number of potential buyers have expressed an interest in the property, and it is hoped that a deal will be negotiated in the first few months of Year 5.

Prima's accounting policy is to not charge depreciation on the villas. Its justification is that the villas are maintained to a high standard and have useful lives of at least 50 years.

Head Office

Over the past two years, Prima has built its own head office. Construction began on 1 October Year 2 and finished on 1 June Year 4, although minor modifications meant that the company did not relocate until 1 September Year 4.

The site cost $1m and the costs of construction were a further $8m. Prima took out a two year loan of $5m on 1 October Year 2, at an interest rate of 9% per annum, to help fund the work. In order to encourage businesses to operate in areas of high unemployment, the government offered a $1.5m grant towards the cost of construction. The terms of settlement were that payment would only be made upon completion of the building once a government inspection had taken place. This inspection had not taken place by the year end, but Prima is confident that the grant will be received shortly after the year end.

The company intends to use the head office for the next 50 years and, as for the villas, does not intend to depreciate the land or buildings.

Yachts

Prima has spent the past year designing a new range of luxury yachts. Work was completed on 1 April Year 4 at a cost of $20m. During the construction, the economy took a downturn and the company now believes that the market value of the yachts is only $17m, although the value in use is estimated to be $18m. The engines of the yachts have a three year life, the interior has a two year life, and the remainder should have a life of 15 years. The engine cost is believed to represent 15% of the total cost of manufacture and the interior approximately 25%.

Required

Explain the accounting issues relating to the villas, head office and yachts, referring to relevant IAS guidance. Where possible, numerical information relating to the 31 December Year 4 financial statements should be provided.

20 Financial instruments

IAS32, IAS39 and IFRS7 together provide guidance on the recognition, measurement and disclosure of financial instruments.

Required

(a) Explain the three measurement methods referred to in IAS 39 and when each model should be used.

(b) A company holds the following financial instruments. Explain how they should be accounted for in accordance with IAS 32 and IAS 39 in the financial statements to 31 December Year 3.

(i) A 3% bond was purchased on 1 January Year 3 for $250,000. The nominal value is $300,000 and redemption will be at par on 31 December Year 6. The coupon is received annually in arrears. The effective interest rate on the bond is 9.7%. The company has classified the bond as "held to maturity". The market value of the bond at 31 December Year 3 is $275,000.

(ii) An investment was made in the equity shares of XYZ. 3,000 shares were purchased (a 1% stake) at a cost of $10 per share on 1 April Year 1. A transaction fee of $300 was charged on the purchase. The entity intended to sell the shares within three months and so classed the investment as "fair value through profit and loss". The market value of the investment continued to rise and so the company decided not to sell in the near term. The market value of the shares over the three years has been as follows:

	$000
31 December Year 1	32
31 December Year 2	34
31 December Year 3	35

(iii) The company issued a convertible bond at par on 31 December Year 3, raising $500,000. The coupon on the bond is 4%. The rate on an equivalent redeemable bond is 7%. The bond can be redeemed at par on 31 December Year 6 or converted into equity shares at a rate of five shares per $100. The bond has not been classed as fair value through profit and loss.

21 HAM

HAM, whose year end is 31 December, has acquired two items of machinery on leases, the terms of which indicate that they should be treated as finance leases. In particular, the length of the leases can be extended for any period of time on payment of a nominal sum. Details of the two leases are as follows:

Item A: Ten annual instalments of $10,000 each, the first payable on 31 December Year 4. The machine was completely installed and first operated on 1 January Year 4, and its purchase price on that date was $80,000. The machine has an estimated life of ten years, at the end of which it will be of no value.

Item B: Ten annual instalments of $15,000 each, the first payable on 1 January Year 6. The machine was completely installed and first operated on 1 January Year 6, and its purchase price on that date was $117,000. This machine has an estimated useful life of twelve years, at the end of which it will be of no value.

The finance charges should be allocated over the period of the lease using the sum of the digits method.

The basic calculations for this are shown below:

Item A

Sum the years: 1 + 2 + 3 + 4 +……. + 10 = 55

or n(n+1) ÷ 2 where n= no of periods of borrowing = 10(11)/2 = 55

Allocate finance charge $20,000 (being $100,000 - $80,000) to each of the ten years.

Year			Finance charge	Total payment	Outstanding liability
			$	$	$
4	10/55	× 20,000 =	3,636	10,000	73,636
5	9/55	× 20,000 =	3,273	10,000	66,909
6	8/55	× 20,000 =	2,909	10,000	59,818
7	7/55	× 20,000 =	2,545	10,000	52,363
8	6/55	× 20,000 =	2,182	10,000	44,545
9	5/55	× 20,000 =	1,818	10,000	36,363
10	4/55	× 20,000 =	1,454	10,000	27,817
11	3/55	× 20,000 =	1,091	10,000	18,909
12	2/55	× 20,000 =	727	10,000	9,635
13	1/55	× 20,000 =	365	10,000	0
			20,000	100,000	

Item B

Sum the years: 9(10)/2 = 45

(Note: n = 9 as payments are made in advance so the liability is paid off in nine years not ten years)

Allocate finance charges $33,000 (being $150,000 - $117,000) to each year.

Year			Finance charge	Total payment	Outstanding liability
			$	$	$
6	9/45	× 33,000	6,600	15,000	108,600
7	8/45	× 33,000	5,867	15,000	99,467
8	7/45	× 33,000	5,133	15,000	89,600
9	6/45	× 33,000	4,400	15,000	79,000
10	5/45	× 33,000	3,667	15,000	67,667

Year			Finance charge	Total payment	Outstanding liability
			$	$	$
11	4/45	× 33,000	2,933	15,000	55,600
12	3/45	× 33,000	2,200	15,000	42,800
13	2/45	× 33,000	1,467	15,000	29,267
14	1/45	× 33,000	733	15,000	15,000
15	0	× 33,000	0	15,000	0
			33,000	150,000	

Required

(a) Calculate the charge to profit or loss for Year 7 and Year 8 if these leases are to be treated as operating leases.

(b) Calculate the charge to profit or loss for Year 7 and Year 8 if these leases are treated as finance leases with the finance charges being allocated using the sum-of-the-digits method.

(c) Show how items A and B would be incorporated in the statement of financial position and notes at 31 December Year 8, if treated as finance leases.

(d) Discuss the suggestion that all leases should be accounted for as finance leases.

Ignore taxation.

22 Flow

Flow prepares financial statements to 31 March each year. On 1 April Year 4, Flow sold a freehold property to another company, River, for $850,000 and then leased it back under a ten year operating arrangement. Flow had purchased the property exactly ten years previously for $500,000 and had charged total depreciation of $60,000 on the property up to the date of disposal.

Details of the sale and leaseback arrangement are as follows:

- Proceeds from sale $850,000
- Fair value at date of disposal $550,000
- Operating lease rentals (payable in arrears) $100,000
- Normal market rental $50,000

Required

(a) Explain and illustrate how Flow should reflect in its financial statements:

  (1) The sale of the property to River on 1 April Year 4

  (2) The payment of the first rental to River on 31March Year 5.

(b) Discuss how the treatment would differ if the leaseback arrangement was a finance lease.

23 AZ

(a) For enterprises that are engaged in different businesses with differing risks and opportunities, the usefulness of financial information concerning these enterprises is greatly enhanced if it is supplemented by information on individual business segments.

Required

(i) Explain why the information content of financial statements is improved by the inclusion of segmental data on individual business segments.
(ii) Discuss how IFRS 8 requires that segments be analysed.

(b) AZ, a public limited company, operates in the global marketplace.

(i) The major revenue-earning asset is a fleet of aircraft which are registered locally and its other main source of revenue comes from the sale of holidays. The directors are unsure as to how to identify business segments.

(ii) The company also owns a small aircraft manufacturing plant which supplies aircraft to its domestic airline and to third parties. The preferred method for determining transfer prices for these aircraft between the group companies is market price, but where the aircraft is of a specialised nature with no equivalent market price, the companies negotiate a price for the aircraft.

(iii) The company has incurred an exceptional loss on the sale of several aircraft to a foreign government. This loss occurred on a fixed price contract signed several years ago for the sale of second hand aircraft and resulted from the fluctuation of exchange rates between the two countries.

(iv) During the year, the company decided to discontinue its holiday business as a result of competition in the sector. This plan had been approved by the board of directors and announced in the press.

(v) The company owns 40% of the ordinary shares of Eurocat, an unquoted company which specialises in the manufacture of aircraft engines and has operations in China and Russia. The investment is accounted for by the equity method and it is proposed to exclude the company's results from segment assets and revenue.

Required

Discuss the implications of each of the above points for the determination of the segmental information required to be prepared and disclosed under IFRS 8 *Operating Segments* and other relevant International Accounting Standards.

24 EPS

IAS 33 outlines the principle that the order in which potential ordinary shares are considered can affect the dilution of basic earnings per share. Any financial instrument which dilutes earnings per share should be taken into account.

Required

(a) Discuss why there is a need to disclose diluted earnings per share.

(b) Calculate the diluted EPS according to IAS 33 *Earnings per Share* from the following information for X, a company whose shares are traded on a stock market.

Accounting data year ended 31 May Year 6:	
Net profit after tax and non-controlling interest	$18,000,000
Ordinary shares of $1 (fully paid)	40,000,000
Average fair value for year of ordinary shares	$1.50

(1) Share options have been granted to directors giving them the right to subscribe for ordinary shares between Year 7 and Year 9 at $1.20 per share. There were 2,000,000 options outstanding at 31 May Year 6.

(2) The company has $20 million of 6% convertible bonds in issue: The terms of conversion of the bonds per $250 nominal value of bond at the date of issue (1 May Year 0) were:

31 May 2 Year 6	24 shares
31 May Year 7	23 shares
31 May Year 8	22 shares.

None of the bonds have as yet been converted.

(3) There are 1,600,000 convertible preference shares in issue. The cumulative dividend is ten cents per share and each preference share can convert into two ordinary shares. The preference shares can be converted in Year 8.

(4) Assume a tax rate of 33%.

(c) Discuss the nature of the diluted EPS calculation in (b) where the order of the dilutive effects is ignored.

(d) Discuss the view that the basic EPS should be based upon not only existing issued shares but also on other shares which are in substance 'share equivalents' and have a dilutive effect on the basic EPS.

25 Universal Solutions

(a) Explain the following as used in IAS 19 *Employee Benefits*:

(i) The term 'defined benefit pension plan'

(ii) The basis to be adopted in measuring scheme assets

(iii) The basis to be adopted in measuring scheme liabilities

(iv) Actuarial gains and losses.

(b) Universal Solutions operates a defined benefit pension scheme on behalf of its employees. The company conducts an annual review of funding in conjunction with their actuaries who have supplied the following information:

	At 31 Dec Year 3	At 31 Dec Year 4
	$	$
Present value of pension fund obligations	1,000	1,200
Market value of pension fund assets	1,000	1,150

Information relevant to the actuarial valuation:	
Expected return on plan assets	8%
Discount rate used to determine pension fund liabilities	12%
Current service cost	$100
Contributions to the pension fund	$140
Benefits paid out amounted to	$95

Required

(i) Calculate the charge to profit or loss for the year to 31 December Year 4.

(ii) Compute the amount of the pension surplus or deficit in the statement of financial position as at 31 December Year 4

(iii) Compute any actuarial gain or loss as at 31 December Year 4 and explain the available accounting treatments of such a gain or loss.

(iv) Describe proposals by the IASB to change the permitted methods of accounting for actuarial gains or losses.

26 IFRS 2

(a) IFRS 2 requires an entity to recognise share-based payment transactions in its financial statements. These include transactions with the employees or other parties where they are to be settled in cash, other assets or equity instruments of the entity.

The IFRS identifies three types of share-based payment transaction and sets out the measurement principles and specific requirements for each.

Required

(i) Suggest why accounting standard setters felt that there was a need for a standard in this area.

(ii) Identify and briefly explain the three types of share based payments recognised by IFRS 2.

(b) A client of your firm, a listed company with a 31 December year end, contacts you for advice on a proposed share option scheme for its employees.

On 1 January Year 5, the client granted 100 options to each of its 500 employees. The grant is conditional upon the employee working for the client over the next three years. At the grant date, it is estimated that the fair value of each option is $15.

Calculate the expense in profit or loss for each year of the vesting period .

(i) Assuming that the client's expectations throughout the vesting period are that all options will vest.

(ii) And, alternatively, assuming that the client's best estimates of the proportion of options that will vest are as follows:

Estimate at 31 December Year 5 85%

Estimate at 31 December Year 6 88%

And that 44,300 options actually vest at 31 December Year 7.

27 The Lucky Dairy

The Lucky Dairy, a company whose shares are traded in the stock market, produces milk for supply to various customers. It produces 25% of the country's milk consumption. The company owns 150 farms and has stock of 70,000 cows and 35,000 heifers (young female cows) which are being raised to produce milk in the future. The farms produce 2.5 million kilograms of milk per annum and normally hold an inventory of 50,000 kilograms of milk.

Extracts from the draft accounts to May 20X2 shows that the herd consists of:

- 70,000 three year old cows (purchased on or before 1June 20X1)
- 25,000 heifers, average age one a half years old (purchase 1 December 20X1)
- 10,000 heifers, average age two years old (purchased 1 June 20X1)

There were no animals born or sold in the year.

The per unit values minus estimate point of sale costs were as follows:

	1 June 20X1	**31 May 20X2**
2 year old animal	$50	$55
1 year old animal	$40 *	$42
3 year old animal		$60
1½ year old animal		$46

* $40 was also the value at 1 December 20X1

The company has had a difficult year in financial and operating terms. The cows had contracted a disease at the beginning of the year which had been passed on in the food chain to a small number of consumers. The publicity surrounding the event had caused a drop in the consumption of milk and as a result the dairy was holding 500,000 kilograms of milk in storage.

The government had stated on 1 April 20X2 that it was prepared to compensate farmers for the drop in the price and consumption of milk. An official government letter was received 6 June 20X2, stating that $1.5 million will be paid to Lucky on 1 August 20X2. Additionally, on 1 May 20X2 Lucky received a letter from its lawyers saying that legal proceedings had started against the company by the persons affected by the disease. The company lawyers have advised them that they feel that

it is probable that they will be found liable and that the costs involved may reach $2million. The lawyers, however, feel that the company may receive additional compensation from the government if certain quality control procedures have been carried out by the company. However, the lawyers will only state that the compensation is possible.

The company's activities are controlled in three locations: Dale, Shire and Ham. The only region affected by the disease was Dale and the government has decided that it is to restrict the milk production of the region significantly. Lucky estimates that the discounted future cash income from the present herds of cattle in the region amounts to $1.2 million, taking into account the government restriction order. Lucky was not sure that the fair value of the cows in the region could be measured reliably at the date of purchase because of the problems with the diseased cattle. The cows in this region amounted to 20,000 in number and the heifers 10,000 in number. All of the animals were purchased on 1 June 20X1.

Lucky has an offer of $1 million for all of the animals in the Dale region (net of selling costs) and $2 million for the sale of the farms in the region. However, there was a minority of directors who opposed the planned sale and Board approval was not achieved until 30 June 20X2.

The directors of Lucky have approached your firm for professional advice on the above matters.

Required

Advise the directors on how the biological assets and produce of Lucky should be accounted for under IAS 41 **Agriculture**, and discuss the implications for the published financial statements of the above events.

Your answer should include a table which shows the changes in value of the cattle inventory for the year, split between physical and price changes and showing separately the valuation of the Dale region. Ignore the effects of taxation.

28 Cohort

Cohort is a private limited company and has two 100% owned subsidiaries, Legion and Air, both themselves private limited companies. Cohort acquired Air on 1 January 20X2 for $5 million when the fair value of the net assets was $4 million, and the tax base of the net assets was $3.5 million. The acquisition of Air and Legion was part of a business strategy whereby Cohort would build up the value of the group over a three-year period and then list its share capital on the Stock Exchange.

(a) The following details relate to the acquisition of Air, which manufactures electronic goods:

  (i) Part of the purchase price has been allocated to intangible assets because it relates to the acquisition of a database of key customers of Air. The recognition and measurement criteria for an intangible asset under IFRS 3 *Business Combinations* and IAS 38 *Intangible Assets* do not appear to have been met but the directors feel that the intangible asset of $500,000 will be allowed for tax purposes and have computed the tax provision

accordingly. However, the tax authorities could possibly challenge this opinion.

(ii) Air has sold goods worth $3 million to Cohort since acquisition and made a profit of $1 million on the transaction. The inventory of these goods recorded in Cohort's statement of financial position at the year ending 31May 20X2 was $1.8 million.

