Financial Reporting

Study Text



Institute of Chartered Accountants of Nigeria





The Institute of Chartered Accountants of Nigeria (ICAN) First edition published by Emile Woolf International Bracknell Enterprise & Innovation Hub Ocean House, 12th Floor, The Ring Bracknell, Berkshire, RG12 1AX United Kingdom Email: info@ewiglobal.com www.emilewoolf.com

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Syllabus

SKILLS LEVEL

FINANCIAL REPORTING

Purpose

In this element the accounting from the foundation level is taken up a level into financial accounting and reporting in the context of more complex events and transactions with a greater emphasis on compliance with regulations including International Accounting Standards and generally accepted accounting practices in the private sectors. Students will be expected to demonstrate an understanding of and competence in financial statement analysis and basic analysis of choices in accounting treatments.

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Regulatory framework

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- 2 Regulatory framework for accounting in Nigeria
- 3 Chapter review

INTRODUCTION

Purpose

In this element the accounting from the foundation level is taken up a level into financial accounting in the context of more complex events and transactions with a greater emphasis on compliance with regulations including International Accounting Standards and generally accepted accounting practices in the private sectors.

Students will be expected to demonstrate an understanding of and competence in financial statement analysis and basic analysis of choices in accounting treatments.

Competencies

1	Accounting and reporting concepts, frameworks and practices
1(a)	Explain the importance of a regulatory framework for accounting and reporting
2	Preparing separate financial statements
2(a)	Identify and state the circumstances in which private sector entities are required to prepare and present statutory financial statements.
2(b)	Identify and state the laws, regulations accounting standards and other requirements that govern the production of financial statements by such entities.
2(c)	Draft and compile financial statements, or extracts from them, of an entity in accordance with its chosen policies and in accordance with IFRS and local law.
2(d)	Assess the circumstances in which the use of IFRS for companies may not be required.

Exam context

This chapter explains aspects of the Nigerian regulatory framework for financial reporting

By the end of this chapter you will be able to:

- Explain the sources of accounting regulation in Nigeria
- Outline the roadmap for conversion to IFRS in Nigeria

1 THE REGULATORY FRAMEWORK

Section overview

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

1.1 The need for regulation

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

Other reasons are as follows:

- People external to businesses 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. 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.

1.2 Sources of regulation

The main sources of regulation are:

- Accounting standards;
- Company law; and
- □ 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. International Financial Reporting Standards are used in Nigeria.

Company law varies from country to country, but typically also 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. The main company law statute in Nigeria is the Companies and Allied Matters Act 2004.

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.

1.3 Principles and rules

Company law consists of detailed rules. Accounting standards may be rulesbased 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 Nigeria, 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 the content of financial statements and accounting practice may be prescribed in great detail by company law with little scope for individual judgement. Because the existing framework is based on detailed rules, users of the financial statements tend to view principles-based accounting as insufficiently rigorous.

2 REGULATORY FRAMEWORK FOR ACCOUNTING IN NIGERIA

Section overview

- Accounting regulation in Nigeria
- Companies and Allied Matters Act (CAMA) 2004 Introduction to accounting requirements
- Standard setting in Nigeria
- Adoption of IFRS in Nigeria
- Summary: Which schedules and standards?
- International Financial Reporting Standards

2.1 Accounting regulation in Nigeria

The objective of financial statements is to provide information about the financial position, financial performance and cash flows of an entity that is useful to a wide range of users in making economic decisions.

2.2 Companies and Allied Matters Act (CAMA) 2004 – Introduction to accounting requirements

CAMA is the primary source of company law in Nigeria. Amongst other things it establishes the requirements for financial reporting by all companies in Nigeria.

Requirement to keep accounting records

Section 331 rules that:

- Every company shall cause accounting records to be kept.
- □ The accounting records shall be sufficient to show and explain the transactions of the company and shall be such as to:
 - disclose with reasonable accuracy, at any time, the financial position of the company; and
 - enable the directors to ensure that financial statements prepared comply with the requirements of the Act with regard to form and content.
- The accounting records must, contain:
 - entries from day-to-day of all sums of money received and expended by the company, and the matters in respect of which the receipts and expenditure take place, and
 - a record of assets and liabilities of the company.
- □ If the business of the company involves dealing in goods, the accounting records shall contain:
 - statements of stock held by the company at the end of each accounting year of the company;
 - all statements of stock takings from which any such statement of stock has been or is to be prepared; and
 - except in the case of goods sold by way of ordinary retail trade, statement of all goods sold and purchased, showing the goods and

the buyers and sellers in sufficient detail to enable all these to be identified.

This section also states that the balance sheet must give a true and fair view of the state of affairs of the company as at the year end and the profit and loss account must give a true and fair view of the profit or loss of the company for the year.

General requirements as to financial statements

Section 334 places a duty on directors to prepare annual financial statements each year.

These statements must include:

- a statement of accounting policies;
- a balance sheet (statement of financial position);
- a profit and loss account (statement of comprehensive income);
- notes on the accounts;
- the auditors' reports;
- □ the directors' report;
- a value added statement for the year;
- a five year financial summary; and
- in the case of a holding company, the group financial statements.

Form and content of financial statements

Section 335 ruled that financial statements must comply with the requirements of the second schedule to the act with respect to their form and content.

The section continued to say that financial statements must also comply with accounting standards laid down in the Statements of Accounting Standards issued from time to time by the Nigerian Accounting Standards Board which is constituted by the Minister.

In June 2011 Financial Reporting Council of Nigeria Act, No. 6, 2011 replaced the Nigerian Accounting Standards Board and in effect resulted in the replacement of Statements of Accounting Standards by International Financial Reporting Standards. This is explained in more detail in the next section.

2.3 Standard setting in Nigeria

Nigerian Accounting Standards Board (NASB)

The Nigerian Accounting Standards Board (NASB) which came into being in 1982 was an independent body which was previously responsible for the development and issuance of Nigerian accounting standards. These were called *Statements of Accounting Standards*.

The standards were given legal authority in Nigeria by section 335 of the Companies and Allied Matters Act 1990. This section required that *"financial statements …shall comply… with the accounting standards laid down in the Statements of Accounting Standards issued from time to time by the Nigerian Accounting Standards Board to be constituted by the Minister …."*

The Nigerian Accounting Standards Board was formally established as a parastatal in 1992.

Definition: Parastatal

Noun: A company or agency owned or controlled wholly or partly by the government

Adjective: Of an organization or industry, having some political authority and serving the state indirectly (e.g. a parastatal organisation).

The Nigerian Accounting Standards Board Act No. 22, 2003 clarified the status, authority and responsibilities of the board.

Financial Reporting Council of Nigeria

In June 2011 Financial Reporting Council of Nigeria Act, No. 6, 2011 repealed the Nigerian Accounting Standards Board Act No. 22, 2003. This new act resulted in the Nigerian Accounting Standards Board being replaced by the Financial Reporting Council of Nigeria (FRCN).

The Financial Reporting Council of Nigeria is a federal government parastatal under the supervision of the Federal Ministry of Industry, Trade and Investment.

The FRCN's main objects, as defined in the FRC Act, are:

- □ To protect investors and other stakeholder's interest;
- To give guidance on issues relating to financial reporting and corporate governance to professional, institutional and regulatory bodies in Nigeria;
- To ensure good corporate governance practices in the public and private sectors of the Nigerian economy;
- To ensure accuracy and reliability of financial reports and corporate disclosures, pursuant to the various laws and regulations currently in existence in Nigeria;
- To harmonise activities of relevant professional and regulatory bodies as relating to corporate governance and financial reporting;
- to promote the highest standards among auditors and other professionals engaged in the financial reporting process;
- To enhance the credibility of financial reporting; and
- □ To improve the quality of accountancy and audit services, actuarial, valuation and corporate governance standards.