(iii) The retained earnings of Air at acquisition were $2 million. The directors of Cohort have decided that, during the three years leading up to the date that they intend to list the shares of the company, they will realise earnings through future dividend payments from the subsidiary amounting to $500,000 per year. Tax is payable on any remittance of dividends and no dividends have been declared for the current year.

(b) Legion was acquired on 1 June 20X1 and is a company which undertakes various projects ranging from debt factoring to investing in property and commodities. The following details relate to Legion for the year ending 31 May 20X2:

(i) Legion has a portfolio of readily marketable government securities which are held as current assets. These investments are stated at market value in the statement of financial position with any gain or loss taken to profit or loss. These gains and losses are taxed when the investments are sold. Currently the accumulated unrealised gains are $4 million.

(ii) Legion has calculated that it requires a general allowance of $2 million against its total loan portfolio. Tax relief is available when the specific loan is written off. Management feel that this part of the business will expand and thus the amount of the general provision will increase.

(iii) When Cohort acquired Legion it had unused tax losses brought forward. At 1 June 20X1, it appeared that Legion would have sufficient taxable profit to realise the deferred tax asset created by these losses but subsequent events have proven that the future taxable profit will not be sufficient to realise all of the unused tax loss.

Impairment of goodwill is not allowed as a deduction in determining taxable profit.

Required

Write a note suitable for presentation to the partner of an accounting firm setting out the deferred tax implications of the above information for the Cohort Group of companies.

29 Reporting performance

"It is essential to ensure that financial and other relevant information is communicated in a manner which can be understood by the recipients of corporate reports. In addition, it is of the utmost importance that corporate reporting does not become over-burdened with unnecessary detail and that the costs of collecting and publishing the information are kept within reasonable bounds."

Required

Explain the reasoning behind this statement and its implications for present day financial reports of listed companies.

30 Rowsley

Rowsley is a diverse group with many subsidiaries. The group is proud of its reputation as a 'caring' organisation and has adopted various ethical policies towards its employees and the wider community in which it operates. As part of its Annual Report, the group publishes details of its environmental policies, which include setting performance targets for activities such as recycling, controlling emissions of noxious substances and limiting use of non-renewable resources.

The finance director is reviewing the accounting treatment of various items prior to finalising the accounts for the year ended 31 March 20X4. All items are material in the context of the accounts as a whole. The accounts are due to be approved by the directors on 30 June 20X4.

Closure of factory

On 15 February 20X4, the board of Rowsley decided to close down a large factory in Derbytown. The board is trying to draw up a plan to manage the effects of the reorganisation, and it is envisaged that production will be transferred to other factories. The factory will be closed on 31 August 20X4, but at 31 March 20X4 this decision had not yet been announced to the employees or to any other interested parties. Costs of the reorganisation have been estimated at $45 million

Relocation of subsidiary

During December 20X3, one of the subsidiary companies moved from Buckington to Sundertown in order to take advantage of government development grants. Its main premises in Buckington are held under an operating lease, which runs until 31 March 20X9. Annual rentals under the lease are $10 million. The company is unable to cancel the lease, but it has let some of the premises to a charitable organisation at a nominal rent. The company is attempting to rent the remainder of the premises at a commercial rent, but the directors have been advised that the chances of achieving this are less than 50%.

Legal claim

During the year to 31 March 20X4, a customer started legal proceedings against the group, claiming that one of the food products that it manufactures had caused several members of his family to become seriously ill. The group's lawyers have advised that this action will probably not succeed.

Environmental impact of overseas subsidiary

The group has an overseas subsidiary that is involved in mining precious metals. These activities cause significant damage to the environment, including deforestation. The company expects to abandon the mine in eight years time. The

mine is situated in a country where there is no environmental legislation obliging companies to rectify environmental damage and it is very unlikely that any such legislation will be enacted within the next eight years. It has been estimated that the cost of cleaning the site and re-planting the trees will be $25 million if the re-planting was successful at the first attempt, but it will probably be necessary to make a further attempt, which will increase the cost by a further $5 million.

Required

Explain how each of the items above should be treated in the consolidated financial statements for the year ended 31 March 20X4

31 Engina

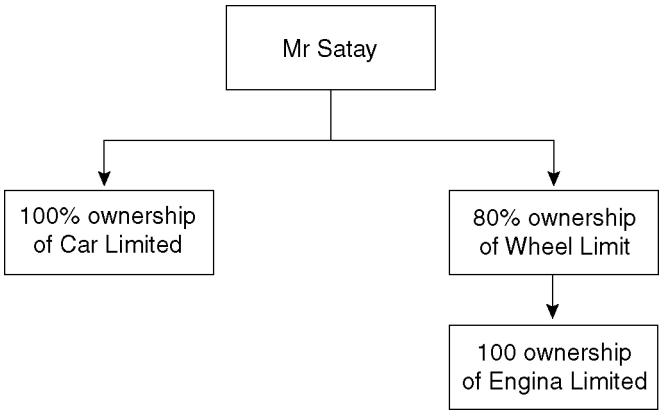
Engina, a foreign company has approached a partner in your firm to assist in obtaining local stock exchange listing (or stock market registration) for the company. Engina is registered in a country where transactions between related parties are considered to be normal but where such transactions are not disclosed. The directors of Engina are reluctant to disclose the nature of their related party transactions as they feel that although they are a normal feature of business in their part of the world, it could cause significant problems politically and culturally to disclose such transactions.

The partner in your firm has requested a list of all transactions with parties connected with the company and the directors of Engina have produced the following summary:

(a) Every month, Engina sells $50,000 of goods per month to Mr Satay, the financial director. The financial director has set up a small retailing business for his son and the goods are purchased at cost price for him. The annual turnover of Engina is $300 million. Additionally, Mr Satay has purchased his company car from the company for $45,000 (market value $80,000). The director, Mr Satay, earns a salary of $500,000 a year, and has a personal fortune of many millions of pounds.

(b) A hotel property had been sold to a brother of Mr Soy, the Managing Director of Engina, for $4 million (net of selling cost of $0.2 million). The market value of the property was $4.3 million but prices have been falling rapidly. The carrying value of the hotel was $5 million and its value in use was $3.6 million. There was an over-supply of hotel accommodation due to government subsidies in an attempt to encourage hotel development and the tourist industry.

(c) Mr Satay owns several companies and the structure of the group is outlined below. Engina earns 60% of its profits from transactions with Car and 40% of its profits from transactions with Wheel. All of the above companies are incorporated in the same country.



Required

Write a report to the directors of Engina setting out the reasons why it is important to disclose related party transactions and the nature of any disclosure required for the above transactions under IAS 24 *Related Party Disclosures*.

32 Property Venture

The directors of Property Venture, a limited liability company, are reviewing their investment in Exceptional Properties. In 20X3 they had invested $2,476,000 in Exceptional Properties' share capital and made a further investment of $6,508,000 in 20X4. They have recently been requested by the directors of Exceptional Properties to subscribe a further $5,000,000 in 20X5 as new ordinary share capital.

The following documents relating to Exceptional Properties (in draft form) are set out below:

- Statement of group cash flows for the year ended 31 December 20X4 together with comparative figures for 20X3.
- Group income statement for the year ended 31 December 20X4 together with comparative figures for 20X3.
- An analysis of movements on equity reserves attributable to the equity owners of Exceptional Properties
- Notes to the financial statements relating to turnover and profit.

Exceptional Properties
Group statement of cash flows for year ended 31 December

	20X4	20X3
	$000	$000
Cash outflow from operating activities		
Cash generated from operations	(13,805)	(7,195)
Interest paid	(7,090)	(3,300)
Income tax paid	(336)	(494)
	(21,231)	(10,989)

Cash flows from investing activities		
Dividends received from associate	-	10
Interest received	300	390
Purchase of non-current assets	(1,607)	(5,650)
Proceeds from sale of non-current assets	16,820	
Acquisition of subsidiary (net of cash acquired)	(7,444)	(3,667)
	8,069	(8,917)
Cash flows from financing activities		
Equity dividends paid	(1,318)	(628)
Issue of ordinary share capital	6,508	2,476
Issue of loan	2,456	5,696
Repayment of loans	(1,064)	(5,242)
	6,582	2,302
Decrease in cash and cash equivalents	(6,580)	(17,604)

Exceptional Properties
Group income statement for the year ended 31 December

	20X4	**20X3**
	$000	$000
Profit before taxation (including results of activites		
Retained and those being sold)	2,311	3,733
Taxation	(1,558)	(784)
Profit after taxation	753	2,949
Profit attributable to non-controlling interests	-	482
Profit attributable to the equity owners of Exceptional Properties Group	753	2,467
	753	2,949

Reserves analysis:	**20X4**	**20X3**
Retained profit:	$000	$000
Profit after tax	753	2,467
Dividends	(1,698)	(768)
	(945)	1,699

Other reserve movements during the period:		
Revaluation reserve	5,612	171
Other	370	(47)
Increase in reserves	5,037	1,823

Notes forming part of the financial statements

(1) Turnover

	20X8	20X7
Analysed by operating segment		
	$000	$000
Activities being retained:		
Construction and house building	86,603	61,710
Overseas property development	6,349	2,383
Engineering	8,647	-
Town House Services	10,763	-
	112,362	64,093
Activities being sold:		
Property development and rentals	8,614	4,506
	120,976	68,599

(2) Profit before taxation is stated after charging or crediting:

(a)	Net trading expenses:		
	Change in work in progress and own work capitalised	(4,575)	(22,226)
	Raw materials and consumables	42,819	28,990
	Other external charges	55,779	44,095
	Staff costs	17,317	8,827
	Depreciation and other amounts		
	Written off tangible assets	1,013	539
	Other operating charges	4,006	4,554
		116,359	64,779
(b)	Share of profits/(losses) of associates	(412)	47
(c)	Income and profits/(losses) from non-current asset investments other than associates	(173)	64
(d)	Interest receivable and similar income	335	383
(e)	Interest payable and similar charges:		

Interest payable on sums:		
Wholly repayable within five years	5,338	3,108
All other loans	1,732	219
	7,070	3,327
Less: Charged to work in progress	(5,014)	(2,746)
	2,056	581

Required

(a) Write a report, with appropriate supporting computations based on the information available above, to advise the directors of Property Venture on the practicality of

(i) providing the additional $5,000,000 share capital, and

(ii) their decision to provide the $6,508,000 in 20X4

(b) State what further information you might require to support your comments and recommendations.

33 Timber Products

You are required to explain the appropriate accounting treatment for the following transactions and to show the disclosures that would appear in the statement of comprehensive income and statement of financial position for the financial year to 31 October 20X4.

Note: A compound interest table has been provided below.

(i) Timber Products supplies direct to large industrial and commercial customers on three month credit terms. On 1 November 20X3 it entered into an agreement with Ready Support whereby it transferred legal title to trade receivables to that company. In return, Timber Products received an immediate payment of 90% of the total net receivables plus rights to future sums depending on whether and when the debtors paid. Ready Support had the right of recourse against Timber Products for any additional losses up to an agreed maximum amount.

By the end of the financial year legal title had been transferred relating to debtors with an invoice value of $15m. Timber Products was subject under the agreement to a maximum potential debit of $200,000 to cover losses.

(ii) Timber Products imports wood and keeps it for five years under controlled conditions prior to manufacturing high quality furniture. In the year to 31 October 20X4 it imported timber at a cost of $40m. It contracted to sell the whole amount for $40m and then buy it back in five years time for $56.1 m.

(iii) Timber Products manufactures and supplies retailers with furniture on a consignment basis such that either party can require the return of the furniture to the manufacturer within a period of six months from delivery. The retailers are required to pay a monthly charge for the facility to display the furniture. The manufacturer uses this monthly charge to pay for insurance cover and

carriage costs. At the end of six months the retailer is required to pay Timber Products the trade price as at the date of delivery. No retailers have yet sent any goods back to Timber Products by the end of the six month period.

In the year ended 31 October 20X4, Timber Products had supplied furniture to retailers at the normal trade price of $10m being cost plus 33 1/3%; received $50,000 in display charges; incurred insurance costs of (15,000 and carriage costs of $10,000; and received $6m from retailers.)

(iv) On 1 December 20X3 Timber Products sold a factory that it owned to Inter, a wholly-owned subsidiary of Offshore Banking, for $10m. The factory had a book value of $8.5m. Inter was financed by a loan of $10m from Offshore Banking. Timber Products was paid a fee by Inter to continue to operate the factory. This fee represented the balance of profit remaining after payment of interest on its parent company loan, set at a level that represented current interest rates. If there was an operating loss, then Timber Products would be charged a fee to cover the operating losses and interest payable.

For the year ended 31 October 20X4 the fee paid to Timber Products amounted to $3m and the loan interest paid by Inter amounted to $1.5m.

Compound interest table	**Interest rate per year**				
No. of years	5%	6%	7%	8%	9%
1	1.050	1.060	1.070	1.080	1.090
2	1.102	1.124	1.143	1.166	1.188
3	1.158	1.191	1.225	1.260	1.295
4	1.216	1.262	1.311	1.360	1.412
5	1.276	1.338	1.403	1.469	1.539
6	1.340	1.419	1.501	1.587	1.677

Q&A

Answers

Contents

1 Environmental reporting

(a) The continuous use of natural resources and pollution of the environment by business operations result in environmental costs. Some costs are paid for by the businesses themselves, as a result of environmental laws or government regulation, but many environmental costs are borne by society as a whole.

In the EU, quoted companies are required to disclose any significant environmental risks in an annual business review, but there are still very few rules, legal or otherwise, to ensure that companies disclose information about environmental issues. Some companies voluntarily produce an environmental report (also called a social and environmental report or a sustainability report).

In the absence of specific regulations, the accounting profession has an opportunity to give a lead to business to develop the financial reporting of environmental costs.

The following list of suggestions is far from exhaustive:

(1) A note in the business review or environmental report disclosing the policy of the business towards environmental costs. This note might be considered part of the mission statement of the organisation.

(2) The amount spent during the accounting period to prevent or remedy damage to the environment caused by the company's activities. This expenditure could be analysed between compulsory and voluntary spending, to show performance against legal and voluntary targets; for example, reductions in pollution of air, water or land.

(3) Amounts provided for future expenditure, to meet contingent liabilities as the law changes, or to clean up a site to be vacated in the future.

(4) More detailed disclosures a business review or environmental report might cover:

  (i) The company's perception of risks to the environment from its operations and plans to cover the risks, by insurance or by its own resources. Any shortfall in the insurance cover would alert shareholders to the risk to which the company is exposed.

  (ii) The amount invested each year by the business to prevent environmental damage, and to protect employees and society in general from harmful features of the company's business activities.

  (iii) The extent of standby facilities capable of responding to a disaster, with an estimate of the cost of the full economic consequences of a possible future major disaster.

It might be difficult to estimate some of the figures suggested above, but the difficulty should not prevent an entity from attempting to provide an estimate. Increasingly, companies are using quantifiable performance measurements and targets to report their environmental performance.

Information provided by an entity about environmental issues should not be treated as a public relations exercise and nothing else.

(b) An asset is 'a right or other access to the future economic benefits controlled by a business as a result of past transactions'.

The manufacturing site is an asset, and money spent to conform to new laws will confirm its ability to continue to earn profits. The cost of $8m can be capitalised as part of the cost of the site and amortised over the economic life of the anti-pollution items. This additional capital expenditure will increase the carrying value of the manufacturing site, which must be tested for impairment to ensure that it is not carried at a figure in excess of its recoverable amount.

The cost of damages for past emissions must be written off to profit or loss. These past costs do not qualify to be treated as a prior-year adjustment because they are not consequent upon a change of accounting policy or a fundamental error.

2 P and Q

The parent has a loan receivable in its statement of financial position of $600,000. The joint venture has the same amount ($600,000) as a payable.

Under proportionate consolidation, the parent's share of the joint venture's assets and liabilities are brought in on a line-by-line basis. P owns one-third of the joint venture.

Correct answer: (b) One third of the amount of the loan is therefore eliminated on consolidation and the remaining two-thirds ($400,000) appears in the consolidated statement of financial position as a loan receivable from the venture.

3 P, S and A

Step 1: Calculate the group structure

P owns 75% of the equity of S and 30% of the equity of A. Therefore S is a subsidiary and A is an associate.

Step 2

Calculate the net assets of S and A at the acquisition date and at the end of the reporting period.

At this stage, make any fair value adjustments and eliminate the unrealised profit in inventory.

Net assets of S	At end of current reporting period	At acquisition	Post acquisition
	$		
Equity shares	200,000	200,000	-
Share premium	80,000	80,000	-
Accumulated profits ($140,000 – unrealised profit of $10,000 (see working))	130,000	60,000	70,000
	410,000	340,000	

Net assets of A	At end of current reporting period	At acquisition	Post acquisition
	$		
Equity shares	100,000	100,000	-
Share premium	120,000	120,000	-
Accumulated profits ($250,000 minus unrealised profit of $4,000 (see working))	246,000	150,000	96,000
	466,000	370,000	

Working

Inventory of A: Unrealised profit = $16,000 × 33.33/133.33 = $4,000.

Inventory of P: Unrealised profit = $40,000 × 33.33/133.33 = $10,000.
The adjustments should be made to the post-acquisition profits of S and A. In addition we need to do the following:

- Reduce the investment in A by $1,200 (30% × $4,000) in the statement of financial position. (This will be achieved automatically by Step 6 below.)
- For the inventory held by P, reduce the inventory on consolidation by $10,000.

Step 3: Calculate the goodwill

This applies to the subsidiary S only, not to the investment in the associate.

	$
Cost of the acquisition	320,000
Parent's share of the subsidiary's net assets at acquisition (75% (Step 1) × 340,000 (Step 2))	(255,000)
Goodwill at acquisition	65,000
Minus: Impairment to date	(20,000)
Balance carried forward	45,000

Step 4: Calculate the non-controlling interest in S

Non-controlling interest's share of net assets of the subsidiary at the end of the reporting period:
= 25% (W1) × $410,000 (W2) = $102,500.

Step 5: Calculate the consolidated accumulated profits.

	$
Accumulated profits of P	650,000
P's share of post-acquisition profits of S (75% (Step 1) × $70,000 (Step 2))	52,500
P's share of post-acquisition profits of A (30% (Step 1) × $96,000 (Step 2))	28,800
	731,300
Minus: Impaired goodwill since acquisition (investment in S) (Step 3)	(20,000)
Consolidated accumulated profits	711,300

Step 6: Calculate the investment in associate A

The investment in associate A is calculated as follows:

	$
Investment at cost	140,000
P's share of post-acquisition retained profits of A (Step 5)	28,800
	168,800

Note: P's share of the post-acquisition profits of A reflects its share ($1,200) of the unrealised profit adjustment relating to the inventory of A (Step 2).

A consolidated statement of financial position can now be prepared as follows:

P Group
Consolidated statement of financial position as at 31 December Year 5

Non-current assets	$
Property, plant and equipment (450,000 + 240,000) – P and S only	690,000
Goodwill (Step 3)	45,000
Investment in associates (Step 6)	168,800
	903,800
Current assets	
Inventory (70,000 + 90,000 – 10,000): see note 1	150,000
Other current assets (20,000 + 110,000 + 130,000): see note 2	260,000
Total assets	1,313,800

Equity and liabilities	
Equity	
P: Equity shares of $1	100,000
P: Share premium	160,000
Consolidated accumulated profits (Step 5)	711,300
Attributable to equity holders of the parent	971,300
Non-controlling interest in S (Step 4)	102,500
Total equity	1,073,800
Long-term liabilities (40,000 + 20,000): P and S only	60,000
Current liabilities (100,000 + 80,000): P and S only	180,000
Total equity and liabilities	1,313,800

Note 1: Inventory	$
Inventory of P	70,000
Inventory of S	90,000
Unrealised profit in inventory of P	(10,000)
	150,000

Note 2: Other current assets	$
Entity P: current account with A	20,000
Entity P: other current assets	110,000
Entity S: other current assets	130,000
	260,000

4 Group and NCI

Ownership of S1	
Direct holding of P	80%
Non-controlling interest in S1 (the balance)	20%
	100%

Ownership of S2	
Direct holding of P	30%
Indirect holding of P (80% × 45%)	36%
	66%
Non-conrolling interest in S2 (the balance)	34%
	100%

P has an 80% interest in S1 and a 66% interest in S2. The non-controlling interest is 20% in S1 and 34% in S2. These percentages should be used in the consolidation process, when the one-stage method is used..

5 H, S and T

There is a vertical group structure. S joined the group on 1 January Year 2 and T joined the group at a later date, 1 January Year 3.

Step 1

Calculate the percentage ownership of the subsidiaries held by H and the percentage ownership of the non-controlling interests.

H acquired 80% of the shares of S (160,000/200,000)
S acquired 70% of the shares of T (35,000/50,000)

Ownership of S	
Direct holding of H	80%
Non-controlling interest in S (balancing figure)	20%
	100%
Ownership of T	
Indirect holding (80% × 70%)	56%
Non-controlling interest in T (balancing figure)	44%
	100%

Step 2

Calculate the net assets of S and T at (1) the end of the current reporting period and (2) the date of acquisition by the group.

	At 31 December Year 6	**At acquisition date**	**Post-acquisition accumulated profits**
	$000	$000	$000
Entity S net assets	630	480	150
Entity T net assets	250	150	100

Step 3

Calculate the non-controlling interest

		$
Non-controlling interest in net assets of S	20% × 630	126.0
Non-controlling interest in net assets of T	44% × 250	110.0
		236.0
Subtract		
Cost of indirect non-controlling interest in T	20% × 109	(21.8)
(20% × Cost of investment by S in T)		
Non-controlling interest in H Group		214.2

Step 4

Calculate the purchased goodwill.

To do this, we must first calculate the cost of the parent company's investment in Entity T.

	$000
Cost of investment of S in T	109.0
Cost of indirect non-controlling interest in T (see above)	(21.8)
Cost of parent's investment in T	87.2

	Investment in S		**Investment in T**
	$000		$000
Cost of investment	444	(see above)	87.2
Minus share of net assets acquired:			
80% × 480	384		
56% × 150			84.0
Purchased goodwill	60		3.2

Total purchased goodwill for the group (in $000) before impairment = 60 + 3.2 = 63.2. There has been impairment of $26,000, so the purchased goodwill in the consolidated statement of financial position is $63,200 - $26,000 = $37,200.

Step 5

Calculate the post-acquisition accumulated profits of the parent company.

	$000
Entity H accumulated profits (parent company)	500
Parent's share of:	
Entity S accumulated profits (80% × 150) – see Step 2	120
Entity T accumulated profits (56% × 100) – see Step 2	56
	676
Accumulated impairment of goodwill	(26)
	650

Consolidated statement of financial position at 31 December Year 6	$000
Goodwill (Step 4)	37.2
Sundry net assets (256 + 521 + 250)	1,027.0
	1,064.2
Share capital	200.0
Reserves (Step 5)	650.0
Parent company's share in equity of the group	850.0
Non-controlling interests (Step 3)	214.2
	1,064.2

6 Disposal

	$ million	$ million
Consideration from sale of shares		960
Fair value of retained shares in Spool		100
		1,060
Net assets of Spool at carrying value	800	
Minus: non-controlling interest de-recognised (10% × 800)	(80)	
		720
Gain on sale of shares		340

None of the assets of Spool have been re-valued, therefore there is no balance on a revaluation reserve; therefore none of this gain should be transferred directly to retained earnings and not reported in profit or loss.

There is no information to suggest that a reclassification adjustment is required to reclassify income previously reported as other comprehensive income as profit or loss.

The total gain of $340 million on disposal of the shares should therefore be recognised in profit or loss for the period.

Hoo will recognise an investment in Spool in its statement of financial position in accordance with the requirements of IAS 39. On initial recognition, this investment should be valued at $100 million.

7 Step acquisiton and partial disposal

(a) The profits of AS since the investment was acquired (all retained) are $40 million (= $300m – $260m). During this period, HH held 25% of the equity of AS and it is assumed that AS is an associate. Profits attributable to H for the year are therefore $10 million (= 25% × $40 million).

	$ million
Initial investment in associate at cost	80
Share of post-investment retained profits	10
	90
Fair value of investment at 30 June	95
Gain recognised when step acquisition occurs	5

The total gain/profit recognised for the year from the investment in AS is therefore $10 million + $5 million = $15 million.

Goodwill	$ million
Fair value of investment in 25% of AS	95
Cost of additional 40% of shares	160
	255
H share of net assets of AS at 30 June (65% × 300)	195
Goodwill attributable to owner of H	60
Goodwill attributable to non-controlling interests	15
Total goodwill	75

	$ million
Fair value of investment in 25% of AS (35% × 300)	105
Goodwill attributable to non-controlling interests	15
Total NCI	120

(b) The disposal of 10% of the shares in S leaves P with a controlling interest; therefore the disposal of the shares should be accounted for as an equity

transaction between owners of the group. No gain or loss is recognised in the consolidated financial statements of P.

It is assumed that the profits of S for the year were $200 million (all retained; therefore $900 million - $700 million). At 30 June it is assumed that profits for the year to date were $100 million (= $200 million × 6/12); therefore the net assets of S at this date were $800 million.

		P		**NCI**
		$m		$m
Before the share sale	(80% × 800)	640	(20%)	160
After the share sale	(70%)	560	(30%)	240
Change in interest in S		- 80		+ 80

The shares were sold for $94 million adding to the assets in P's statement of financial position. The transaction should therefore be accounted for in equity as follows:

Debit: Cash	$94 million
Credit: NCI	$80 million
Credit: Reserves attributable to P (= gain = balance)	$14 million

	$ million	$ million
Post-acquisition profit attributable to S (see above)		200
Less: Impairment of goodwill		(8)
Recognised profit		192
Attributable to equity owners of P		
1 January – 30 June (80% × 200 × 6/12)	80	
1 July – 31 December (70% × 200 × 6/12)	70	
Goodwill impairment	(8)	
Attributable to NCI		142
1 January – 30 June (20% × 200 × 6/12)	20	
1 July – 31 December (30% × 200 × 6/12)	30	
		50
		192

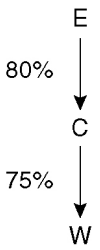
8 The Edgeley Group

Consolidated statement of financial position at 31 December Year 4

ASSETS	$m	$m
Non-current assets		
Intangible: Goodwill (652 + 148 (W3)		800
Tangible (1,840 + 863 + 520)		3,223
Current assets		
Inventory (350 - 20 unrealised profit + 212 + 108)	650	
Receivables (213 + 127 + 82)	422	
Bank (234 + 26 + 19)	279	
		1,351
TOTAL ASSETS		5,374
EQUITY AND LIABILITIES		
Equity		
Ordinary share capital		500
Accumulated profits (W5)		3,737
Equity attributable to owners of Edgeley		4,237
Non-controlling interest (W6)		446
Total equity		4,683
Current liabilities		
Trade payables (262 + 151 + 92)	505	
Taxation payable (112 + 47 + 27)	186	
		691
TOTAL EQUITY AND LIABILITIES		5,374

Workings

(1) Group structure



80 × 75 = 60% indirectly held by E in W.

NCI = 40%

Consolidation adjustments

(2) **Intra-group trading**

Cost	100%
Mark-up	40%
Intra-group sales price	140%

Unrealised profit in inventory still held

$25\% \times 280 \times {}^{40}/_{140} = 20$

Consolidation adjustment:

DR Reserves account of Cheadle	20
CR Inventory	20

(3) **Goodwill**

	Cheadle	Wilmslow
	$000	$000
Cost of investment	1,452	500
Minus indirect holding adjustment (20% x 500)		(100)
Minus group share of the fair value of net assets at acquisition as represented by the pre-acquisition share capital and reserves:		
80% × 1000 (200 + 800)	(800)	
60% × 420 (100 + 320)		(252)
Goodwill	652	148

(4) **Cheadle's revised reserves**

	$000
As given in the question	1,330
Minus unrealised profit included in inventory (W2)	(20)
Adjusted reserves	1,310

(5) **Consolidated reserves**

	$000
Edgeley	3,215
Plus group share of the post-acquisition profits of the subsidiaries:	
Cheadle: 80% (1,310 (W4) – 800 at acquisition)	408
Wilmslow: 60% (510 – 320 at acquisition)	114
	3,737

Note: Wilmslow only became a subsidiary of the group when Cheadle was acquired by Edgeley. Hence the acquisition date for Wilmslow is treated as the 1 January Year 4.

(6) **Non-controlling interest**

	$000
Cheadle: 20% (200 + 1,310 (W4)	302
Wilmslow: 40% (100 + 510)	244
Minus indirect holding adjustment: (20% × 500)	(100)
	446

9 The A Group

A's original investment in C was 90% of C's 400,000 shares (360,000 shares). During the year A has disposed of 350,000 of these shares, which reduces the investment from subsidiary status to that of a 'simple' investment.

A Group
Consolidated statement of financial position as at 31 December Year 4

	$000
Goodwill (W2, B only)	428
Investment in C at fair value	44
Other net assets (W4)	6,661
	7,133
Equity	
Share capital	1,500
Accumulated profits attributable to owners of A (working 1)	5,347
Equity attributable to owners of A	6,847
Non-controlling interest: 20% × (1,260 + 170)	286
Total equity	7,133

Income statement working schedule for year ended 31 December Year 4

	A	B	Group
	$000	$000	$000
Operating profit	1,200	250	
Minus: Dividend from B	(16)	nil	
	1,184	250	1,434
Gain on disposal of C (W2)	237		237
Profit before tax	1,421	250	1,771
Tax	(360)	(60)	(420)
Profit after tax	1,061	190	1,251

Attributable to:	
Equity owners of A (1,061 + 80% × 190)	1,213
Non-controlling interest: 20% × 190	38
	1,251

Workings

(1) **Movement on consolidated reserves attributable to owners of parent**

	A	B	C	Group
	$000	$000	$000	$000
At 31 December Year 3 (W5)	3,300	272	612	4,184
Profit for year attibutable to A				1,213
Dividends paid by A				(50)
At 31 December Year 4				5,347

(2) **Disposal of shares in C, with loss of control**

Gain to parent	$000	$000
Net assets of C at date of disposal: de-recognised		1,400
Purchased goodwill in C de-recognised (see working 3)		472
		1,872
Minus: Non-controlling interest de-recognised (10% × 1,400)		(140)
Assets attributable to A de-recognised		1,732
Fair value of investment retained	44	
Sale proceeds	1,925	
		1,969
Total gain on disposal of shares		237

Since there has been no revaluation of non-current assets and there is no information about any reclassification adjustments that might be required, it is assumed that this entire gain should be included in profit or loss for the year.

(3) **Calculation of goodwill**

	B	C
	$000	$000
Cost of Investment	1,164	1,120
Less: Group share of the fair value of the net assets at acquisition		
80% × (500 + 420)	(736)	
90% × (400 + 320)		(648)
	428	472

(4) **Other net assets**

	$000
A's net assets as 1 January Year 4	2,516
B's net assets at 1 January Year 4	1,260
A's retained profit year ended 31 December Year 4	790
B's retained profit year ended 31 December Year 4	170
Proceeds of disposal of C	1,925
	6,661

(5) **Calculation of post-acquisition retained profits b/fwd attributable to A**

		$000
A	As given in the question	3,300
B and C	Group share of post-acquisition	
	B 80% × (760 - 420)	272
	C 90% × (1,000 - 320)	612
Total		4,184

10 Herbert

(a) **Memorandum**

To: The Managing Director
From: Accountant
Date:
Subject: **Exclusion of subsidiaries from consolidation**

Sarah

It has been suggested that Sarah should not be included in the consolidated financial statements for the year ended 31 December Year 4 on the grounds that the group's interest in this company may be sold in the near future.

IAS 27 *Consolidated financial statements and accounting for investments in subsidiaries* sets out the conditions under which subsidiaries may be excluded from consolidation. It is quite correct that subsidiaries should not be consolidated if they **are acquired** and held exclusively with a view to subsequent re-sale. However, the group's shareholding in Sarah does not come within the definition of an interest held exclusively with a view to subsequent resale from the time it was acquired.

It was clearly not originally acquired with a view to subsequent re-sale. Even if a purchaser had been identified, the definition would still not be met.

Therefore Sarah must be included in the consolidated financial statements until a disposal actually takes place.

Jeremy

IAS 27 permits exclusion of a subsidiary from consolidation only in limited circumstances. With the exception of subsidiaries acquired with a view to re-selling them (which should be accounted for in accordance with IFRS 5), 'consolidated financial statements shall include all subsidiaries of the parent' (IAS 27). A subsidiary is an entity that is controlled by the parent. The unstable political situation in Overonia is not a sufficient reason to exclude Jeremy from consolidation, if a controlling interest in Jeremy is acquired.