The FRCN is structured into a series of directorate to allow it to fulfil its many responsibilities. The directorates are:

- Directorate of Accounting Standards Private Sector
- Directorate of Accounting Standards Public Sector
- Directorate of Auditing Practice Standards
- Directorate of Actuarial Standards
- Directorate of Valuation Standards
- Directorate of Inspection and Monitoring
- Directorate of Corporate Governance

Directorate of Accounting Standards – Private Sector

The FRCN is responsible for, among other things, developing and publishing accounting and financial reporting standards to be applied in the preparation of financial statements of public entities in Nigeria; and for related matters.

To this end the *Directorate of Accounting Standards* has the following responsibilities:

- To develop accounting and financial reporting standards to be observed in the preparation of financial statements in the private sector and small and medium scale enterprises;
- □ To promote the general acceptance and adoption of such standards by preparers and users of financial statements;
- To promote compliance with the accounting standards developed or reviewed by the Directorate;
- □ To review from time to time the accounting standards developed in line with the prevalent social, economic and political environment;
- □ To promote compliance with the accounting and financial reporting standards adopted by the Council;
- To promote, in the public interest, accounting and financial reporting standards to be observed in the preparation of financial statements of public interest entities; and
- To perform such other duties which in the opinion of the Board are necessary or expedient to ensure the efficient performance of the functions of the Council.

The FRCN is overseeing the convergence of Nigerian GAAP to IFRS. A plan has been constructed (known as a roadmap) to set out the route to conversion. This roadmap is structured as several phases with each phase requiring certain categories of companies to comply with IFRS by a given date.

2.4 Adoption of IFRS in Nigeria

Adoption of IFRS in Nigeria is proceeding in the following phases:

Phase 1: Significant public interest entities and publicly listed entities

Entities in this category include:

- Government business entities
- Entities that have equity or debt instruments listed and traded in domestic markets, foreign markets or in over the counter trades.
- All other organisations which are required by law to file returns with regulatory authorities (this excludes private companies that routinely file returns only with the Corporate Affairs Commission and Federal Inland Revenue Service). This category will include private entities involved in financial services.
- All entities in this category must adopt IFRS from the periods ending after 1 January 2012.

Phase 2: All other public interest entities

These are unquoted private companies which are of significant public interest because of the nature of their business, size, number of employees etc.

All entities in this category must adopt IFRS from the periods ending after 1 January 2013.

Phase 3: Small and medium sized entities (SMEs)

This refers to entities that may not have public accountability and have the following characteristics:

- Their equity and debt instruments are not traded or in the process of becoming traded.
- They do not hold assets in a fiduciary capacity for a broad group of outsiders as one of their primary businesses
- Their annual turnover (revenue) is not more than ₩500 million or such amount as might be fixed by the Corporate Affairs Commission.
- □ Their total assets value is not more than ₩200 million or such amount as might be fixed by the Corporate Affairs Commission.
- □ They do not have foreign board members
- No members of the entity are a government, government agency, government corporation or a nominee of any such body.
- The directors hold not less than 51% of its equity share capital

All entities in this category must use the IFRS for SMEs from the periods ending after 1 January 2014.

Entities that do not meet the IFRS for SMEs criteria must report using the Small and Medium-sized Entities Guidelines on Accounting (SMEGA) Level 3 issued by the United Nations Conference on Trade and Development (UNCTAD).

2.5 Summary: Which schedules and standards?

Entity	Which standards?	Date
Significant public interest entities and publicly listed entities	Full IFRS	Periods ending after 1 January 2012
Other public interest entities	Full IFRS	Periods ending after 1 January 2013
Small and medium sized entities	IFRS for SMEs	Periods ending after 1 January 2014

Comment on Nigerian Accounting Standards

Nigerian accounting standards have been replaced by International Financial Reporting Standards.

However, Nigerian standards included industry specific rules which are not found in IFRS. Companies in the industries covered are expected to continue to apply these rules (insofar as they do not conflict with IFRS). Such relevant standards include:

- SAS 14: Accounting in the petroleum industry: Down-stream activities
- SAS 17: Accounting in the petroleum industry: Up-stream activities
- □ SAS 25: Telecommunications activities)

2.6 International Financial Reporting Standards

The International Accounting Standards Committee (IASC) was established in 1973 to develop international accounting standards with the aim of harmonising accounting procedures throughout the world.

The first *International Accounting Standards* (IASs) were issued in 1975. The work of the IASC was supported by another body called the Standing Interpretation Committee. This body issued interpretations of rules in standards when there was divergence in practice. These interpretations were called Standing Interpretation Committee Pronouncements or SICs.

In 2001 the constitution of the IASC was changed leading to the replacement of the IASC and the SIC by new bodies called the International Accounting Standards Board (IASB) and the International Financial Reporting Interpretations Committee (IFRIC). This body has since been named the International Financial Reporting Standards Interpretations Committee (IFRSIC).

The IASB adopted all IASs and SICs that were extant at the time but said that standards written from that time were to be called *International Financial Reporting Standards* (IFRS). Interpretations are known as IFRICs.

The term IFRS is also used to refer to the whole body of rules (i.e. IAS and IFRS in total).

Published by the IASC
(up to 2001)Published by the IASC
(from 2001)Accounting standardsIASs

Thus IFRS is made up as follows:

Interpretations

Note that many IASs and SICs have been replaced or amended by the IASB since 2001.

SICs

International accounting standards cannot be applied in any country without the approval of the national regulators in that country. All jurisdictions have some kind of formal approval process which is followed before IFRS can be applied in that jurisdiction.

Note that interpretations are not examinable at this level.

The following page sets out a list of standards so that you can appreciate the breadth of the GAAP. Not all of these documents are examinable at this level. Those that are examinable are indicated in the list. Please note that many of the documents examinable at this level will be examinable in more detail in later papers.

IFRICs

Standard	Applicable in Nigeria?	Examinable at this level?
IAS 1 – Presentation of Financial Statements	Yes	Yes
IAS 2 – Inventories	Yes	Yes
IAS 7 – Cash Flow Statements	Yes	Yes
IAS 8 – Accounting Policies, Changes in Accounting Estimates and Errors	Yes	Yes
IAS 10 – Events occurring after the reporting period	Yes	Yes
IAS 11 – Construction Contracts	Yes	Yes
IAS 12 – Income Taxes	Yes	Yes (in part)
IAS 16 – Property, Plant and Equipment	Yes	Yes
IAS 17 – Leases	Yes	Yes
IAS 18 – Revenue	Yes	Yes
IAS 19 – Employee Benefits	Yes	
IAS 20 – Accounting for Government Grants and Disclosure of Government Assistance	Yes	Yes
IAS 21 – The Effects of Changes in Foreign Exchange Rates	Yes	
IAS 23 – Borrowing Costs	Yes	Yes
IAS 24 – Related Party Disclosures	Yes	Yes
IAS 26 – Accounting and Reporting by Retirement Benefit Plans	Yes	
IAS 27 – Separate Financial Statements	Yes	Yes
IAS 28 – Accounting for Investments in Associates and Joint ventures	Yes	Yes
IAS 29 – Financial Reporting in Hyperinflationary Economies	Not relevant in Nigeria	
IAS 32 – Financial Instruments: Presentation	Yes	Yes
IAS 33 – Earnings Per Share	Yes	Yes
IAS 34 – Interim Financial Reporting	Yes	
IAS 36 – Impairment of Assets	Yes	Yes
IAS 37 – Provisions, Contingent Liabilities and Contingent Assets	Yes	Yes
IAS 38 – Intangible Assets	Yes	Yes
IAS 39 – Financial Instruments: Recognition and Measurement	Yes	Yes
IAS 40 – Investment Property	Yes	Yes
IAS 41 – Agriculture	Yes	