(b) Herbert Group income statement for the year ended 31 December Year 4 (See working 1)

	$000
Sales revenue	400,000
Cost of sales	(223,000)
Gross profit	177,000
Distribution costs	(61,200)
Administrative expenses	(24,800)
Profit before tax and finance costs	91,000
Share of associate's loss (W4)	(3,500)
Profit before tax	87,500
Income tax expense (25 + 12 + Associate 3)	(40,000)
Profit for the year after tax	47,500
Attributable to:	
Equity holders of the parent	44,300
Non-controlling interests	3,200
	47,500

Workings

(1) Income statement: Consolidation schedule

	Herbert	Sarah		Adjust	Group
	$000	$000			$000
Sales	290,000	110,000			400,000
Cost of sales	(162,000)	(51,000)		}	(223,000)
Unrealised profit		(10,000)	(W2)		
Gross profit	128,000	49,000			177,000
Selling and distribution costs	(48,800)	(12,400)		}	(61,200)
Administrative expenses	(16,200)	(8,600)			(24,800)
Investment income	(9,000)			(9,000) (W3)	0
Tax	(25,000)	(12,000)			(37,000)
Profit after tax		16,000			
Non-controlling interest (20%)		(3,200)			(3,200)

(2) **Unrealised profit**

Sarah

	$000
Brought forward	10,000
Carried forward	20,000
Increase charged to current period	10,000

(Tutorial note: No information has been given of the trading transactions which have given rise to the unrealised profit. Group sales should be reduced by the total amount of intra-group sales made in the year and this will have a knock-on effect on cost of sales).

Amanda

Group share $^1/_3 \times \$30m = \$10m$

(3) **Investment income**

The investment income of $9m in the accounts of Herbert is all inter-company dividends. $8m has come from Sarah (80% of $10m) and $1m has come from Amanda (1/3 of $3m). Therefore this should not appear in the consolidated income statement as the dividends have been replaced with the share of the profits.

(4) **Associate**

	$000
Share of profits 1/3 × 19,500	6,500
Minus: group share of unrealised profit (W2)	(10,000)
Loss attributable to investment in associate, before tax	(3,500)
Share of tax 1/3 × 9,000	(3,000)
Share of associate's loss	(6,500)

11 Abbeville

(a) **Abbeville: Statement of financial position after reorganisation**

Tutorial note

Abbeville now has two direct subsidiaries (Narbonne and Bonneville) and one indirect subsidiary investment in Lynette through its holding of Bonneville.

	$000
Net tangible assets	2,200
Investments:	
Narbonne	1,000
Bonneville (see Working)	1,030
	4,230
Capital and reserves	
Share capital	3,500
Other reserves	200
Accumulated profits	530
	4,230

Working	$000
Original investment	580
Additional shares	450
Investment in Bonneville	1,030

Bonneville: Statement of financial position after reorganisation

Tutorial note

Bonneville now has a wholly owned subsidiary: Lynette

	$000
Net tangible assets	1,300
Investment in Lynette (note)	450
	1,750
Capital and reserves	
Share capital (580 + 200)	780
Share premium account (W)	250
Reserves	300
Accumulated profits	420
	1,750

Note

The carrying value of the investment is maintained at the value in the books of the transferor prior to the transfer, in accordance with local company law (as stated in the question).

Working

The share premium is the difference between the base value of the shares allotted and their nominal value. This base value is the amount at which the assets acquired are recorded in the books of the transferor prior to transfer.

	$000
Base value	450
Nominal value of shares	200
Share premium	250

(b) (i) Narbonne remains as a subsidiary because Abbeville still retains a controlling interest (above 50%) of the equity shares. IAS 27 (revised) states that a reduction in a shareholding in a subsidiary without loss of control should be accounted for as an equity transaction and should not be reported in consolidated profit or loss.

The adjustments required to account for the transaction as a n equity transaction are:

Debit: Cash	$700,000
Credit: Non-controlling interests (35% × $1,500,000) =	$525,000
Credit: Equity attributable to owners of parent (balance)	$175,000

Abbeville: Statement of financial position

Abbeville Group: Consolidated statement of financial position

	$000	$000
Net tangible assets (W1)		6,540
Equity		
Equity attributable to owners of Abbeville		
Share capital	3,500	
Other reserves (W2)	690	
Accumulated profits (W3)	1,825	
		6,015
Non-controlling interest (W4)		525
		6,540

Workings

(1) **Net assets**

	$000
Abbeville (2,200 + 700 cash)	2,900
Narbonne	1,500
Bonneville	1,300
Lynette	840
	6,540

(2) **Other reserves attributable to equity owners of Abbeville**

	$000
Abbeville	200
Narbonne	100
Bonneville	300
Lynnette	90
	690

Since the sale of the shares in Narbonne is treated as an equity transaction in the consolidated financial statements, there are no adjustments to the post-acquisition other reserves or accumulated profits attributable to the parent.

(3) **Accumulated profits attributable to equity owners of Abbeville**

	$000
Abbeville (530 + equity transaction 175)	705
Narbonne	400
Bonneville	420
Lynette	300
	1,825

(4) **Non-controlling interest**

	$000
Narbonne 35% of $1,500,000	525

(ii) In b (i) Abbeville retained 65% of its interest in Narbonne and hence Narbonne remained a subsidiary and was consolidated with a non-controlling interest of 35%.

If Abbeville were to sell 75%, then the remaining interest in Narbonne would be only 25% and would result in a loss of control over the operations of Narbonne. Given the 75% shareholding is sold to a number of shareholders, the remaining 25% would probably leave Abbeville with significant influence over Narbonne's financial and operating decisions. If this is so, then Narbonne will be accounted for as an associate using equity accounting. If Abbeville does not have significant influence, the investment will be dealt with as a trade investment under the provisions of IAS 39 on financial instruments.

IAS 27 (revised) states that the gain or loss on disposal of the shares should be calculated as follows. In the individual statement of financial position of Abbeville the investment will be reduced to 25% of its value:

	$000
Consideration received for sale of shares	1,650
Fair value of remaining shares in Narbonne	400
	2,050
Net assets of Narbonne de-recognised	(1,500)
Total gain	550

Abbeville Group: Consolidated statement of financial position

	$000
Net tangible assets (W1)	6,390
Equity	
Equity attributable to owners of Abbeville	
Share capital	3,500
Other reserves (same as answer b (i))	690
Accumulated profits (W2)	2,200
	6,390

Workings

(1) **Net assets**

	$000
Abbeville (2,200 + 1,650 cash + 400 investment in associate)	4,250
Bonneville	1,300
Lynette	840
	6,390

(2) **Accumulated profits attributable to equity owners of Abbeville**

	$000
Group accumulated profits at time of share disposal (530 + 400 + 420 + 300)	1650
Gain on disposal of shares	550
	2,200

The gain on disposal will be recognised in group profit or loss, unless there is a revaluation reserve in Narbonne, in which case some of the total gain might be transferred directly to equity reserves and not recognised in profit or loss.

(iii) If the 75% interest has been acquired by a single buyer, it is unlikely that Abbeville will exercise significant influence over Narbonne's financial and operating policies as it will be controlled by the 75% shareholder. Under such circumstances, Abbeville will not be able to treat Narbonne as an associate but instead must include it in the consolidated statement of financial position as an investment under the provisions of IAS 39. When the shares are sold, the consolidated statement of financial position will be the same as in the answer to b (ii), unless the fair value of the remaining investment is less than $400,000. After the share disposal, if the shareholding in Narbonne is accounted for as an ordinary investment rather than an associate, consolidated profit or loss will not include Abbeville's share of the profit of Narbonne, but only the dividends received.

(c) If the amalgamation of Northcote and Abbeville is achieved by means of an exchange of shares (initially) between Gourmet Delights and Abbeville, then this is a transaction which might in the past have been accounted for as a merger using the pooling (uniting) of interests method of consolidation.

However, under the provisions of IFRS 3, the pooling of interests method is not permitted and acquisition accounting must be used to account for a business combination. This will involve identifying an acquirer (presumably Abbeville); all net assets must be recognised at fair values and intangible assets acquired must be recognised together with goodwill. Pre-acquisition reserves will not be treated as profits belonging to the group. Goodwill must be carried in the consolidated statement of financial position and subjected to annual impairment reviews.

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(a) **Year to June Year 4**

- The revenue and the receivable for the sale of €96,000 should be translated at the spot rate of 0.8 = $120,000
- The capital expenditure of €1m should also be translated at the spot rate of 0.8:

Debit Property, plant and equipment	$1,250,000
Credit: Payables	$1,250,000.

- The receipt on 12 June relating to the receivable is translated at the rate at that date of 0.9. This generates cash of $106,667 to settle a receivable of $120,000. Hence an exchange loss of $13,333 is recognised in profit or loss.
- The non-current asset is not re-translated at the year end, but the outstanding payable (a monetary item) must be re-stated to the year end exchange rate of 0.7. This gives a year-end payable balance of $1,428,571. This has increased from the initial $1,250,000; therefore an exchange loss of $178,571 will be recognised in profit or loss.

(b) **Year to June Year 5**

When the payable is settled after the year end at the spot rate of 0.8, it results in a payment of $1,250,000. There is an exchange gain of $178,571 compared with the carrying value at the end of Year 4.

13 Mancaster and Stockpot

Part A

(1) (a) **Functional currency**

Functional currency is the currency of the primary economic environment in which the entity operates. It reflects the underlying transactions, events and conditions that affect the company. It is not simply the currency of the country where the company is based. For example, if a company is incorporated and listed in the UK, but operates

in the South African mine fields, then its functional currency will be the South African Rand, not Sterling, because the Rand is the currency in which it generates and spends the most cash.

(b) **Presentation currency**

Presentation currency is the currency in which the financial statements are presented. Continuing the example of the company referred to above, since the company is listed in the UK it will present and file its accounts in Sterling.

Transactions and balances measured in a currency other than the presentation currency will have to be translated into the presentation currency for reporting purposes. So the sales and operating costs incurred in South Africa will need to be translated from Rand into Sterling.

(2) **Factors to be considered when determining the functional currency of an overseas subsidiary**

The primary economic environment in which an entity operates is defined in IAS 21 as the one in which it **primarily generates and expends cash**.

Primary indicators

An entity must consider the following factors in determining its functional currency:

- the currency that mainly influences sales prices for goods and services
- the country whose competitive forces and regulations mainly determined the sales prices of its goods and services
- the currency that mainly influences labour, material and other costs of goods or services.

Additional indicators

The following factors may also provide evidence:

- the currency in which funds from financing activities are generated (i.e. currency used for issuing debt and equity)
- the currency in which surplus cash is invested.

Part B

(a) **Translation: Statement of financial position of Stockpot at 31 March Year 4**

	EU000	Rate	$000
Property, plant and equipment	30,000	2.2	13,636
Inventories	18,000	2.2	8,182
Trade receivables	15,000	2.2	6,819
Trade payables	(10,400)	2.2	(4,727)
Bank overdraft	(7,600)	2.2	(3,455)
Non-current liabilities	(20,000)	2.2	(9,091)
	25,000		11,364
Issued capital	15,000	3.0	5,000
Pre-acquisition reserves	5,000	3.0	1,667
			6,667
Post-acquisition reserves	5,000	balancing figure	4,697
	25,000		11,364

Mancaster Group: Consolidated statement of financial position at 31March Year 4

	$000	$000
Non-current assets		
Goodwill (see workings)		682
Property, plant and equipment (20,000 + 13,636)		33,636
Current assets:		
Inventories (10,000 + 8,182)	18,182	
Trade receivables (10,000 + 6,819)	16,819	
		35,001
		69,319
		$000
Capital and reserves:		
Issued capital		9,000
Accumulated profits (see workings)		16,205
		25,205
Non-controlling interest (see workings)		2,841
		28,046

Non-current liabilities:		
Loans (10,000 + 9,091)		19,091
Current liabilities:		
Bank overdraft (6,100 + 3,455)	9,555	
Trade payables (7,900+4727)	12,627	
		22,182
		69,319

(b) **Translation: Income statement of Stockpot for year ended 31 March Year 4**

	EU000	Rate	$000
Revenue	60,000	2.3	26,087
Cost of sales	(30,000)	2.3	(13,043)
Gross profit	30,000		13,044
Operating expenses	(16,000)	2.3	(6,957)
Operating profit	14,000		6,087
Interest payable	(2,000)	2.3	(870)
Profit before tax	12,000		5,217
Tax	(4,200)	2.3	(1,826)
Profit after tax	7,800		3,391

The income statement has been translated at the average rate as an approximation to the actual (historical) rate. The closing rate is not allowed under IAS 21.

Mancaster Group:

Consolidated income statement for the year ended 31 March Year 4

	$000
Revenue (50,000 + 26,087)	76,087
Cost of sales (25,000 + 13,043)	(38,043)
Gross profit	38,044
Operating expenses (15,000 + 6,957)	(21,957)
Operating profit	16,087
Interest payable (1,000 + 870)	(1,870)
Profit before tax	14,217
Tax (3,600 + 1,826)	(5,426)
Profit after tax	8,791
Attributable to	
Equity holders of the parent	7,943
Non-controlling interest (25% × 3,391) – see translation	848
	8,791

Workings

(1) **Goodwill at date of acquisition**

	$000	Rate	EU000
Cost of investment	5,500	× 3	16,500
Minus: Share of net assets acquired:			
Share capital (translated at 3.0)	5,000		
Accumulated profits (translated at 3.0)	1,667		
	6,667		
Group share (75%)	5,000	× 3	(15,000)
Goodwill	500		1,500
Re-stated to closing rate: (1,500/2.2)	682		
Translation gain on goodwill – to group reserves	182		

(2) **Consolidated accumulated profits**

	$000
Mancaster:	12,500
Stockpot: group share of post-acquisition profits (75% × 4,697) – see translation of statement of financial position	3,523
Translation gain on goodwill	182
	16,205

(3) **Non-controlling interest**

	$000
Non-controlling share of net assets at 31 MarchYear 4 : (25% × 11,364) – see translation of Stockpot statement of financial position	2,841

14 Statement of cash flows

Part A

(a) **Direct method**

Cash flows from operating activities	$000
Cash receipts from customers	15,424
Cash paid to suppliers	(5,824)
Cash paid to and on behalf of employees	(2,200)
Other operating cash payments	(511)
Cash generated from operations	6,889

(b) **Indirect method**

Cash flows from operating activities	$000
Profit before taxation	6,022
Adjustments for:	
Depreciation	899
	6,921
Increase in trade and other receivables	(72)
Increase in inventories	(194)
Increase in trade payables	234
Cash generated from operations	6,889

Part B

Item	**Operating activities**	**Investing activities**	**Financing activities**
Cash payment to buy shares in an associate		√	
Cash proceeds from the sale of intangible assets		√	
Income tax repayments received	√		
Payment of patent royalties	√		
Repayments of finance lease obligations			√
Cash payments to acquire property, plant and equipment		√	
Dividend income received		√	
Interest paid	√		

Part C

	$000
Net assets acquired:	
Cash	10
Inventories	30
Tangible non current assets	50
	90
Non-controlling interest (10% × 90)	(9)
	81
Purchased goodwill (balancing figure)	34
Fair value of net assets acquired (total consideration paid)	115

Satisfied by:	
Issue of shares	60
Cash paid	55
Purchase consideration	115

The cash flow shown in the group statement of cash flows as an investing activity will be an outflow of $45,000. This represents the cash paid as consideration of $55,000 minus the cash within the subsidiary on acquisition of $10,000.