Standard	Applicable in Nigeria?	Examinable at this level?
IFRS 1 – First time adoption of IFRS	Yes (subject to specific guidance issued by FRCN)	
IFRS 2 – Share-based payment	Yes	
IFRS 3 – Business combinations	Yes	Yes
IFRS 4 – Insurance contracts	Yes	
IFRS 5 – Non-current assets held for sale and discontinued operations	Yes	Yes
IFRS 6 – Exploration for and evaluation of mineral resources	Yes	
IFRS 7 – Financial Instruments: Disclosures	Yes	Yes
IFRS 8 – Operating segments	Yes	Yes
IFRS 9 – Financial Instruments	Yes	
IFRS 10 – Consolidated financial statements	Yes	Yes
IFRS 11 – Joint arrangements	Yes	
IFRS 12 – Disclosure of interests in other entities	Yes	
IFRS 13 – Fair value measurement	Yes	
IFRS for SMEs	Yes	

3 CHAPTER REVIEW

Chapter review

Before moving on to the next chapter check that you now know how to:

- Explain the sources of accounting regulation in Nigeria
- Outline the roadmap for conversion to IFRS in Nigeria



Accounting and reporting concepts, frameworks and practices

Contents

- 1 Constitution and objectives of the IASC Foundation and the IASB
- 2 A conceptual framework for financial reporting
- 3 The IASB Conceptual Framework
- 4 Qualitative characteristics of useful financial information
- 5 The elements of financial statements
- 6 Recognition in the financial statements
- 7 Accounting concepts
- 8 Bases of accounting
- 9 Measurement and capital maintenance
- 10 Fair presentation
- 11 Chapter review

INTRODUCTION

Purpose

In this element the accounting from the foundation level is taken up a level into financial accounting in the context of more complex events and transactions, with a greater emphasis on compliance with regulations including International Accounting Standards and generally accepted accounting practices in the private sectors.

Competencies

1	Accounting and reporting concepts, frameworks and practices
1(b)	Explain the objectives and limitations of financial statements using appropriate examples or using a given scenario
1(d)	Identify and present the financial effects of accounting for events and transactions under the IASB Conceptual Framework
1(e)	Identify, present and explain the differences between financial statements prepared using accruals and cash bases
1(f)	Identify and explain the break up basis of accounting
1(g)	Identify, present and explain to professional accountants or general users the different bases of measurement or of capital and capital maintenance that may be used under accruals based accounting.
1(h)	Explain the meaning of true and fair or fairly presented in relation to financial reporting.

Exam context

This chapter explains each of the above.

By the end of this chapter you will be able to:

- Explain the objectives of financial statements
- List and explain the components of the conceptual framework
- Explain the difference between the accruals, cash and break up basis of accounting
- Prepare simple cash and break up basis financial statements
- Explain the measurement bases available under IFRS
- Explain and illustrate the capital maintenance concepts described in the conceptual framework
- Explain the meaning of true and fair or fairly presented

1 CONSTITUTION AND OBJECTIVES OF THE IASC FOUNDATION AND THE IASB

Section overview

- The IASC Foundation
- Structure of the IFRS Foundation
- The International Accounting Standards Board (IASB)
- The IFRS Interpretations Committee (IFRSIC)
- The IFRS Advisory Council (IFRSAC)
- IFRSs and IASs

1.1 The IASC Foundation

This is explained in the Preface to International Financial Reporting Standards

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 foundation is now known as the IFRS Foundation

The 22 Trustees of the IFRS 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 IFRS Foundation, and is accountable to the Trustees.

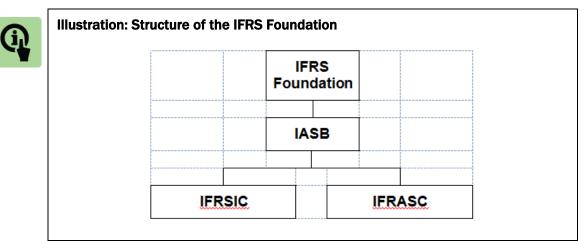
The objectives of the IFRS Foundation

The objectives of the IFRS 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.

1.2 Structure of the IFRS Foundation

The current structure of the IFRS Foundation is as follows:



1.3 The International Accounting Standards Board (IASB)

The IASB is responsible for developing international accounting standards.

The IASB consists of 14 members, all with a high level of 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 nine 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 IFRS Interpretations Committee (IFRSIC).

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.

1.4 The IFRS Interpretations Committee (IFRSIC)

The role of IFRSIC 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 Conceptual Framework
- publish draft Interpretations for public comment. After studying responses to the draft Interpretation, it will obtain IASB approval for a final (published) Interpretation (an IFRIC)

1.5 The IFRS Advisory Council (IFRSAC)

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

1.6 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'.

The IASB has no power to enforce its standards. 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.

2 A CONCEPTUAL FRAMEWORK FOR FINANCIAL REPORTING

Section overview

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

2.1 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, UK GAAP and Nigerian GAAP).

Many countries have now adopted International Financial Reporting Standards or IFRSs, sometimes called international accounting standards. It is now fairly common to refer to the totality of the rules as IFRS or IAS.

2.2 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.

The International Accounting Standards Committee (the predecessor of the IASB) issued a conceptual framework document in 1989. This was called the *Framework for the Preparation and Presentation of Financial Statements* and was adopted by the IASB. It is comprised of the following sections:

- The objective of financial statements (now replaced see below)
- Underlying assumptions of financial statements
- Qualitative characteristics of financial statements (now replaced see below)
- □ 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.

The IASB has been working closely with FASB (the US standard setter) on a wide range of projects with the aim of converging IFRS and US GAAP. One of the projects has had the aim of producing a conceptual framework common to each GAAP.

The new conceptual framework is being developed on a chapter by chapter basis. Each chapter is being released as an exposure draft and then, subject to comments received, released as the final version. To date, two chapters have been finalised and these replace the sections on "*The objective of financial statements*" and "*Qualitative characteristics of financial statements*" from the original document.

To avoid confusion the IASB has published a new document called *"The conceptual framework for financial reporting"* which, includes the new chapters and those retained from the original framework.

The new document is made up of the following sections:

- **Chapter 1** The objective of general purpose financial statements.
- □ **Chapter 2** The reporting entity (to be added currently in release as an exposure draft).
- **Chapter 3** Qualitative characteristics of financial information.
- □ **Chapter 4** The Framework (1989): The remaining text (These sections are unchanged as of yet).
 - Underlying assumptions 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.

The original document was known as **The Framework**. This text will describe the new document as **The Conceptual Framework**. Note that the changes are not fundamental in terms of their impact on IFRS.

2.3 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.

2.4 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 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.

3 THE IASB CONCEPTUAL FRAMEWORK

Section overview

- Introduction
- Underlying assumption
- Users and their information needs
- Chapter 1: Objective of general purpose financial statements

3.1 Introduction

Financial reports are based on estimates, judgements and models rather than exact depictions. The Conceptual Framework establishes the concepts that underlie those estimates, judgements and models.

The Conceptual Framework deals with:

- □ the objective of financial reporting;
- □ the qualitative characteristics of useful financial information;
- □ the definition, recognition and measurement of the elements from which financial statements are constructed; and
- □ concepts of capital and capital maintenance.