15 Bella

Statement of cash flows for the year ended 31 March Year 6

	$000	$000
Cash flows from operating activities		
Profit before taxation	4,617	
Adjustments for:		
Depreciation (Working 1)	300	
Loss on disposal of non-current asset (800 – 700)	100	
Interest expense	60	
	5,077	
Increase in inventories (280 – 100)	(180)	
Decrease in trade and other receivables (1,350 – 1,290)	60	
Increase in trade payables (430 – 275)	155	
Cash generated from operations	5,112	
Interest paid (Working 3)	(45)	
Income taxes paid (Working 4)	(185)	
Net cash from operating activities		4,882
Cash flows from investing activities		
Purchase of property, plant and equipment	(6,000)	
Proceeds from the sale of property, plant and equipment	700	
Purchase of intangible assets (800 – 300)	(500)	
Net cash used in investing activities		(5,800)
Cash flows from financing activities		
Proceeds from the issue of share capital (Working 2)	865	
Issue of long-term loan (600 – 500)	100	
Dividends paid	(350)	
Net cash inflow from financing activities		615
Net decrease in cash and cash equivalents		(303)
Cash and cash equivalents at the beginning of the period		45
Cash and cash equivalents at the end of the period (55 – 313)		(258)

Workings

(1) **Property, plant and equipment (PPE)**

	$000	$000
PPE at net book value (NBV) at end of year		12,900
PPE at NBV at beginning of year	8,000	
Disposals during the year at NBV	(800)	
		(7,200)
		5,700
Depreciation charge for the year (balancing figure)		300
PPE acquired during the year		6,000

(2) **Share capital and premium**

	Share capital	**Share premium**	**Total**
	$000	$000	$000
At end of year	1,900	95	1,995
At beginning of year	1,100	30	(1,130)
Cash receipts from share issue			865

(3) **Interest payable**

	$000
Accrued interest at beginning of year	25
Interest charge in profit and loss	60
	85
Accrued interest at end of year	(40)
Interest payments in the year	45

(4) **Current tax payable**

	$000
Tax payable at beginning of year	325
Tax charge in profit and loss	400
	725
Tax payable at end of year	(540)
Tax payments in the year	185

16 Bishop Group

(a)

Statement of cash flows for year ended 31 December Year 2

	$000	$000
Cash flows from operating activites (Note 1)		2,282
Interest paid (120 + 205)		(325)
Dividends received		90
Taxation paid (W2)		(117)
Net cash flows from operating activities		1,930
Cash flows from investing activities:		
Payments to acquire tangible non-current assets (W3)	(4,996)	
Receipts from sale of tangible non-current assets	810	
Purchase of investments	(300)	
Net cash used in investing activities		(4,486)
Cash flows from financing activities:		
Proceeds of share issue	3,824	
Additional loans (1,200 – 800 – 25)	375	
Capital payments under finance leases (W4)	(150)	
Dividends paid to NCI (W1)	(295)	
Equity dividends paid	(600)	
Net cash provided by financing activities		3,154
Net increase in cash and cash equivalents		598
Effect of exchange rate movements		53
		651
Cash and cash equivalents b/fwd		169
Cash and cash equivalents c/fwd		820

Notes to the statement of cash flows

Reconciliation of operating profit to net cash inflow from operating activities

	$000
Operating profit	2,849
Depreciation	1,200
Profit on sale of non-current assets (810 – 720)	(90)
Increase in inventories (6,135 – 5,740 – 117)	(278)
Increase in receivables (5,720 – 4,380 – 339)	(1,001)
Decrease in payables (1,420 – 1,760 – 58)	(398)
Net cash flows from operating activities	2,282

Workings

(1)

Non-controlling interest

	$000		$000
Dividend paid to NCI	295	Balance b/fwd	2,500
Balance c/fwd	2,800	Income statement	420
		Exchange gain (20% × 875)	175
	3,095		3,095

(2)

Tax

	$000		$000
Tax paid	117	B/fwd current tax	167
C/fwd current tax	700	B/fwd deferred tax	400
C/fwd deferred tax	550	Income statement	800
	1,367		1,367

(3) **Non-current assets**

	$
Opening NBV	7,520
Depreciation	(1,200)
Disposals at NBV	(720)
New finance leases	700
Exchange rate gains	424
Purchase for cash	4,996
Closing NBV	11,720

(4)

Obligations under finance leases

	$000		$000
Cash paid	355	Balance b/f < 1 year	50
Balance c/f < 1 year	110	Balance b/f > 1 year	250
Balance c/f > 1 year	740	Finance charge in profit or loss	205
		Non current asset additions	700
	1,205		1,205

The payment of $355,000 is split as $205,000 interest and $150,000 capital as payments are made in arrears and hence the year end payment pays off the year's finance cost.

(b) The income statement and statement of financial position are based on the accruals concept whereas the statement of cash flows is based on the cash concept. Cash is the 'life blood' of the company and is therefore critical to an entity's survival. Without cash to pay suppliers, the work force and other payables, the company will cease to operate, irrespective of how profitable it is.

Shareholders need to know that a company is viable and has the resources to continue, and perhaps expand, operations. Suppliers need to know they will be paid and customers need to know the company is in a position to continue operations.

Profit may be significantly affected by the choice of accounting policies made by a company. This means it is more subjective than cash and more open to manipulation. However, the statement of cash flows itself may be subject to window dressing, for example by delaying payment of suppliers until after year end. The auditor needs to be involved in this respect to ensure the shareholders and other users receive meaningful information.

The statement of cash flows gives additional information not provided by the other financial statements.

17 The Grape Group

Group statement of cash flows for the year ended 31 March Year 4.

	$000	$000
Cash flows from operating activities		
Net profit before taxation		9,550
Adjustments for:		
Depreciation (Note 1)		1,176
Loss on sale of assets		18
Income from associate		(139)
Interest expense		552
Operating profit before working capital changes		11,157

Increase in inventories (1,127 – 139)	(988)
Increase in receivables (273 – 85)	(188)
Increase in payables (203 – 68)	135
Cash generated from operations	10,116
Interest paid	(552)
Income taxes paid (W3)	(2,400)
Net cash from operating activities	7,164

Cash flows from investing activities

Acquisition of subsidiary net of cash acquired (346 – 3)	(343)
Purchase of property, plant and equipment (1,875 – 315)	(1,560)
Proceeds from sale of property, plant and equipment (W1)	156
Dividends received from associate (W2)	93
Net cash used in investing activities	(1,654)

Cash flows from financing activities

Proceeds from issuance of share capital (675 + 519 - 152)	1,042
Repayment of loan notes	(990)
Dividends paid	(2,100)
Net cash used in financing activities	(2,048)
Net increase in cash and cash equivalent	3,462
Cash and cash equivalents at beginning of period	1,728
Cash and cash equivalents at end of period	5,190

Notes to the statement of cash flows

(1) **Major non-cash transactions**

During the year the group purchased a subsidiary undertaking. Part of the consideration for the acquisition was in the form of shares. Further details of the acquisition are given below.

(2) **Purchase of subsidiary undertaking**

	$000
Net assets acquired:	
Property, plant and equipment	315
Inventories	139
Receivables	85
Cash at bank and in hand	3
Payables	(68)
	474
Goodwill	24
	498
Satisfied by:	
Shares allotted	152
Cash	346
	498

Workings

(1) **Proceeds from sale of property, plant and equipment**

	$000
Cost of assets sold	429
Accumulated depreciation	(255)
Loss on sale	(18)
Proceeds	156

(2) **Dividends received from associated undertaking**

Interest in associated undertakings

	$000		$000
Balance b/d	1,920	Dividends received from associates	93
Share of associates' profit after tax	139	Balance c/d	1,966
	2,059		2,059

(3) **Taxation**

Taxation			
	$000		$000
Cash paid	2,400	Balance b/d	2,400
Balance c/d	2,950	Income statement	2,950
	5,350		5,350

18 IMPS

(a) Impairment loss

	$m
Carrying value	500
Recoverable amount	(385)
Impairment loss	115

Recoverable amount is value in use (Working 1) as this is higher than net realisable value (Working 2).

Workings

(1) ***Value in use:***

Forecast cash flows discounted at 12%:

	$m
Year 1 (185 × 0.893)	165.2
Year 2 (160 × 0.797)	127.5
Year 3 (130 × 0.712)	92.6
Total	385.3

(2) ***Net realisable value:***

	$m
Goodwill	0
Freehold	270
Freehold land and buildings	50
	320

(b) Treatment of impairment loss

IAS 36 requires the impairment loss to be allocated to the various non-current assets in the following order: firstly, goodwill, secondly, to other assets, either pro-rata or on another more appropriate basis.

	Before impairment	Impairment loss (W1)	After impairment
	$m	$m	$m
Goodwill	70	(70)	-
Land and buildings	320	(33)	287
Plant and machinery	110	(12)	98
	500	(115)	385

Because the land and buildings have been re-valued, the impairment is treated as a revaluation decrease until the carrying amount of the asset reaches its depreciated historical cost. The revaluation reserve relating to the asset is $65 million and so is adequate to cover the full impairment of $33m. The impairment must be separately disclosed and the notes to the accounts must specify by class of asset the impairment recognised directly to equity.

The impairment loss on the goodwill and plant ($66 million) must be recognised in profit or loss for the year. The notes to the accounts must specify the line item in which the impairment loss has been included.

Where the impairment write-down is material, information must also be provided as to the events and circumstances that led to the loss, the nature of the assets affected, the segment to which the asset belongs, that recoverable amount was based on value in use and the discount rate used to calculate this.

Workings

Loss on the various non-current assets

After the impairment loss has been recognised on the goodwill there is still 115 - 70 = 45 loss to be allocated to the other non current assets, on a pro-rata basis.

Loss on land and buildings:

$$\frac{320}{320+110} \text{ x } 45 = 33$$

Loss on plant and machinery:

$$\frac{110}{320+110} \text{ x } 45 = 12$$

19 Prima

Holiday villas

IAS 16 allows property, plant and equipment to be re-valued or left at historical cost. Revaluation should be based on the fair value (the open market value in an arm's length transaction). Revaluation is not required every year, but must be conducted when it is believed that the fair value differs materially from the carrying value.

The method of accounting for the villa that is to be sold is covered by IFRS 5 which requires that where, at the end of a reporting period, an asset is held for sale it should be reclassified, re-measured and no longer depreciated. An asset is only classified as held for sale where the following conditions are all met:

- The asset is available for sale in its present condition.
- The sale is believed to be highly probable:
  - Appropriate level of management is committed to the sale;
  - There is an active programme underway to find a buyer;
  - The asset is marketed at a realistic price.
- Completion of sale expected within 12 months of classification.

From the limited information provided it appears that these conditions have been met and therefore, under the rules of IFRS 5, the villa should be re-measured to the lower of its carrying value and its fair value minus costs to sell.

Therefore, the villas should be valued at 31 December Year 4 as follows:

	Fair value	**Carrying value**
	$	$
All villas	25	20
Property held for sale	(1)	(1.25)
Properties to be retained	24	18.75

The villas to be retained should be re-valued to $24m, resulting in an increase in the revaluation reserve of $5.25m (24-18.75).

The villa to be sold should be written down from its carrying value to its fair value minus costs to sell of $0.95m ($1m – 50,000). This impairment of $300,000 (1.25m – 0.95m) will be charged against the revaluation reserve for this asset. If there is insufficient revaluation reserve, then the write down must be charged to profit or loss.

The villa held for sale must be re-classified from 'Non-current assets' to 'Current assets' as a separate line item.

Depreciation should not be charged when an asset has been classified as held for sale. However, the other villas should be depreciated. IAS 16 states that expenditure on repairs and maintenance does not remove the need to depreciate an asset. The villas have a finite useful life and therefore must be depreciated. If the residual value of these assets is greater than the carrying value then the depreciation charge will be zero. It is not acceptable therefore to have a policy of non-depreciation on such assets, and a prior year adjustment should be made to correct the error if the error is material.

Head office

The head office should be recorded under property, plant and equipment at cost. IAS 23 (revised 2007) requires that borrowing costs should be capitalised as part of

the cost of an asset if they are directly attributable to the acquisition, construction or production of a 'qualifying asset'. A qualifying asset is an asset that necessarily takes a long period of time to get ready for its intended use or sale.

In this situation the company is therefore required to capitalise the borrowing costs as part of the asset cost. Capitalisation must cease when the asset is substantially complete. Construction finished on 31 May Year 4 and, although minor modifications continued for a further three months, the standard states that minor modifications indicate that the asset is substantially complete.

Cost at 30 June Year 4:		$000	$000
Land			1,000
Building:	Construction cost	8,000	
	Interest 9% × 5million × 20/12 (1.10 × 2 to 1.6 × 4)	750	
			8,750
Total			9,750

Prima is to receive a government grant. IAS 20 requires that the grant be recognised when there is reasonable assurance that the entity will meet any conditions and receive the grant. As the grant has not been received, a receivable will be recorded under current assets. The credit can be treated in one of two ways:

- Option 1: Record as deferred income and release to profit or loss over the useful life of the asset
- Option 2: Deduct the grant from the carrying amount of the asset.

If the second option is taken, the asset will be carried at $8.25m rather than at $9.75m. The effect on profit or loss will be the same in both cases.

Land should not normally be depreciated, because land has an indefinite useful life in most situations. However, as buildings have a limited useful life, a residual value must be allocated to the building and the depreciable amount must then be written off over the 50 year useful life. Depreciation will be charged in Year 4 for the four months from 1 September to 31 December.

The estimates of residual value and useful life must be revised each year and the depreciation amended prospectively.

Yachts

It is important to note that the yachts are held for rental purposes, so they are non-current assets, not inventory.

The yachts cost $20m to build, but the recoverable amount on completion (higher of value in use and net selling price) is only $18m, and so the assets must be initially recognised at their recoverable amount. The impairment write down of $2m will be charged to profit or loss in 20Year 4 in accordance with IAS 36.

	Cost	Recoverable amount
	$	$
Engines (15%)	3	2.7
Interior (25%)	5	4.5
Remainder (60%)	12	10.8
	20	18

IAS 16 requires that each part of the asset that has a cost that is significant in relation to the total cost must be depreciated separately. Therefore, in the first year the depreciation charge will be as follows:

Engines	$2.7m × 1/3 × 9/12 =	$0.675m
Interior	$4.5m × 1/2 × 9/12 =	$1.688m
Remainder	$10.8m × 1/5 × 9/12 =	$1.620m
Charge to profit or loss in Year 4		$3.983m

20 Financial instruments

(a) IAS 39 requires that, initially, all financial instruments be recorded at cost. Only in rare circumstances (see below) may the investment remain at historical cost. In most cases the instrument will be recorded at fair value or amortised cost.

When a financial instrument is acquired or issued it must be classified into one of four asset categories or one of two liability categories. The classification will then determine the re-measurement model at the end of each subsequent reporting period. The position can be set out as follows:

	Financial assets	Financial liabilities
Fair value through profit or loss	Fair value	Fair value
Held to maturity	Amortised cost	
Loans and receivables	Amortised cost	
Available for sale	Fair value	
Other		Amortised cost

The three valuation models are:

(i) **Historical cost**

This model must only be used for investments in equity instruments where there is no active quoted market price and the fair value cannot otherwise be reliably determined. Derivatives linked to such instruments are also permitted to be carried at historical cost.

(ii) **Amortised cost**

Amortised cost is calculated as:

Initial cost recognised

Plus: Interest at the effective rate

Minus: Cash received/paid

This model is used to measure the following instruments:

- Assets held to maturity – non-derivative financial assets with fixed or determinable payments and a fixed maturity. The entity must have positive intention and financial ability to hold these investments to maturity. It will not contain investments that have been designated as fair value through profit or loss, available for sale or where the investments meet the definition of loans and receivables.
- Loans and receivables – non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. It will not contain investments that are held for trading or otherwise designated as fair value through profit or loss nor designated as available for sale.
- Financial liabilities not treated as fair value through profit or loss.

(iii) **Fair value**

Fair value is the amount for which an asset can be exchanged or a liability settled, between knowledgeable and willing parties in an arm's length transaction. This model is used as follows:

- Fair value through profit or loss – where the financial asset or liability is either:
  - held for short term trading, or
  - a derivative not accounted for under hedging rules, or
  - designated as such upon initial recognition.
- Available for sale – those financial assets are not classified or designated as fair value through profit or loss, nor classified as loans and receivables or held to maturity.

(b) (i) **3% Bond**

The bond must initially be recorded at its purchase price of $250,000. If classified as 'held to maturity', it must be re-measured at the end of the reporting period to its amortised cost. The market value is not relevant.

Interest will be credited to profit or loss using the effective interest rate, resulting in finance income of $24,250 (9.7% × 250,000). The effective rate reflects the total return received by the investor over the duration of the bond – being the coupon + $50,000 premium on redemption. The coupon recorded in the statement of cash flows is $9,000 (3% × 300,000).

The difference between the effective interest and the actual coupon is added to the investment to give an amortised cost at the end of Year 3 of $265,250 (250,000 + 24,250 – 9,000).

(ii) **Equity shares in XYZ**

The shares will initially be recorded at their cost of $30,000. As they have been classed as 'fair value through profit or loss' the transaction costs must be expensed to profit or loss immediately. At the end of each reporting period, the shares must be re-measured to their market value, with the resulting gain or loss being taken to profit or loss.

At 1 January Year 3, the investment has a carrying value of $34,000. By the 31 December Year 3 this value is now $35,000. A $1,000 gain will therefore be recognised in profit or loss for the year.

Even though the investment is no longer intended for sale in the short term, it must remain classified as fair value through profit or loss as IAS 39 does not permit reclassification into or out of this category.

(iii) **Convertible bond**

A convertible bond represents a compound instrument. In essence, issuing a convertible bond is equivalent to issuing a non-convertible bond plus a call option on the entity's shares. Therefore, the investment should be divided into a liability portion and an equity portion.

To establish the liability (debt) element, the future cash flows from the bond are discounted at the normal market rate to establish the value of an equivalent but redeemable bond.