The Conceptual Framework sets out the concepts that underlie the preparation and presentation of financial statements for external users. Its purpose is:

- to assist the IASB in the development of future IFRSs and in its review of existing IFRSs;
- to assist the IASB in promoting harmonisation of regulations, accounting standards and procedures relating to the presentation of financial statements by providing a basis for reducing the number of alternative accounting treatments permitted by IFRSs;
- □ to assist national standard-setting bodies in developing national standards;
- to assist preparers of financial statements in applying IFRSs and in dealing with topics that have yet to form the subject of an IFRS;
- to assist auditors in forming an opinion on whether financial statements comply with IFRSs;
- to assist users of financial statements in interpreting the information contained in financial statements prepared in compliance with IFRSs; and
- to provide those who are interested in the work of the IASB with information about its approach to the formulation of IFRSs.

This Conceptual Framework is not an IFRS and nothing in the Conceptual Framework overrides any specific IFRS.

On very rare occasions there may be a conflict between the Conceptual Framework and an IFRS. In those cases, the requirements of the IFRS prevail over those of the Conceptual Framework.

3.2 Underlying assumption

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 or curtail its operating activities significantly. The going concern assumption is particularly relevant for the valuation of assets.

This is found in chapter 4 of *The Conceptual Framework*.

3.3 Users and their information needs

Many existing and potential investors, lenders and other creditors cannot require reporting entities to provide information directly to them and must rely on general purpose financial reports for much of the financial information they need. These are the primary users to whom general purpose financial reports are directed.

- General purpose financial reports cannot provide all the information needed and users also need to consider pertinent information from other sources.
- General purpose financial reports do not show the value of a reporting entity; but they provide information to help users estimate a value.
- Individual primary users have different information needs. The aim of IFRSs is to provide information that will meet the needs of the majority of primary users.

Other users

- Regulators and members of the public other than investors, lenders and other creditors, may also find general purpose financial reports useful but these reports are not primarily directed to these groups.
- A company's management is of interested in financial information but the management do not need to rely on general purpose financial reports.

3.4 Chapter 1: Objective of general purpose financial statements

The objective of general purpose financial reporting forms the foundation of the Conceptual Framework. Other aspects of the Conceptual Framework flow logically from the objective.

The objective

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

Those decisions involve buying, selling or holding equity and debt instruments, and providing or settling loans and other forms of credit.

- □ In order to make these decisions the users need information to help them assess the prospects for future net cash inflows to an entity.
- In order to assess an entity's prospects for future net cash inflows, users need information about:
 - the resources of the entity;
 - claims against the entity; and
 - how efficiently and effectively the entity's management have discharged their responsibilities to use the entity's resources. (This information is also useful for decisions by those who have the right to vote on or otherwise influence management performance).

Information provided

General purpose financial statements provide information about:

- the financial position of the entity information about economic resources and the claims against them; and
- Changes in its financial position which could be due to:
 - financial performance; and/or
 - other events or transactions (e.g share issues).

Economic resources and claims

Information about the nature and amounts of economic resources and claims can help users to:

- identify the financial strengths and weaknesses of a reporting entity;
- to assess a reporting entity's liquidity and solvency and its needs for additional financing;

Information about priorities and payment requirements of existing claims helps users to predict how future cash flows will be distributed among those with a claim against the reporting entity.

Changes in economic resources and claims – Financial performance

Accrual accounting depicts the effects of transactions and other events and circumstances on a reporting entity's economic resources and claims in the periods in which those effects occur, even if the resulting cash receipts and payments occur in a different period.

This is important because such information provides a better basis for assessing the entity's past and future performance than information solely about cash receipts and payments during that period.

Importance of information about a reporting entity's financial performance:

- It helps users to understand the return generated from its economic resources. This in turn provides an indication of how well management has discharged its responsibilities to make efficient and effective use of these resources.
- It shows the capacity of a reporting entity to generate net cash inflows through its operations rather than by obtaining additional resources directly from investors and creditors.
- It gives an indication of the extent to which events such as changes in market prices or interest rates affect its ability to generate net cash inflows.
- Information about the variability and components of return is also important, especially in assessing the uncertainty of future cash flows.
- Information about past financial performance is helpful in predicting the entity's future returns on its economic resources.

Another aspect of performance is management of cash flow. Information about a reporting entity's cash flows during a period helps users to assess the entity's ability to generate future net cash inflows. It indicates how the reporting entity obtains and spends cash, including information about its borrowing and repayment of debt, cash dividends or other cash distributions to investors, and other factors that may affect the entity's liquidity or solvency. Information about cash flows helps users understand a reporting entity's operations, evaluate its financing and investing activities, assess its liquidity or solvency and interpret other information about financial performance.

Changes in economic resources and claims - Other events and transactions

Information about this type of change is necessary to give users a complete understanding of why the reporting entity's economic resources and claims changed and the implications of those changes for its future financial performance.

Objectives of financial statements: summary

The objectives of financial statements are met by:

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

4 QUALITATIVE CHARACTERISTICS OF USEFUL FINANCIAL INFORMATION

Section overview

- Introduction
- Relevance
- Faithful representation
- Enhancing qualitative characteristics
- Cost constraint on useful information

4.1 Introduction

This is covered by chapter 3 of *The IASB Conceptual Framework*.

Information must have certain characteristics in order for it to be useful for decision making. The *IASB Conceptual Framework* describes:

- fundamental qualitative characteristics; and
- enhancing qualitative characteristics

Fundamental qualitative characteristics:

- relevance; and
- □ faithful representation

The qualitative characteristics that enhance the usefulness of information that is relevant and a faithful representation are:

- comparability;
- verifiability
- timeliness; and
- understandability

"If financial information is to be useful, it must be relevant and faithfully represent what it purports to represent. The usefulness of financial information is enhanced if it is comparable, verifiable, timely and understandable".

Emphasis

Information must be both relevant and faithfully represented if it is to be useful.

The enhancing qualitative characteristics cannot make information useful if that information is irrelevant or not faithfully represented.

4.2 Relevance

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

- Let 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 materiality.

Information is material if omitting it or misstating it could influence decisions that users make on the basis of financial information about a specific reporting entity.

- Materiality is an entity-specific aspect of relevance based on the nature or magnitude (or both) of the items to which the information relates in the context of an individual entity's financial report.
- □ Therefore, it is not possible for the IASB to specify a uniform quantitative threshold for materiality or predetermine what could be material in a particular situation.

4.3 Faithful representation

Financial reports represent economic phenomena (economic resources, claims against the reporting entity and the effects of transactions and other events and conditions that change those resources and claims) by depicting them in words and numbers.

To be useful, financial information must not only represent relevant phenomena, but it must also faithfully represent the phenomena that it purports to represent.

A perfectly faithful representation would have three characteristics. It would be:

- complete the depiction includes all information necessary for a user to understand the phenomenon being depicted, including all necessary descriptions and explanations.
- neutral the depiction is without bias in the selection or presentation of financial information; and
- □ free from error where there are no errors or omissions in the description of the phenomenon, and the process used to produce the reported information has been selected and applied with no errors in the process.

4.4 Enhancing qualitative characteristics

Comparability

Comparability is the qualitative characteristic that enables users to identify and understand similarities in, and differences among, items

Information about a reporting entity is more useful if it can be compared with similar information about other entities and with similar information about the same entity for another period or another date.

Consistency is related to comparability but is not the same. Consistency refers to the use of the same methods for the same items, either from period to period within a reporting entity or in a single period across entities. Consistency helps to achieve the goal of comparability.

Verifiability

This quality helps assure users that information faithfully represents the economic phenomena it purports to represent.

- Verifiability means that different knowledgeable and independent observers could reach consensus that a particular depiction is a faithful representation.
- Quantified information need not be a single point estimate to be verifiable. A range of possible amounts and the related probabilities can also be verified.

Timeliness

This means having information available to decision-makers in time to be capable of influencing their decisions.

Understandability

Information is made understandable by classifying, characterising and presenting it in a clear and concise manner.

Financial reports are prepared for users who have a reasonable knowledge of business and economic activities and who review and analyse the information diligently.

4.5 Cost constraint on useful information

Reporting financial information that is relevant and faithfully represents what it purports to represent helps users to make decisions with more confidence. This results in more efficient functioning of capital markets and a lower cost of capital for the economy as a whole. An individual investor, lender or other creditor also receives benefits by making more informed decisions. However, it is not possible for general purpose financial reports to provide all the information that every user finds relevant.

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).

5 THE ELEMENTS OF FINANCIAL STATEMENTS

Section overview

- Assets
- Liabilities
- Equity
- Income
- Expenses

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.

5.1 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.

5.2 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**.

5.3 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.

5.4 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.

5.5 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.

6 **RECOGNITION IN THE FINANCIAL STATEMENTS**

Section overview

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

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 statement of profit or loss) 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 of 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.

6.1 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).

6.2 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 profit or loss and other 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.

6.3 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 statement of profit when an increase in future economic benefit 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 statement of profit or loss when a decrease in future economic benefit 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 **statement of profit or loss** 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 statement of profit or loss) 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 statement of profit or loss. 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.

6.4 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.

The development of the new Conceptual Framework with FASB should further improve reporting in the future.

7 ACCOUNTING CONCEPTS

Section overview

- Consistency of presentation
- Materiality and aggregation
- Offsetting

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*.

7.1 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.

7.2 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.

7.3 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.

8 BASES OF ACCOUNTING

Section overview

- Introduction
- Accruals basis of accounting (matching concept)
- Cash basis of accounting
- Break-up basis of accounting

8.1 Introduction

There are three bases of accounting which go to the heart of how transactions are recognised and measured:

- accruals basis;
- cash basis; and
- break up basis

The accruals basis is by far and away the most important and popularly applied of these three in practice.

8.2 Accruals basis of accounting (matching concept)

Accruals basis accounting (accruals accounting, the accruals concept) recognises transactions and other events and circumstances in the periods in which those effects occur, even if the resulting cash receipts and payments occur in a different period.

- Revenue from sales and other income should be reported in the period when the income arises (which might not be the same as the period when the cash is received).
- □ The cost of sales in the statement of comprehensive income must be matched with the sales. Income and 'matching' expenses must be reported in the same financial period.
- Other expenses should be charged in the period to which they relate, not the period in which they are paid for.

8.3 Cash basis of accounting

Cash basis accounting recognises transactions in the periods in which cash receipts and payments occur.

- Revenue from sales and other income would be reported in the period when the cash is received (which might be in a later period than when the income arose).
- Expenses are charged in the period to which they are paid not the period in which they are incurred.

Over time the accruals based accounting and cash based accounting result in recognising the same amounts. However, transactions might be recognised in different periods under each system.

Example: Accruals vs cash basis

A company prepares its financial statements to the **31** December each year.

It sells goods for 350,000 to a customer on 6 December Year 2, but does not receive a cash payment from the customer until 15 January Year 3.

Accruals basis

The sale is recognised as income in the year to 31 December Year 2, even though the cash is not received until after the end of this financial year.

Cash basis

The sale is recognised as income in Year 3, even though sale was made in year 2.

₩50,000 is recognised as revenue under each basis but in different periods.



Example: Accruals vs cash basis

A company starts in business on 1 September Year 1. It acquires an office for which it pays one year's rent in advance, to 31 August Year 2.

The cost of the annual rental is ₩120,000. The company prepares its financial statements for a financial period ending on 31 December each year.

Accruals basis

The office rental cost in the period to 31 December Year 1 is the cost of just four months' rent.

The expense is therefore 40,000 ($120,000 \times 4/12$) in Year 1, and there has been a prepayment for 80,000 that relates to the next financial period, the year to 31 December Year 2.

Cash basis

The entire cost is recognised in the year to 31 December Year 1.

8.4 Break-up basis of accounting

Both the accruals basis and the cash basis assume that a business is a going concern. That means that the business is expected to continue into the future. This may not always be the case.

A business might be brought to an end (wound up) either due to financial difficulty or, less likely, the owners decide that the business has run its course.

The break-up basis of accounting is used when the business is no longer a going concern. This basis results in all assets and liabilities being measured at the amount of cash that they can be sold for (assets) or settled (liabilities).

Example: Break-up basis

A company prepares its financial statements to the 31 December each year.

The company is in severe financial difficulty and is not expected to survive. It has a building in its accounts carried at \$1,500,000.

Real estate professionals have advised that this building could be sold for only \$1,200,000 in current market conditions.

Break-up basis

The building should be remeasured ₩1,200,000 in the financial statements.

9 MEASUREMENT AND CAPITAL MAINTENANCE

Section overview

- Measurements of elements of financial statements
- Fair value
- Capital maintenance concepts

9.1 Measurements of elements of financial statements

The Conceptual Framework allows 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.

9.2 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 Conceptual 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 may be used in financial statements in the following circumstances:

- After its initial recognition at acquisition, a non-current asset may be revalued 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 statement of profit or loss 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.

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 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.

9.3 Capital maintenance concepts

The Conceptual Framework states that there are two concepts of capital:

- A financial concept of capital;
- A physical concept of capital.

Different systems of accounts used different capital maintenance concepts. The choice of capital maintenance has a profound effect on the measurement of profit.

Consider the basic accounting equation.



Formula: Accounting equation							
Assets = Liabilities + Equity	or or	Assets	_	Liabilities	=	Equity	
A = L + E		Α	_	L	=	Е	
		Net assets					

The accounting equation is an equation. Therefore, changes in one side are matched by changes in the other side.

Profit or loss for a period can be calculated from the difference between the opening and closing net assets after adjusting for any distributions during the period.



Formula: Profit

Change in equity = Closing equity – Opening equity

Increase in equity = Profit + capital introduced – distributions

Profit = Increase in equity – capital introduced + distributions

This shows that the value ascribed to opening equity is crucial in the measurement of profit.

Financial capital maintenance

With the **financial concept of capital maintenance**, a profit is not earned during a period unless the financial value of equity at the end of the period exceeds the financial value of equity at the beginning of the period (after adjusting for equity capital raised or distributed).

Historical cost accounting is based on the concept of **money financial capital maintenance**. Under this concept, an entity makes a profit when its closing equity exceeds its opening equity measured as the number of units of currency at the start of the period. Note that this is a separate issue from asset valuation. Assets could be revalued during the period but this would have no effect on the opening capital position.

An alternative view of financial capital maintenance is used in constant purchasing power accounting. This system is based on the concept of **real financial capital maintenance**. Under this concept, an entity makes a profit when its closing equity exceeds opening equity remeasured to maintain its purchasing power.

This requires the opening equity to be uplifted by the general inflation rate. This is achieved by a simple double entry.

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Illustration: Adjustment to maintain opening equity		
	Debit	Credit
Statement of profit or loss	Х	
Inflation reserve		Х

Physical capital maintenance

A **physical concept of capital** is that the capital of an entity is represented by its productive capacity or operating capability. Where a physical concept of capital is used, the main concern of users of the financial statements is with the maintenance of the operating capability of the entity.

With a physical concept of capital maintenance, a profit is not earned during a period unless (excluding new equity capital raised during the period and adding back any distribution of dividends to shareholders) the operating capability of the business is greater at the end of the period than at the beginning of the period.

This requires the opening equity to be uplifted by the specific rates of inflation that apply to the individual components of the net assets of the company. Again, this is achieved by the same simple double entry.