Using a rate of 7% this gives a net present value of:

$$\frac{20,000}{1.07}+\frac{20,000}{1.07^2}+\frac{520,000}{1.07^3}=\$460,635$$

As the bond was issued for $500,000, it implies that the call option embedded within the bond was sold for $39,365 ($500,000 – 460,635).

Therefore, the proceeds of $500,000 will be shown in the statement of cash flows as a financing cash flow, and the credit will be split into non-current liabilities $360,635 and equity $39,365.

21 HAM

(a) **Charge to profit or loss: operating lease treatment**

	Years ended 31 December	
	Year 7	**Year 8**
Item A	10,000	10,000
Item B	15,000	15,000
	25,000	25,000

(b) **Charge to profit or loss: finance lease treatment**

	Years ended 31 December	
	Year 7	**Year 8**
	$	$
Depreciation:		
Item A - 80,000/10	8,000	8,000
Item B - 117,000/12	9,750	9,750
	17,750	17,750
Finance costs:		
Item A - Given in question	2,545	2,182
Item B – Given in question	5,867	5,133
	8,412	7,315

(c) **Statement of financial position**

(i) **Accounting policy note: as required by IAS 1**

The capital element of leased asset repayments is treated as a separate category within non-current assets. Depreciation of leased assets is consistent with the company's policy for owned assets as found in note x.

(ii) **Non-current assets**

	Years ended 31 December	
	Year 7	**Year 8**
	$	$
Leased machinery		
Cost (working (1))	197,000	197,000
Depreciation (working (2))	51,500	69,250
Net book value	145,500	127,750

(iii) **Capital amounts due on finance leases** (working (3))

	Year ended 31 December		Year ended 31 December	
	Year 7	**Year 7**	**Year 8**	**Year 8**
	Minimum payments	**Present value**	**Minimum payments**	**Present value**
	$	$	$	$
Amounts falling due:				
Within one year	25,000	22,818	25,000	23,182
In years 2-5	100,000	78,777	100,000	83,163
After 5 years	55,000	50,235	30,000	27,800
	180,000		155,000	
Future finance charges	(28,170)		(20,855)	
Present value of future payments	151,830	151,830	134,145	134,145

Workings

(1) **Cost**

	Year 7	**Year 8**
	$	$
Item A	80,000	80,000
Item B	117,000	117,000
	197,000	197,000

(2) **Depreciation**

	$		$
Item A (4 × $8,000)	32,000	(5 × $8,000)	40,000
Item B (2 × $9,750)	19,500	(3 × $9,750)	29,250
	51,500		69,250

(3) **Finance lease creditor**

	Item A	**Item B**	**Total**
	$	$	$
End of Year 7	7,818	15,000	22,818
< 1 year	34,910	43,867	78,777
2-5 years	9,635	40,600	50,235
>5 years	52,363	99,467	151,830

End of Year 8			
<1 year	8,182	15,000	23,182
2-5 years	36,363	46,800	83,163
> 5years	0	27,800	27,800
	44,545	89,600	134,145

(d) **Current proposals**

A draft plan was issued in 2003 by the IASB to develop a single method of accounting whereby all leases would be treated as finance leases and capitalised.

The argument in favour of a new approach was based on the view that it has proved impossible to establish a clear definition of a finance lease. Leases can be very complex agreements and it is often difficult to establish the substance of the arrangement. This has allowed companies to treat leases as operating leases if their characteristics are 'on the margin' between finance and operating leases. This keeps the asset and the finance out of the statement of financial position and tends to have the effect of improving performance measures such as ROCE.

Another argument in favour of treating all leases as finance leases is that all leases generate assets and liabilities and therefore should be recognised in the statement of financial position in order to comply with concepts in the IASB's 'Framework'.

22 Flow

(a) **Sale and operating leaseback**

The nature of the leaseback arrangement affects the treatment of the sale proceeds. As the arrangement is an operating leaseback, it means that Flow permanently transfers the risks and rewards in the asset when it makes the sale. Therefore, on the sale, Flow will de-recognise the asset and the leaseback payments will be charged as rentals to profit or loss.

If the sale is made at fair value, then the profit on disposal is recognised in profit or loss immediately. However, the transaction here is significantly above fair value resulting in an abnormally high profit which is then compensated by higher operating leaseback rentals. In this situation, IAS 17 requires the excess of proceeds over fair value (the 'abnormal profit') to be deferred and amortised over the period during which the asset is expected to be used. This will serve to offset and normalise the high future rental charges.

On this basis, the accounting treatment becomes:

	DR	CR
	$	$
Sale of property		
Cash	850,000	
Non current assets		440,000
Profit or loss – normal profit (550,000 – 440,000)		110,000
Deferred income (liability) – abnormal profit (850,000 – 550,000)		300,000

	DR	CR
	$	$
Payment of rental		
Cash		100,000
Profit or loss – rental	100,000	
Profit or loss – amortised deferred income (300,000/10 years)		30,000
Deferred income	30,000	

(b) **Sale and finance leaseback**

Where the leaseback is a financing arrangement, two treatments could apply.

Treatment 1

As the asset has been sold, the asset should be de-recognised and the proceeds recorded. It is not appropriate to show a profit on the disposal as the risks and rewards of ownership revert back to Flow under a finance leaseback. The substance of the transaction is that there has been no sale and the lessor is providing finance to the lessee with the asset as security hence the profit of $410,000 should be deferred and amortised.

On the leaseback, the asset should be re-instated and, as a finance lease, this would be at the fair value (or the present value of the minimum payments if lower) of $550,000. The lease payments will be split into repayment of the capital and the interest. The deferred profit will be amortised over the ten year lease term.

Treatment 2

It could, however, be argued that the above treatment does not fully reflect the substance of the transaction as the original owner bears the risks and rewards of ownership before and after the sale and leaseback. If the risks and rewards were not transferred from Flow, then it could be argued that the asset should remain in the books at its original net book value and should not be uplifted to fair value. There will not be a profit or loss recorded.

The proceeds from the 'sale' reflect a financing arrangement secured on the property and so should be recognised as a liability. The subsequent lease

payments would again be split into repayment of the capital $850,000 and interest $150,000 ($1m payments - $850,000 loan).

23 AZ

(a) (i) **Usefulness of segmental data**

Many entities carry out several classes of business and operate in a number of countries across the world. Each of these businesses and geographical segments carries with it different opportunities for growth, different rates of profit and varying degrees of risk. Some business segments may be strongly influenced by the health of the economy whereas other segments may be unaffected by recession. One country may be experiencing growth; another country may be less stable because of political events. Awareness of these cultural and environmental differences is important to investors in order to allow them to fully understand the performance and position of the entity over the past, its prospects for the future and the risks that it faces.

IFRS 8 requires that segmental information should be provided to enable investors to understand the impact that the different segments of a business may have on the business as a whole. If the user of financial statements is only provided with figures for the entity as a whole, this might hide the risks and problems or profits and opportunities of the underlying business segments. The disaggregated financial information provided by segmental reporting allows for analytical review on a segment by segment basis which will provide greater understanding of the entity's position and performance and allow a better assessment of its future.

(ii) **Analysing segments**

IFRS 8 defines an operating segment as a component of an entity that engages in business activities from which it ay earn revenues and incur expenses, whose operating results are reviewed regularly by the chief operating decision maker in the entity and for which discrete financial information is available.

Not every part of a business is necessarily an operating segment or part of an operating segment. Head office is an example, since head office does not usually earn revenues. Generally an operating segment has a segment manager who is directly accountable to and maintains regular contact with the chief operating decision-maker, to discuss the performance of the segment.

IFRS 8 requires that entities should report information about each operating segment that is identified and that exceeds certain quantitative thresholds for size of revenue, operating profit or loss or assets. Financial information about operating segments with similar characteristics can be aggregated.

IFRS 8 sets out the information about each reportable operating segment that should be disclosed, including total assets, profit or loss, revenue

from external customers, revenue from sales to other segments, interest income and expense, depreciation, material items of income or expense and tax. The amount reported for each item should be the same measure that is reported for the segment to the chief operating decision maker of the entity.

IFRS8 applies to quoted companies only.

(b) **AZ segmental reporting issues**

(i) **Fleet of aircraft**

The answer to (a) explains how operating segments should be identified. It seems probable that information is provided separately for aircraft seat sales and for holiday homes to the chief operating decision maker of AZ; therefore it seems probable that these should be treated as reportable operating segments for the purpose of IFRS 8, provided that they exceed the minimum threshold limits for size (at least 10% of revenues, or profit or loss, or assets of the reporting entity).

(ii) **Aircraft manufacturing plant**

IFRS 8 requires that in measuring and reporting segment revenue from transactions by an operating segment with other segments, inter-segment transfers should be measured on the basis of the information provided to the chief operating decision maker. In this case, the revenues from inter-segment sales should be based on the prices actually charged.

IFRS 8 also requires that AZ must disclose the basis of accounting for transactions between reportable segments.

(iii) **Exceptional loss**

Items which are unusual in size, nature or incidence and hence where knowledge of their nature and amount is relevant to a reader's understanding of performance are required to be disclosed in the notes or on the face of the statement of comprehensive income in accordance with IAS 1.

In addition, IFRS 8 requires disclosure for each reportable segment of any material items of income or expense that is disclosed in accordance with IAS1. If the activities of the airline manufacturing plant are a reportable segment or part of a reportable segment, the loss should therefore be reported within the segmental information in the financial statements.

(iv) **Discontinued operations**

IFRS 8 does not deal with discontinued operations as this is the subject of IFRS 5 **Non-current assets held for sale and discontinued operations**. IFRS 5 requires the disclosure of the impact of a discontinued operation, and has strict conditions that must be met when identifying a discontinued operation.

To be classed as discontinued, IFRS 5 requires that the component of the entity has been sold in the year or is classified as 'held for sale'. A decision by the board and an announcement to the press alone is

insufficient to be classed as 'held for sale'. The criteria that must be met by the end of the reporting period are as follows:

- The asset must be available for immediate sale in its present condition; and
- The sale must be highly probable. For this to be so the following sub-conditions must also be met:
  - The appropriate level of management must be committed to the plan to sell
  - An active programme to locate a buyer must have been initiated
  - The asset is being marketed at a reasonable price, and
  - The sale should be expected to be completed within one year from the date of classification.

Hence, unless marketing of the holiday business is in progress at a reasonable price, and sale in the next 12 months is expected, the operation need not be classified as discontinued. If however, all of the above criteria are met, then the results of this operation must be disclosed as a single line on the face of the statement of comprehensive income together with supporting disclosures in the notes to the accounts.

(v) **40% investment in Eurocat**

IFRS 8 requires that information should be disclosed for each reportable segment of the entity's interest in the profit or loss of associates and joint ventures accounted for by the equity method. In addition, if the information is provided to the chief operating decision maker of the entity, for each reportable segment there should be disclosure of the amount of investment in associates or joint ventures accounted for under the equity method.

Therefore, AZ must disclose the results of the associate in its segmental disclosures.

24 EPS

(a) **The need to disclose diluted EPS**

Many entities issue financial instruments that allow the holder to buy shares at a price that is less than the market price. Such instruments include convertible debt, options and warrants. When the holders exercise their rights and obtain the equity, the original EPS measure will be diluted. This is because the shares have been issued at below their market price and so will provide the entity with less cash and so less earnings per share. IAS 33 requires disclosure of both the basic and diluted EPS. The diluted earnings per share figure is calculated using the current earnings and assuming the worst dilution arises. This will assist existing and prospective investors with their investment decisions.

For example, a convertible bond provides the holder with a regular coupon plus the option to convert the bonds into ordinary shares at during a certain time frame. Most investors will probably choose to convert rather than to

redeem their bonds and hence this will affect the EPS. Firstly, the number of shares in issue will increase; secondly, the earnings will increase because the coupon will no longer need to be paid. Typically, convertible bonds will be issued at a low coupon because of the opportunity to take the shares. Therefore, the impact on earnings is minimal, and the EPS will typically decrease.

(b) **Calculation of diluted EPS**

Basic EPS	$000
	Net profit
Net profit after tax and non-controlling interests	$18,000,000
Ordinary shares	40,000,000
EPS	45 cents

It is assumed that the preference dividend is included in finance costs; therefore the net profit after tax represents total earnings.

In order to determine the diluted EPS, the potential ordinary shares must first be ranked in order of their dilutive effect.

Dilutive effect	**Effect on earnings $000**	**Effect on number of shares**	**Extra EPS**
Options (w1)	nil	400	nil
Convertible bonds (w2)	804	1,840	0.44
Convertible preference shares (w3)	160	3,200	0.05

Diluted EPS must be calculated starting with the most dilutive (options) and finishing with the least dilutive (bonds).

Diluted EPS	**Earnings**	**Ordinary shares**	**EPS**
	$000		cents
Basic EPS	18,000	40,000	45
(i) Options	nil	400	
	18,000	40,400	44.55c
(ii) Convertible preference shares	160	3,200	
	18,160	43,600	41.65
(iii) Convertible bonds	804	1,840	
	18,964	45,440	41.70

The convertible bond is seen to have an anti-dilutive effect and therefore must be excluded from the calculation, giving a diluted EPS of 41.65. This must be disclosed alongside the basic EPS in the statement of comprehensive income.

Workings

(1) **Options**

Number of options	2,000,000
Proceeds from exercise at $1.20/option	$2,400,000
Market price of a share	$1.5
Effective number of shares at full price ($2.4m/1.5)	1,600,000
Effective number of free shares (2m – 1.6m)	400,000

(2) **Convertible bonds**

Where more than one conversion rate applies, IAS 33 requires the calculation to be based on the most advantageous rate to the holder. This will be in the next year at a rate of 23 shares per $250 nominal value of bonds. Resulting in an additional 1.84 million shares (20million × 23/250). Post tax interest saved on conversion = $804,000 (6% × $20m × 0.67).

(3) **Convertible preference shares**

Additional ordinary shares created = 3.2m (2 × 1.6m)

Preference dividend saved = $160,000 (10 × 1.6m)

(c) **Nature of diluted EPS**

IAS 33 requires that the instruments be considered in order of their dilutive effect. If this is ignored then the cumulative preference shares would be considered before the cumulative bonds and the calculation would give a diluted EPS of 41.70 instead.

Diluted EPS	$000	$000	**cents**
	Net profit	**Ordinary shares**	**EPS**
Basic EPS	18,000	40,000	45.00
(i) Option	nil	400	
	18,000	40,400	44.55
(ii) Convertible bonds	804	1,840	
	18,804	42,240	44.52
(iii) Convertible preference shares	160	3,200	
	18,964	45,440	41.70

The impact of ignoring the order of the dilutive effects is that the true dilutive effect on the EPS figure is not reported. Nevertheless, both of these measures may be of use to users and it may be helpful to disclose both calculations in

the financial statements. IAS 33 permits additional measures of EPS to be provided in the notes to the accounts.

(d) **Share equivalents**

The basic EPS is calculated using the number of shares actually in issue, and does not take account of the other instruments in issue that are share equivalents and so have a dilutive effect. The view may be taken that the existing measure of basic EPS is unrealistic as at least some of the share equivalents will convert into shares and so the basic measure is overstated and meaningless.

If the basic measure of EPS were to be adjusted, one problem would be to determine which of the instruments may convert. There would also need to be a standard definition of share equivalents to ensure that all entities prepare their calculation in the same manner, in order to achieve comparability. The possibility of conversion may vary from one organisation to the next and it would be difficult to factor this into the calculation. For example, the decision to convert a bond into an ordinary share will depend on the market price of a share as well as the conversion rate. A change in the market price will affect the possibility of conversion and hence the EPS, but this will be difficult to predict and calculations would therefore be unstable.

It is therefore preferable to provide users with both the best case (basic) and the worst case (diluted) EPS scenarios. The true measure of EPS will be somewhere in between. The calculation of these two measures can be more easily prescribed and hence the comparability between organisations can be more carefully controlled.

25 Universal Solutions

(a) (i) **Defined benefit pension scheme**

The employees of a defined benefit scheme will be guaranteed a pension based on their final salary and their number of years of service. Accordingly, the higher paid the employee is on retirement, and the longer the length of service:

- the greater the employee's pension entitlement and
- the greater the liability of the pension fund.

An actuary will advise the company of the cash contributions to be paid into the plan each year in order to provide the promised pensions. This is a complicated calculation involving many estimates such as employee mortality, future increases in salary and expected future investment returns.

The employer has an open-ended liability to make additional contributions should there be a deficit in the defined benefit pension fund. A deficit may arise, for example, if salary levels rise more than expected or staff turnover reduces, increasing service years.