The following example should help you to understand this.

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Example: Capital maintenance concepts

X Limited commenced business on 1 January with a single item of inventory which cost \$10,000.

During the year it sold the item for ₦14,000 (cash).

During the year general inflation was 5% but the inflation specific to the item was 10%.

Profit is calculated under each concept in the following ways.

	Capital maintenance concept			
	Financial (money terms)	Financial (real terms)	Physical	
Statement of profit or loss	₩	Ħ	₩	
Revenue	14,000	14,000	14,000	
Cost of sale	(10,000)	(10,000)	(10,000)	
Inflation adjustment (inflation rate applied to opening equity):				
5% × ₩10,000		(500)		
10% × ₩10,000			(1,000)	
	4,000	3,500	3,000	
Statement of financial position	N	Ħ	N	
Net assets	14,000	14,000	14,000	
Equity: Opening equity				
Before adjustment	10,000	10,000	10,000	
Inflation reserve (see above)		500	1,000	
After adjustment	10,000	10,500	11,000	
Retained profit (profit for the year)	4,000	3,500	3,000	
	14,000	14,000	14,000	

Commentary on the example

Under historical cost accounting, the profit is №4,000. If the business paid this out as a dividend it would have №10,000 left.

№10,000 is the opening equity expressed as a number of units of currency. This means that the company would have maintained its equity expressed as a number of units of currency. However, inflation in the period has caused the purchasing power of the currency to decline. This means that №10,000 no longer has the same purchasing power that it had a year ago. The company has not maintained its capital in real terms.

To maintain its opening equity in real terms the company would have to ensure that it had the same purchasing power at the year-end as it had at the start. Inflation was 5% so the company would need \$10,500 at the year-end in order to have the same purchasing power as it had at the start of the year. The company can achieve this by transferring \$500 from profit and loss into an inflation reserve. Profit would then be reported as \$3,500.

If the business paid out \$3,500 as a dividend it would have \$10,500 left. This is not enough to buy the same asset that it had at the start of the year. The asset has been subject to specific inflation of 10% therefore the company would need \$11,000 at the year-end in order to buy the same asset.

This means that the company would not have the same capacity to operate as it had a year ago.

To maintain its opening equity in physical terms the company would have to ensure that it had the same ability to operate at the year-end as it had at the start. In other words it would need to have \$11,000. The company can achieve this by transferring \$1,000 from profit and loss into an inflation reserve. Profit would then be reported as \$3,000.

Comparing the two concepts

Neither the IASB Conceptual Framework nor accounting standards require the use of a specific capital maintenance concept. In practice, almost all entities use money financial capital maintenance, but both concepts can provide useful information.

Financial capital maintenance is likely to be the most relevant to investors as they are interested in maximising the return on their investment and therefore its purchasing power.

Physical capital maintenance is likely to be most relevant to management and employees as they are interested in assessing an entity's ability to maintain its operating capacity. This is particularly true for manufacturing businesses, where management may need information about the ability of the business to continue to produce the same or a greater volume of goods.

10 FAIR PRESENTATION

Section overview

- 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

10.1 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.

11 CHAPTER REVIEW

Chapter review

Before moving on to the next chapter check that you now know how to:

- Explain the objectives of financial statements
- List and explain the components of the conceptual framework
- Explain the difference between the accruals, cash and break up basis of accounting
- Prepare simple cash and break up basis financial statements
- Explain the measurement bases available under IFRS
- Explain and illustrate the capital maintenance concepts described in the conceptual framework
- Explain the meaning of true and fair or fairly presented

Skills level Financial reporting



Presentation of financial statements

Contents

- 1 The components of financial statements
- 2 General features of financial statements
- 3 Structure and content of the statement of financial position
- 4 Structure and content of the statement of profit or loss and other comprehensive income
- 5 Statement of changes in equity (SOCIE)
- 6 Notes to the financial statements
- 7 Financial statements Specimen formats
- 8 Technique of preparing financial statements
- 9 IAS 10: Events after the reporting period
- 10 Chapter review

INTRODUCTION

Purpose

In this element the accounting from the foundation level is taken up a level into financial accounting in the context of more complex events and transactions with a greater emphasis on compliance with regulations including International Accounting Standards and generally accepted accounting practices in the private sectors.

Competencies

2 Preparing separate financial statements

- **2(b)** Identify and state the laws, regulations accounting standards and other requirements that govern the production of financial statements by such entities.
- **2(c)** Draft and compile financial statements, or extracts from them, of an entity in accordance with its chosen policies and in accordance with IFRS and local law.

IAS 1 and IAS 10 are examinable documents in the syllabus.

Exam context

This chapter explains the main features of IAS 1 and IAS 10

By the end of this chapter you will be able to:

- State the components of a set of financial statements according to IAS 1
- Explain the general features of financial statements described in IAS 1
- Define current and non-current assets
- Define current and non-current liabilities
- Explain the IAS 1 guidance on the structure of the statement of financial position
- Explain the IAS 1 guidance on the structure of the statement of profit or loss and other comprehensive income
- Explain the IAS 1 guidance on the structure of the statement of changes in equity
- Describe the IAS 1 rules on notes to the financial statements
- Distinguish between adjusting and non-adjusting items
- Explain and apply the IAS 10 guidance on the recognition of dividends

1 THE COMPONENTS OF FINANCIAL STATEMENTS

Section overview

- Preparing financial statements
- The format of published accounts

1.1 Preparing financial statements

The basic approach to preparing a statement of financial position and a statement of profit or loss in practice can be summarised as follows.

- The balances on all the accounts in the general ledger (nominal ledger or main) are extracted into a trial balance. (A list of balances on all ledger accounts for assets, liabilities, capital, income and expenses).
- Adjustments are made for 'year-end' items, such as:
 - depreciation charges for non-current assets;
 - accruals and prepayments for expense items;
 - adjusting the allowance for bad (irrecoverable) debts;
 - closing inventory; and
 - other items and transactions not yet recorded or incorrectly recorded.
- □ The adjusted income and expense balances are entered into a statement of profit or loss to establish the profit or loss for the period.
- □ The adjusted asset, liability and capital balances, together with the retained profit for the year, are entered into a statement of financial position as at the end of the reporting period.

This process can be used to prepare the statement of profit or loss and statement of financial position of a sole proprietor, a partnership or a company.

It is likely that you will be given a trial balance with information about missing or incorrectly treated items. You will then be asked to construct a statement of financial position and a statement of profit or loss.

1.2 The format of published accounts

Some entities must publish financial statements in accordance with International Financial Reporting Standards International Accounting Standards). *IAS 1: Presentation of Financial Statements*, sets out the rules on the form and content of financial statements which such entities must comply with.



Definition

General purpose financial statements (referred to as 'financial statements') are those intended to meet the needs of users who are not in a position to require an entity to prepare reports tailored to their particular information needs.

IAS 1 specifies what published 'general-purpose' financial statements should include, and provides formats for a statement of financial position, statement of profit or loss and other comprehensive income, and statement of changes in equity.

The objective of general-purpose financial statements is to provide information about the financial position of the company, and its financial performance and cash flows, that is useful to a wide range of users in making economic decisions.

A complete set of financial statements consists of:

- a statement of financial position as at the end of the period;
- a statement of profit or loss and other comprehensive income for the period (made up of a statement of profit or loss and a statement of other comprehensive income);
- a statement of changes in equity for the period;
- a statement of cash flows (this is dealt with in a later chapter); and
- notes to these statements, consisting of a summary of significant accounting policies used by the entity and other explanatory notes.

Further requirements include:

- □ Financial statements should present fairly the financial position, financial performance and cash flows of the entity.
- Comparative information for the immediate preceding accounting period should be disclosed.
- Each component of the financial statements must be properly identified with the following information displayed prominently:
 - the name of the reporting entity
 - the date of the end of the reporting period or the period covered by the statement, whichever is appropriate
 - the currency in which the figures are reported
 - the level of rounding used in the figures (for example, whether the figures are thousands of naira or millions of naira).

Note: IAS 1 does not specify what the statements must be called and allows the use of other terminology. For example a statement of financial position is often called a balance sheet and a statement of profit or loss is often called an income statement.

2 GENERAL FEATURES OF FINANCIAL STATEMENTS

Section overview

- Introduction
- Fair presentation and compliance with IFRSs
- Going concern
- Accrual basis of accounting
- Materiality and aggregation
- Offsetting
- Frequency of reporting
- Comparative information
- Consistency of presentation

2.1 Introduction

IAS 1 describes and provides guidance on the following general features of financial statements:

- □ Fair presentation and compliance with IFRSs
- Going concern
- Accrual basis of accounting
- Materiality and aggregation
- Offsetting
- □ Frequency of reporting
- Comparative information
- Consistency of presentation

2.2 Fair presentation and compliance with IFRSs

Disclosure of compliance

An entity whose financial statements comply with IFRSs must make such disclosure in the notes to the accounts.

Financial statements shall not be described as complying with IFRS unless they comply with all the requirements of each applicable Standard and Interpretation.

Fair presentation

Financial statements must present fairly the financial position, financial performance and cash flows of an entity.

This means that they must be a faithful representation of the effects of transactions and other events in accordance with the definitions and recognition criteria for assets, liabilities, income and expenses set out in IFRS.

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

Fair presentation requires:

- the selection and application of accounting policies in accordance with IAS
 8, Accounting Policies, Changes in Accounting Estimates and Errors;
- the presentation of information, including accounting policies, in a manner that provides relevant, reliable, comparable and understandable information; and,
- □ the provision of additional disclosures when the particular requirements in IFRSs are insufficient to enable users to understand the impact of particular transactions or other events on the entity's financial position and financial performance.

True and fair override

In extremely rare circumstances, management might conclude that compliance with a requirement in IFRS would be so misleading that it would conflict with the objective of financial statements set out in IFRS.

In these cases the requirement should not be followed as longs as the relevant regulatory framework requires or otherwise does not prohibit this.

When an entity departs from a requirement in IFRS 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 IFRS except that it has departed from a particular requirement to achieve a fair presentation; and
 - details of the departure:
 - the Standard (or Interpretation) from which the entity has departed and:
 - the nature of the departure (including the treatment that is required by IFRS);
 - the reason why that treatment would be so misleading in the circumstances that it would conflict with the objective of financial statements set out in the "Framework";
 - 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.

If the relevant regulatory framework prohibits departure from a requirement the entity must make the following disclosures to reduce the misleading aspects of compliance "to the maximum extent possible":

- the Standard (or Interpretation) requiring the entity to report information concluded to be misleading and:
- □ the nature of the requirement;
- the reason why management has concluded that complying with that requirement is so misleading in the circumstances that it conflicts with the objective of financial statements; and,
- □ for each period presented, the adjustments to each item in the financial statements that management has concluded would be necessary to achieve a fair presentation.

2.3 Going concern

Financial statements must be prepared on a going concern basis unless management either;

- intends to liquidate the entity; or,
- □ to cease trading; or
- has no realistic alternative but to do so.

Management must assess an entity's ability to continue as a going concern when preparing financial statements.

In making this assessment management must take into account all available information about the future. (This is for at least twelve months from the reporting date).

Disclosures

If management is aware, in making its assessment, of material uncertainties related to events or conditions that may cast significant doubt upon the entity's ability to continue as a going concern, those uncertainties must be disclosed.

If the financial statements are not prepared on a going concern basis, that fact must be disclosed, together with:

- Let the basis on which the financial statements are prepared; and,
- □ the reason why the entity is not regarded as a going concern.

2.4 Accrual basis of accounting

Financial statements (except for cash flow information) must be prepared under the accrual basis of accounting.

Under the accrual basis of accounting, items are recognised as assets, liabilities, equity, income and expenses (the elements of financial statements) when they satisfy the definitions and recognition criteria for those elements set out in the "Framework".

2.5 Materiality and aggregation

Each material class of similar items must be presented separately in the financial statements.

Items of a dissimilar nature or function must be presented separately unless they are immaterial.

An item that is not sufficiently material to warrant separate presentation on the face of the financial statements may nevertheless be sufficiently material for it to be presented separately in the notes.

Information is material if its non-disclosure could influence the economic decisions of users taken on the basis of the financial statements.

Materiality depends on the size and nature of the item or aggregation of items judged in the particular circumstances of its omission.

2.6 Offsetting

Assets and liabilities must not be offset except when offsetting is required by another Standard.

The reporting of assets net of valuation allowances—for example, obsolescence allowances on inventories and doubtful debts allowances on receivables—is not offsetting.

Items of income and expense must be offset when, and only when IFRS requires or permits it. For example:

- gains and losses on the disposal of non-current assets are reported by deducting from the proceeds on disposal the carrying amount of the asset and related selling expenses; and,
- expenditure that is reimbursed under a contractual arrangement with a third party (for example, a subletting agreement) is netted against the related reimbursement.

Also gains and losses arising from a group of similar transactions are reported on a net basis (for example, foreign exchange gains and losses or gains and losses arising on financial instruments held for trading purposes).

Such gains and losses must be reported separately if their size, nature or incidence is such that separate disclosure is necessary for an understanding of financial performance.

2.7 Frequency of reporting

Financial statements must be presented at least annually.

When an entity's reporting date changes its financial statements are presented for a period longer or shorter than one year. In such cases an entity must disclose, in addition to the period covered by the financial statements:

- Let the reason for using a period other than one year; and,
- the fact that comparative amounts for the income statement, changes in equity, cash flows and related notes are not comparable.

2.8 Comparative information

Comparative information must be disclosed in respect of the previous period for all amounts reported in the financial statements unless IFRS permits or requires otherwise.

Comparative information must be included for narrative and descriptive information when it is relevant to an understanding of the current period's financial statements.

When the presentation or classification of items in the financial statements is amended, comparative amounts must be reclassified (unless the reclassification is impracticable). When comparative amounts are reclassified, an entity must disclose:

- □ the nature of the reclassification;
- □ the amount of each item or class of items that is reclassified; and,
- □ the reason for the reclassification.

The following must be disclosed when reclassification of comparative amounts is impracticable:

- Let the reason for not reclassifying the amounts; and,
- □ the nature of the adjustments that would have been made if the amounts were reclassified.

2.9 Consistency of presentation

The presentation and classification of items in the financial statements must be retained from one period to the next unless:

- a significant change in the nature of the operations of the entity or a review of its financial statement presentation demonstrates that a change in presentation results in a more appropriate presentation of transactions or other events; or
- a change in presentation is required by an IFRS.

3 STRUCTURE AND CONTENT OF THE STATEMENT OF FINANCIAL POSITION

Section overview

- Introduction
- Current and non-current assets and liabilities
- Current assets
- Current liabilities
- Information to be presented on the face of the statement of financial position

3.1 Introduction

IFRS uses terms which are incorporated into this study text. However, it does not forbid the use of other terms and you might see other terms used in practice.

IAS 1 sets out the requirements for information that must be presented in the statement of financial position or in notes to the financial statements, and it also provides implementation guidance. This guidance includes an illustrative format for a statement of financial position. This format is not mandatory but you should learn it and use it wherever possible.