It will be necessary for the actuary to regularly re-value the pension fund's assets and liabilities to assess the surplus or deficit position and revise the company's contributions.

(ii) **The basis to be adopted in measuring scheme assets**

Assets should be measured at their fair value. For quoted securities, for example, this means their mid-market price.

(iii) **The basis to be adopted in measuring scheme liabilities**

Liabilities should be measured on an actuarial basis (i.e. discounted cash flow), using the projected unit credit method.

The projected unit method is an accrued benefits valuation method in which the scheme's liabilities reflect projected future earnings. To derive the scheme liabilities, the expected future pension payments should be discounted at a rate that reflects the time value of money, for example, using an AA (high quality) corporate bond rate.

(iv) **Actuarial gains and losses**

Actuarial gains and losses are deficits or surpluses that arise because:

- events have not coincided with the actuarial assumptions made at the last valuation (experience gains and losses) or
- the actuarial assumptions have changed.

For example, if the actuary forecast that investment returns were going to be 7% in a year, but in fact the return actually achieved was only 5%, this would give rise to an actuarial deficit.

(b) **Workings**

	Pension fund		**Company position**	
	Assets	**Liabilities**	**Expense**	**Statement of financial position**
	$	$	$	$
Opening balance 1 January Year 4	1,000	1,000		0
Interest cost (12% × 1,000)		120	120	
Current service cost		100	100	
Expected return (8% × 1,000)	80		(80)	
Net expense to company				(140)
Contributions to the pension fund	140			140
Benefits paid out	(95)	(95)		
Amounts recorded by company	1,125	1,125		0
Actuarial difference (balance)	25	75		(50)
Closing balance 31 Dec Year 4	1,150	1,200		(50)

Answers:

(i) The charge to profit or loss for the year to 31 December Year 4 is $140.

(ii) There is no net pension surplus or deficit recorded by the company as at 31 December Year 4.

(iii) There is an actuarial loss at 31 December Year 4 of $50. Under IAS 19 there are three possible accounting treatments of this:

1. Immediate recognition in profit or loss
2. Immediate recognition in the statement of changes in equity
3. Deferred recognition under the corridor approach. This would involve recognition, starting in the following period of any amount of the actuarial loss falling outside the corridor (the greater of 10% of opening assets liabilities). The recognition may be spread over the estimated service lives of the employees.

In March 2008 the IASB issued a Discussion Paper in response to recognition that financial information about post-employment benefit promises is unsatisfactory and lacks transparency. A particular concern was the way in which IAS 19 allows entities to delay the recognition of gains or losses on defined benefit schemes due to the 'smoothing features' that it permits. A consequence of the smoothing features of IAS 19 is that there may be misleading figures about liabilities in the statement of financial position.

The Discussion Paper therefore proposed that all changes in the value of plan assets and liabilities should be recognised in the period when they occur (and there should be no deferral of gains or losses through smoothing).

26 IFRS 2

(a) (i) **The need for accounting standard regulation**

Share options are often granted to employees at an exercise price that is higher than the market price of the shares. Therefore, the options have no intrinsic value to the company and, prior to the issue of IFRS 2, these transactions were not generally recognised until such time as the shares were issued. This approach could be seen as resulting in a distortion of reported results between accounting periods and leaving liabilities unrecorded.

In addition, the subject of accounting for share-based payments contains a number of other contentious issues, notably relating to the measurement principles to be applied in recognising the transactions. If employees agree to stay until their options vest, the organisation must recognise the service they will provide in return, but how should this be valued?

IFRS 2 was therefore issued in February 2004 to provide comprehensive guidance on these matters.

(ii) The three types of share based payments

These can be summarised as follows:

Category	Features
Equity-settled share-based payment transactions	The entity pays for goods or services by issuing equity instruments in the form of shares or share options.
Cash-settled share-based payment transactions	The entity incurs a liability for goods or services and the settlement amount is based on the price (or value) of the entity's shares or other equity instruments.
Share based payments with cash alternatives	Transactions where an entity acquires goods or receives services and either the entity or the supplier can choose payment to be a cash amount based on the price (or value) of the entity's shares or other equity instruments, or equity instruments of the entity.

(b) (i) **Assuming all options vest**

31 December Year 5	**Profit and loss**	**Equity**
Expected outcome (at grant date value)		
500 employees × 100 options × $15 fair value	750,000	
3 years to vest	×1/3	
Year 1 charge	250,000	
Balance carried forward		250,000

31 December Year 6	$	
Expected outcome (at grant date value)		
500 × 100 × $15	750,000	
	×2/3	
Recognised by the year end	500,000	
Minus expense previously recognised	(250,000)	
Year 2 charge		250,000
Balance carried forward		500,000

31 December Year 7	$	
Actual outcome (at grant date value)		
500 × 100 × $15	750,000	
Minus expense previously recognised	(500,000)	
Year 3 charge		250,000
Balance at end of year 3		750,000

(ii) **Reflecting revised vesting assumptions**

31 December Year 5	**Profit or loss**	**Equity**
Expected outcome (at grant date value)		
85% × 500 × 100 × $15	637,500	
	×1/3	
Year 1 charge	212,500	
Balance carried forward		212,500

31 December Year 6	$	
Expected outcome (at grant date value)		
88% × 500 × 100 × $15	660,000	
	×2/3	
	440,000	
Minus expense previously recognised	(212,500)	
Year 2 charge		227,500
Balance carried forward		440,000

31 December Year 7	$	
Actual outcome (at grant date value)		
44,300 × $15	664,500	
Minus expense previously recognised	(440,000)	
Year 3 charge		224,500
Balance carried forward		664,500

27 The Lucky Dairy

The cattle

IAS 41 *Agriculture* defines a biological asset as a living animal or plant. It requires that these assets should be measured initially and at the end of each reporting period at their fair value minus estimated point-of-sale costs. The change in fair value is recognised in profit or loss for the period in which it arises. Where the fair value can not be reliably measured, IAS 41 requires that the assets should be measured at cost minus any accumulated depreciation and impairment losses.

Lucky's inventory of cows and heifers represent biological assets, however, the herd of cattle at Dale cannot be fair-valued because of the disease problems. The valuation of Dale's cattle must be considered separately.

The table in the appendix to this report shows that the change in fair value during the year is $1.65m. The notes to the accounts must provide a reconciliation explaining purchases and sales and further changes due to fair value movements.

IAS 41 encourages an entity to analyse this movement into the gain due to physical changes from the cattle being older and hence more valuable and the price changes due to the market value changing with inflation. As illustrated in the appendix, $300,000 of the fair value is attributable to physical changes and $350,000 is due to changes in the market values of cattle.

IAS 41 also requires that disclosure be made as to the physical quantities of each group of biological asset at the end of each period, and so Lucky must disclose the quantities of cows and heifers at 31 May 20X2.

Dale region

Where a market value is not available, as is the case with the Dale cattle and any alternative valuation methods are believed to be unreliable, IAS 41 requires that the biological asset is valued at cost minus accumulated depreciation and impairment losses.

The cattle in the Dale region comprise 20,000 cows and 10,000 heifers, all purchased on 1 June 20X1 when the costs were $50 and $40 respectively. Therefore, the cattle would initially be recorded at cost of $1.4 million.

The fair value minus costs of sale for the cattle is $1 million and their value in use from the discounted future sales of milk is $1.2 million. The recoverable amount is the higher of these two figures, i.e. $1.2 million and so the cattle carrying value must be impaired by $200,000. They will be held in the statement of financial position at $1.2 million until a fair value becomes reliably measurable or until they are held for sale.

Although there are plans to sell the Dale region, IFRS 5 *Non-current assets held for sale and discontinued operations* has strict conditions that must be met before the component to be sold can be identified, re-measured and re-classified as 'held for sale'. The conditions must be met at the end of the reporting period and one key condition is that the appropriate level of management must be committed to the plan. This is not the case as the board did not approve the sale until one month after the year end. If this approval is prior to the 20X2 accounts being approved then disclosures are required in the notes describing the following:

- The assets to be sold
- The facts and circumstances surrounding the sale
- The segment to which these assets are included for segmental reporting purposes.

Milk

IAS 41 requires that the agricultural produce from the biological assets should be measured at the point of harvest at its fair value less any estimated point-of-sale costs. Lucky has 500,000 kilograms of milk in inventory at the year end, which is significantly higher than its normal holding of 50,000 kilograms.

In light of this excessive holding and the disease contracted by some of the purchasers of the milk, an assessment must be made as to whether the milk can

actually be sold and if so, for how much. If the value of the inventory cannot be fully recovered, it must be written down and disclosure must be made given the size of the write down.

Government grant

The promise of government compensation for the drop in the price and consumption of milk can only be recognised as income in profit or loss when the grant becomes receivable. The official government letter confirming the $1.5 million grant was received six days after the year end and so IAS 41 does not permit the income to be recognised in 20X2. It will however be recognised in the 20X3 financial statements.

Legal claims

IAS 37 **Provisions, contingent liabilities and contingent assets** requires that a provision should be made where the entity has a present obligation as a result of a past event and it is believed probable that an outflow of resources will be required to settle the obligation. The sale of the milk by Lucky took place before the year end, and the lawyers believe it is probable that Lucky will be found liable and so a provision for $2million, being the estimated amount to settle the case, should be made.

Lucky hopes that some of this cost may be reimbursed by the government. However, IAS 37 only allows a reimbursement to be recognised where it is virtually certain that the reimbursement will be received. Lucky's lawyers believe that the compensation is only possible and so no asset/ income should be recognised.

Appendix

Cattle at Shire and Ham	$000	$000
Fair value at 1 June 20X1		
- 50,000 2 year old cows at $50		2,500
Fair value at 31 May 20X2		
- 50,000 3 year old cows at $60	3,000	
- 25,000 1 1/2 year old heifers at $46	1,150	
		4,150
Gain resulting from change in fair value		1,650

Analysis of gain

	50,000 cows	25,000 heifers	Change
	$000	$000	$000
Purchases 1 December 20X1			
- 25,000 heifers at fair value $40			1,000
Fair value gain due to change in market price			
- 2 year old cows at $50 1 June 20X1	2,500		
at $55 31 May 20X2	2,750		
			250
- 1 year old heifers at $40 1 June 20X1		1,000	
at $42 31 May 20X2		1,050	
			50
Fair value gain attributable to physical change			
at 31 May 20X2			
- 2 year old cows at $55	2,750		
3 year old cows at $60	3,000		
			250
- 1 year-old heifers at $42		1,050	
1 1/2 year-old heifers at $46		1,150	
			100
Total change in fair value			**$1,650**

28 Cohort

Note for presentation to partner
Subject: Deferred Taxation

The calculation and presentation of deferred tax is considered by IAS 12 **Income taxes**. A company is required to provide deferred tax on all material temporary differences using the full provision method. Temporary differences arise because there is a difference in timing between transactions being reflected in the financial statements and the item being taxed.

In light of the recent acquisitions of Legion and Air, deferred tax must be considered for the group accounts. Additional tax issues arise at the group level that will not have been reflected in the individual entity's accounts and these points are outlined below.

Once the temporary differences have been identified, deferred tax must be provided at the tax rate expected to be effective at the date when the tax is settled. Given this

rate is not known when the differences arise, a provision is made using the rates enacted at that time and the estimate is then confirmed as tax changes arise.

Air

(a) The acquisition of air mid-year gives rise to a number of issues:

(1) ***Intangible asset***

There is some concern that the acquisition of the database of key customers may not be allowed for tax purposes but it has nevertheless been included in the tax calculation on the assumption that a deduction will be allowed by the tax authorities. If this deduction is not allowed, then an additional tax payment will need to be made to the authorities, hence it would be prudent to recognise a liability for this amount (probably classified as current taxation, rather than deferred taxation).

(2) ***Inter-company sales***

When goods are sold between group members, the profits made are seen as unrealised in the group accounts until the items are sold outside of the group. However, the tax authorities tax the individual entities, not the group, and so the profit will be subject to tax at the time of the inter-company sale. The unrealised profit represents the temporary difference on which deferred tax must be provided. The goods were sold at a margin of 33⅓%. Goods sold for $1.8m remain in inventory at the year end, and hence the unrealised profit, and therefore temporary difference, is $0.6m.

(3) ***Unremitted profits***

Un-remitted earnings represent a temporary difference in the group accounts. This is because the tax base is the cost of the investment, yet in the consolidated accounts, this cost is uplifted by the post-acquisition un-remitted profits. IAS 12 requires a provision to be made on this timing difference unless the parent controls the timing of the reversal and it is probable that the difference will not reverse for the foreseeable future. The payment of dividends is under the control of Cohort, but we understand that the intention is to realise these un-remitted earnings through future dividends and hence a provision must be made.

(b) **Legion**

The acquisition of Legion at the start of the year brings further deferred tax issues in the group accounts as outlined below.

(1) ***Fair value through the profit or loss investments***

The fair value adjustment has been reflected in the financial statements, yet the gain is not taxed until the investments are sold. Hence the fair value adjustment of $4m gives rise to a temporary difference upon which deferred tax must be provided. As the gain has been taken to profit or loss rather than other comprehensive income or reserves, the deferred tax must also be expensed to profit or loss.

(2) ***General allowance***

The allowance against the loan portfolio has reduced the carrying value of the loans but the tax relief is not available until the loan is written off,

and hence a temporary difference is created on the provision. As the tax relief will reduce future tax charges, the temporary difference of $2m gives rise to a deferred tax asset. The temporary difference is accounted for even though there is no expectation that the difference will reverse in the immediate future. However, a deferred tax asset can only be reflected to the extent that it is probable that there will be future taxable profits against which the temporary difference can be relieved.

(3) ***Unrelieved tax losses***

When Legion was acquired, it had unused tax losses brought forward which could, in principle, give rise to a deferred tax asset. However, it can only be recognised to the extent that it is believed that the loss can be recovered. Given your belief that there will not be sufficient future profits, the deferred tax can only be partially recognised. If the fortunes of Legion change in the future, the deferred tax asset should then be recognised, leading to a compensating amendment to goodwill.

29 Reporting performance

In relation to the first element of the statement given, it is undoubtedly true that financial reporting is of little value unless it communicates effectively with the recipients of the report and the communication is of little value unless the recipients can understand the information.

The primary user group of the corporate report is seen to be the shareholder/ investor group. Most shareholders are not specialists in accounting and will not be familiar with the conventions adopted or all the terminology used. This point has been put forward as an argument in favour of simplified financial statements and will be developed below. Whether or not one is in favour of simplified accounts, a clear presentation and the absence of unnecessary technical jargon will always be desirable.

Turning now to the second part of the statement, a number of factors have contributed to the increasing length and complexity of companies' financial statements in recent years.

(a) **Implementation of legislative requirements**. In a European context, the EU Regulation regarding the adoption of IFRSs by listed companies in their group accounts is a clear example of entities sharing common accounting policies. This makes it easier for the reader to understand the accounts and to compare the financial statements of different entities

(b) **Changes in the business environment**. Increased overseas activities and fluctuating exchange rates have reinforced the need for disclosure of policies adopted in respect of foreign currency translation. Inflation has prompted disclosure of information relating to the effects of price changes. The 'global' nature of the activities and financing of large companies has led to the need for GAAP reconciliations where companies have dual listings.

(c) **Publication of accounting standards**. As more standards are published, more information is required in company accounts. The effect of this is exaggerated as standard setters tackle more complex areas, such as Financial Instruments (IAS 32/39) and share based payments.

Traditionally, company law has required companies to circulate full statutory accounts to all shareholders who wished to receive them. No account was taken in the legislation of the shareholders' varying abilities to understand the content of those accounts. The problem is now more widely acknowledged, though more often in the context of the information needs of employees rather than the needs of shareholders and other investors. Some companies already produce employee reports, providing financial and employment information to employees in a form they are likely to understand. At the very least, it is essential to ensure that the statutory accounts are no more complicated than they need to be and clear presentation and avoidance of accounting jargon can both contribute to easier understanding.

Some countries allow listed companies to send a summary financial statement (SFS) to those shareholders who do not want (or are indifferent about) full accounts. This measure was not however introduced to make the accounts easier to understand but to reduce the costs of printing and posting the full glossy report to millions of small shareholders. The mandatory contents of the SFS are few and the main exclusions are from the notes. The SFS is in fact required to include a warning that it does not contain enough information to allow a full understanding of the results and state of affairs of the company.

Commenting on the introduction of the SFS, one of the major accounting and auditing practices said 'this approach could merely exacerbate the common misunderstanding that the results and financial position of a highly complex organisation can be encapsulated in simple measures such as EPS and gearing'.

It seems therefore, that instead of making accounts more understandable, the introduction of the SFS indicates that the government and many large companies do not think that most shareholders are really interested in the accounts. The annual reports of many large companies relegate the accounts to the back or to a relatively unattractive supplement, leaving the optimistic words of the chairman and the photographs, pie charts and so on to take pride of place.

A number of arguments can be advanced against the publication of simplified accounts.

(a) Accounting information is, by nature, complex. Companies operate in a complicated and rapidly changing business environment. To gloss over the complexities may present a misleading picture.

(b) Shareholders need to satisfy themselves that the directors have carried out their stewardship function satisfactorily. Simplified accounts may not provide sufficient information for them to do so.

(c) Statute generally insists that financial statements should give a true and fair view and the work of the IASB is also directed towards ensuring that they do. The publication of simplified accounts might be regarded as a lowering of professional standards.

(d) There is a danger that simplified accounts might be used for purposes for which they are not suitable. For example, shareholders or potential investors might be tempted to base investment decisions on them. To an extent, the same difficulty applies with full statutory accounts which also are not

designed primarily to aid investment decisions, but the problem is aggravated in the case of simplified accounts.

(e) Shareholders who find difficulty in understanding full accounts may have recourse to a professional adviser to assist them.

30 Rowsley

Introduction

All four scenarios relate to the rules of IAS 37 **Provisions, contingent liabilities and contingent assets**. In each scenario, the key issue is whether or not a provision should be recognised.

Under IAS 37, a provision should only be recognised when three conditions are met:

- there is a present obligation as a result of a past event; and
- it is probable that a transfer of economic benefits will be required to settle the obligation; and
- a reliable estimate can be made of the amount of the obligation.

Factory closure

As the factory closure changes the way in which the business is conducted (it involves the relocation of business activities from one part of the country to another) it appears to fall within the IAS 37 definition of a restructuring.

The key issue here is whether the group has an obligation at the end of the reporting period to incur expenditure in connection with the restructuring. There is clearly no legal obligation, but there may be a constructive obligation. IAS 37 states that a constructive obligation only exists if the group has created valid expectations in other parties such as employees, customers and suppliers that the restructuring will actually be carried out. As the group is still in the process of drawing up a formal plan for the restructuring and no announcements have been made to any of the parties affected, there cannot be an obligation to restructure. A board decision alone is not sufficient. Therefore no provision should be made.

If the group starts to implement the restructuring or makes announcements to those affected after the end of the reporting period but before the accounts are approved by the directors it may be necessary to disclose the details in the financial statements as a non-adjusting post event after the reporting period in accordance with IAS 10. This will be the case if the restructuring is of such importance that non-disclosure would affect the ability of the users of the financial statements to reach a proper understanding of the group's financial position.

Operating lease

The lease contract appears to be an 'onerous contract' as defined by IAS 37 as the unavoidable costs of meeting the obligations under it exceed the economic benefits expected to be received from it.

Because the enterprise has signed the lease contract there is a clear legal obligation and the enterprise will have to transfer economic benefits (pay the lease rentals) in settlement. Therefore, the group should recognise a provision for the net present value of the remaining lease payments.

In principle, a corresponding asset may be recognised in relation to the future rentals expected to be received, if these receipts are virtually certain. The current arrangement with the charity generates only nominal rental income and so the asset is unlikely to be material enough to warrant recognition. The chances of renting the premises at a commercial rent are less than 50% and so no further potential rent receivable may be taken into account as the outcome is not virtually certain and so recognition would not be prudent.

The financial statements should disclose the carrying amount of the onerous lease provision at the end of the reporting period, a description of the nature of the obligation and the expected timing of the lease payments. Disclosure should also be made of the contingent assets where the amount of any expected rentals receivable from sub-letting are material and the likelihood is believed probable.

Legal proceedings

It is unlikely that the group has a present obligation to compensate the customer; therefore no provision should be recognised. However, there is a contingent liability. Unless the possibility of a transfer of economic benefits is remote, the financial statements should disclose a brief description of the nature of the contingent liability, an estimate of its financial effect and an indication of the uncertainties relating to the amount or timing of any outflow.

Environmental damage

It is clear that there is no legal obligation to rectify the damage. However, through its published policies, the group has created expectations on the part of those affected that it will take action to do so. There is, therefore, a constructive obligation to rectify the damage and a transfer of economic benefits is probable.

The group must recognise a provision for the best estimate of the cost. As the most likely outcome is that more than one attempt at re-planting will be needed, the full amount of $30 million should be provided. The expenditure will take place some time in the future, and so the provision should be discounted at a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the liability.

The financial statements should disclose the carrying amount at the end of the reporting period, a description of the nature of the obligation and the expected timing of the expenditure. The financial statements should also give an indication of the uncertainties about the amount and timing of the expenditure.

31 Engina

Report to: The Board of Directors of Engina
From: XXXXXXXX
Date:
Subject: **Related party transactions**

Related party transactions

This report addresses the disclosure requirements of IAS 24 *Related Party Disclosures* with regard to Engina. IAS 24 requires that all entities, listed or otherwise, provide disclosure of such transactions as they may affect the assessments made by users of an entity's operations, risks and opportunities.

It is understood that Engina is reluctant to disclose related party transactions because they are believed to be both politically and culturally sensitive, however the following advice must be followed in order to secure a listing/stock exchange registration.

IAS 24: Scope and purpose

IAS 24 does not provide any exclusion from its scope, and so disclosure must be made. Related party transactions are a normal feature of business, but an entity's ability to succeed in business is often affected by the strength of its relationship with other entities and individuals. The results of the entity may be affected if these relationships were to be terminated. For example, the ability of an entity to trade in a particular country may only be possible because of the presence of its subsidiary in that local market. Similarly, prices and terms of trade may be preferential because of the strength of the relationship. Therefore IAS 24 requires knowledge of these transactions to be provided to the reader of the financial statements.

The results of an entity may be affected even if the related party transactions do not occur. A parent may cease trading with a business partner upon acquisition of a subsidiary that can supply similar products.

Disclosure must be given irrespective of whether the transactions took place at an arm's length value, as such transactions may still be lost if the relationship is terminated. Hence the knowledge of such transactions provides valuable information to investors and regulators.

Disclosure requirements

IAS 24 requires that, at a minimum, the following disclosures must be given:

- The amount of the transaction
- The amount of any outstanding balance and the terms, conditions and guarantees attached
- Allowance for any irrecoverable debts or amounts written off in the period
- Disclosure that transactions were at an arm's length value can only be given if this information can be substantiated.

Disclosures relevant to Engina

The following outlines the related party disclosure requirements for the three transactions you have specifically requested comment on. It is your responsibility to bring any further related party transactions to our attention in order that they can also be incorporated into your financial statement disclosures.

(a) **Sale of goods to directors**

The sale of goods and a company car to Mr Satay both constitute related party transactions, due to Mr Satay's position as a director of Engina. IAS 24 requires disclosure of all related party transactions with key management personnel. However, accounting standards only apply to material transactions. An item is considered material where knowledge of that transaction might influence the decisions of a user of the financial statements. Materiality is not just a matter of size, as small transactions with a director may still be of relevance to an investor if the transaction is material to the director, despite not being material to the entity.

In the situation described, the transactions amount to $600,000 of sales and the sale of a company car for $45,000 (market value $80,000). In terms of value these transactions appear not to be material to Engina and neither do they appear to be material in value to Mr Satay. However, given the sensitive nature of transactions with directors, and especially senior directors like Mr Satay, the transactions should be disclosed in the financial statements in accordance with good corporate governance practice.

Significant contracts with directors, such as these with Mr Satay, may also require disclosure by the local Stock Exchange.

(b) **Hotel property**

The sale of the hotel to the brother of Mr Soy, constitutes a related party transaction because of Mr Soy's status as Managing Director. The property seems to have been sold at below market price and IAS 24 requires disclosure of any information surrounding a transaction which will allow the reader to understand its impact on the financial statements.

The hotel had a carrying value of $5m, but given the fall in market values it should have been written down to its recoverable amount in accordance with IAS 36 **Impairment**. Recoverable amount is measured at the higher of value in use ($3.6m) and fair value minus costs of sale ($4.3 - 0.2m). Hence the property should have been recorded in the statement of financial position at $4.1m.

As the property was sold at $100,000 less than this impaired value, disclosure of this fact should be made, together with any other information relevant to the reader, such as the reason for the sale in light of the expected decline in prices in the future.

(c) **Mr Satay**

Mr Satay has investments in 100% of the equity of Car and 80% of the equity of Wheel. In turn, Wheel owns 100% of Engina. Engina and Wheel are related because of their parent-subsidiary relationship. In addition, because all three entities are under the common control of Mr Satay, IAS 24 also considers Engina and Car to be related. Therefore, the transactions between Engina and both Wheel and Car are related party transactions.

The transactions will need to be disclosed in the individual financial statements of all three entities. In the group accounts, all intra-group transactions are cancelled on consolidation, and so disclosure need not be made at this level.

Further disclosure requirements of director's interests in the equity of Engina may be necessary under local Companies Acts requirements and Stock Exchange rules.

32 Property Venture

(a) **Report**

To: The Directors of Property Venture

From: AN Advisor

Subject: **Additional $5,000,000 investment in Exceptional Properties (EP)**

EP has undergone significant growth and change in recent years. Using the group statements of cash flows for 20X3 and 20X4, together with the group statements of comprehensive income for these periods, there would appear to be cause for concern about the viability of the proposed additional investment.

The statements appear to show that a considerable amount of expansion has taken place over the past two years with insufficient effort being made to raise the appropriate funds to finance this expansion. This situation has been referred to as 'over-trading '

It also appears that working capital control has been weak in this period of change.

Analysing the difference between pre-tax profits and net cash outflow from operating activities shows:

	20X4	**20X3**
	$000	$000
Profit before tax	2,311	3,733
Items included in profit but disclosed separately in statement of cash flows		
Associates	412	(47)
Interest receivable	(335)	(383)
Interest payable	2,056	581
Operating profit	4,444	3,884
Depreciation	1,013	539
Profit/loss on non-current assets	173	(64)
Increase in work in progress	(4,575)	(22,226)
(Increase)/Decrease in other elements of working capital (balancing figure)	(14,860)	10,672
Net cash outflow from operating activities	(13,805)	(7,195)

20X3 saw a large increase in WIP and own work capitalised and 20X4 saw a large increase in other elements of working capital. Part of this increase arose from the entity's accounting policy of capitalising interest payable to WIP.

Together with interest payments, these summaries clearly show that the operations of the company are not going to produce a surplus from which the $5,000,000 can be repaid. However, the asset revaluation surplus in 20X4 indicates that there might be assets on which a loan could be secured and this option should be considered if the finance is to be provided.

The $6,508,000 provided in 20X4 appears to have been used (together with the sale of fixed assets) to finance the very large increase in working capital. You should ensure that this was the reason given for raising the finance and consider this when making your decision on the future $5,000,000 share capital.

The size of the finance being discussed appears to be dwarfed by the size of operations now undertaken by the group and there is obviously a problem with operations being self-financing. Expansion on this scale and in this form will probably lead to a very serious liquidity problem for the group. A review of the way operations are financed on a continuing basis is clearly essential before any decision on the increase in share capital can be taken.

(b) The report above could be extended and improved if the following information were available:

(i) Detailed group statements of financial position, with itemised analysis of the assets and liabilities.

(ii) Capital structure of EP

(iii) Forecast financial statements for EP

(iv) Business plans over the past periods and for the future years

(v) Actual to budget comparison over the past two years

(vi) Analysis of the spend of the $6,508,000 in 20X4

(vii) Segmental (diversified) details of revenue and profitability, especially for risky overseas operations.

(viii) Planned use of the $5,000,000 share capital proceeds

(ix) A list of payables, showing an analysis by age

(x) Revisions to accounting policies over the past year.

33 Timber Products

(i) **Factoring**

The transaction represents a factoring arrangement in that the receivables of Timber Products have been sold to release cash for the company. In determining the accounting treatment, it is necessary to apply the rules of IAS 39 to establish whether the receivable should be derecognised.

Timber Products has transferred the contractual rights to receive cash flows from the receivables, hence IAS 39 requires an evaluation as to the extent to which it has retained the risks and rewards of ownership. The factoring arrangement does not allow Timber Products the right to re-acquire the asset,

nor is it obliged to effectively provide a lender's return to Ready Support. Therefore, the receivable should be derecognised in the books of Timber Products and replaced with the cash proceeds and a financial asset for the remaining proceeds potentially receivable from the debts in the future. If there are doubts about whether this receivable is collectable, Timber Products would need to make an impairment write-down of the financial asset.

The guarantee of $200,000 offered by Timber Products should be reflected as a financial liability in the year end statement of financial position.

Extract from statement of financial position	$m
Financial asset (10% × $15m)	1.5
Cash (90% × $15m)	13.5
Financial liabilities	(0.2)

Extract from statement of comprehensive income (profit or loss)	
Loss on derecognition (see working)	0.2
Working:	
Proceeds (cash + financial asset)	15
Derecognition of receivable	(15)
Recourse guarantee	(0.2)
Loss	(0.2)

(ii) **Re-sale of imported timber**

For a sale and repurchase transaction, IAS 18 **Revenue** requires that the terms of the transaction be considered to see whether, in substance, the seller has transferred the risks and rewards of ownership of the inventory to the buyer. As Timber Products has contracted to buy back the timber, it would appear that the company has retained the risks and rewards, even though legal title has transferred. Therefore, the transaction must be viewed as a financing agreement, secured on the inventory.

The sale will therefore not be recorded and the inventory will remain in the statement of financial position. The proceeds from the sale will be reflected as a financial liability within non-current liabilities. The $16.1m finance cost will be spread over the 5 year financing period using the effective rate of interest. In accordance with IAS 39 *Financial Instruments* the financial liability will be recognised at amortised cost. Therefore, each year there will be an interest element of charged to the expenses and added to the liability.

	$m
Extract from statement of financial position	
Inventory	40.0
Non-current liabilities ($40m + $2.8m interest)	42.8

Notes: Non-current liabilities

The loan is secured by inventory of $40m at cost

Charge in profit or loss

Interest payable (7% of $40m – see working)	2.8m

Workings

Interest represents 40% (16.1÷ 40) of the nominal value over the five years. Using compound interest tables, this equates to 7% per annum.

(iii) **Consignment inventory**

The issue to be determined is whether the sale should be recognised on delivery or later and hence whether the inventory should be recognised in the statement of financial position of Timber Products at the end of the reporting period.

IAS 18 **Revenue** requires that the sale of goods be recognised when:

- the risks and rewards have been transferred
- the entity retains no managerial involvement associated with ownership
- the amount of revenue can be measured reliably;
- it is probable that benefits will flow to the entity, and
- the associated costs can be measured reliably.

The main condition is therefore whether, at the point of delivery, Timber Products has transferred the significant risks and rewards. The terms suggest that if this is the case, the retailer only pays the trade price at the date of delivery, rather than a price adjusted for market movements over the time to acceptance. The payment by the retailer for insurance and carriage costs also supports that the risks have been transferred. On the other hand, the retailer can return the goods in the six months after delivery, which returns the risk of obsolescence to Timber Products. However, this right has not been exercised.

On balance, it appears that the risks and rewards transferred on delivery and therefore the sale should be recorded on this date and the inventory should be derecognised and excluded from the statement of financial position of Timber Products.

A provision should be recognised for returns based on past experience.

	$m
Extract from statement of financial position	
Receivables	4.0
Extract from statement of comprehensive income (profit or loss)	
Sales revenue	10
Services revenue	0.05
Cost of sales ($7.5m + $0.015m + $0.01m)	(7.525)

(iv) **Factory**

Legally, Inter is a wholly-owned subsidiary of Offshore Banking. However, the commercial effect of the factory sale to Inter shows that the operations of Inter appear to be controlled by Timber Products. Timber Products participates in the surplus profits of Inter after the payment of a fixed return to its legal owner. Offshore Banking has no other beneficial interest in the operations of Inter and is simply a capital provider.

Under SIC 12, Inter appears to be a special purpose entity and as a result, the factory held by Inter will appear as an asset in the consolidated accounts of Timber Products. The factory will be valued at its cost to the group of $8.5m being the cost to the group, and the profit on disposal will be cancelled out. The fee paid by Inter to Timber Products to continue to operate the factory will also be cancelled as an intra group transaction.

The loan interest payable to Offshore Banking is an external transaction to the Timber Group and so will appear at $1.5m in the profit or loss section of the consolidated statement of comprehensive income. The loan of $10m owed by Inter to Offshore Banking will appear as a payable in the consolidated statement of financial position.

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