3.2 Current and non-current assets and liabilities

Current and non-current items should normally be presented separately in the statement of financial position, so that:

- current and non-current assets are divided into separate classifications; and
- current and non-current liabilities are also classified separately.

As a general rule, an amount is 'current' if it is expected to be recovered or settled no more than 12 months after the end of the reporting period.

3.3 Current assets

IAS 1 states that an asset should be classified as a current asset if it satisfies **any** of the following criteria:

- □ The entity expects to realise the asset, or sell or consume it, in its normal operating cycle.
- □ The asset is held for trading purposes.
- □ The entity expects to realise the asset within 12 months after the reporting period.
- It is cash or a cash equivalent unless the asset is restricted from being used for at least 12 months after the reporting date. (Note: An example of 'cash' is money in a current bank account. An example of a 'cash equivalent' is money held in a term deposit account with a bank.)

All other assets should be classified as non-current assets.

This definition allows inventory or trade receivables to qualify as current assets, even if they may not be realised into cash within 12 months, provided that they will be realised in the entity's normal operating cycle or trading cycle.

The operating cycle of an entity is the time between the acquisition of assets for processing and their realisation in cash or cash equivalents. When the entity's normal operating cycle is not clearly identifiable, it is assumed to be twelve months. This is almost always the case.

3.4 Current liabilities

IAS 1 also states that a liability should be classified as a current liability if it satisfies **any** of the following criteria:

- The entity expects to settle the liability in its normal operating cycle.
- The liability is held primarily for the purpose of trading. This means that all trade payables are current liabilities, even if settlement is not due for over 12 months after the end of the reporting period.
- Let is due to be settled within 12 months after the end of the reporting period.
- □ The entity does **not** have the unconditional **right** to defer settlement of the liability for at least 12 months after the end of the reporting period.

All other liabilities should be classified as non-current liabilities.

3.5 Information to be presented on the face of the statement of financial position

IAS 1 provides a list of items that, **as a minimum**, must be shown on the face of the statement of financial position as a 'line item' (in other words, on a separate line in the statement):

Assets

- (a) Property, plant and equipment
- (b) Investment property
- (c) Intangible assets
- (d) Long-term financial assets, such as long-term holdings of shares in other companies, with the exception of item (e) below
- (e) Investments accounted for using the equity method (this is explained in a later chapter on investments in associates)
- (f) Biological assets
- (g) Inventories
- (h) Trade and other receivables
- (i) Cash and cash equivalents.
- (j) The total of assets classified as held for sale in accordance with IFRS 5

Liabilities

- (k) Trade and other payables
- (I) Provisions
- (m) Financial liabilities, excluding any items in (k) and (l) above: (for example, bank loans)
- (n) Liabilities (but possibly assets)for current tax, as required by *IAS 12: Income Taxes*
- (o) Deferred tax liabilities (but possibly assets). These are always non-current.

(p) Liabilities included in disposal groups in accordance with IFRS 5

Equity

- (q) Non-controlling interests presented within equity
- (r) Issued capital and reserves attributable to the **owners** of the entity. (The term 'owners', refers to the **equity holders**.)

Additional line items should be included in the statement of financial position when presenting them separately and is 'relevant to an understanding of the entity's financial position.

Information to be shown on the face of the statement of financial position or in notes

Some of the line items in the statement of financial position should be subclassified into different categories, giving details of how the total figure is made up. This sub-classification may be presented either:

- as additional lines on the face of the statement of financial position (adding up to the total amount for the item as a whole) or
- in notes to the financial statements.

For example:

- □ Tangible non-current assets should be divided into sub-categories, as required by *IAS 16: Property, Plant and Equipment*.
- Receivables should be sub-classified into trade receivables, receivables from related parties, prepayments and other amounts.
- Inventories are sub-classified in accordance with IAS 2: Inventories into categories such as merchandise, materials, work-in-progress and finished goods.

e,

Example: statement of financial position of an individual entity

IAS 1 does not specify what the exact format of the statement of financial position should be. However, it includes an illustrative statement of financial position in Guidance to implementing the Standard (which is an appendix to the Standard).

The example below is based on that example. Illustrative figures are included.

Statement of financial position of ABCD Entity as at 31 December 20XX			
	₩m	₩m	
Assets			
Non-current assets			
Property, plant and equipment	205.1		
Intangible assets	10.7		
Investments	6.8	222.6	
Current assets		222.6	
Inventories	17.8		
Trade and other receivables	13.3		
Other current assets	2.0		
Cash and cash equivalents	0.7		
		33.8	
Total assets		256.4	
Equity and liabilities			
Share capital	50.0		
Retained earnings (accumulated profits)	60.6		
Other components of equity	31.9		
Total equity		142.5	
Non-current liabilities			
Long-term borrowings	30.0		
Deferred tax	4.5		
Total non-current liabilities	34.5		
Current liabilities	a- <i>i</i>		
Trade and other payables	67.1		
Short-term borrowings (bank overdraft)	3.2		
Current portion of long-term borrowing	5.0 4.1		
Current tax payable	4.1		
Total current liabilities	79.4		
Total liabilities		113.9	
		256.4	
Total equity and liabilities		200.4	

4 STRUCTURE AND CONTENT OF THE STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME

Section overview

- A single statement or two statements
- Information to be presented on the face of the statement of profit or loss and other comprehensive income
- Analysis of expenses by their function
- Analysis of expenses by their nature

4.1 A single statement or two statements

The statement of profit or loss and other comprehensive income provides information about the performance of an entity in a period. It consists of two parts:

- a statement of profit or loss a list of income and expenses which result in a profit or loss for the period; and
- a statement of other comprehensive income a list of other gains and losses that have arisen in the period.

IAS 1 allows an entity to present the two sections in a single statement or in two separate statements. If two separate statements are used they should include all the information that would otherwise be included in the single statement of profit or loss and other comprehensive income.

The statement of profit or loss shows the components of profit or loss, beginning with 'Revenue' and ending with 'Profit (or Loss)' for the period after tax.

Examples of other comprehensive income

In this syllabus the only gains and losses that are recognised in the statement of other comprehensive income are those arising on the revaluation of property. plant and equipment under the rules in IAS 16. This is covered in more detail in chapter 7 of this text.

There are many other transactions which must be recognised in the statement of other comprehensive income but these are not in the scope of this syllabus. You will study them in papers at a higher level.

Definition of total comprehensive income

Total comprehensive income during a period is the sum of:

- □ the profit or loss for the period; and
- other comprehensive income.

4.2 Information to be presented on the face of the statement of profit or loss and other comprehensive income

As a **minimum**, IAS 1 requires that the statement of profit or loss and other comprehensive income should include line items showing the following amounts for the financial period:

- (a) revenue
- (b) finance costs (for example, interest costs)
- (c) share of profit of associates
- (d) tax expense
- (e) an amount related to the profit or loss from discontinued operations (IFRS5)
- (f) profit or loss
- (g) each component of 'other comprehensive income
- (h) total comprehensive income.

Additional line items should be presented on the face of the statement of profit or loss and other comprehensive income when it is relevant to an understanding of the entity's financial performance.



Example: Statement of profit or loss and other comprehensive income of an individual entity

IAS 1 does not specify formats.

The example below is based on a suggested presentation included in the implementation guidance to IAS 1.

XYZ Entity: Statement of $\rho rofit$ or loss and other comprehensive for the year ended 31 December 20XX

	₩ 000
Revenue	678
Cost of sales	250
Gross profit	428
Other income	44
Distribution costs	(98)
Administrative expenses	(61)
Other expenses	(18)
Finance costs	(24)
Profit before tax	271
Taxation	(50)
PROFIT FOR THE YEAR	221
Other comprehensive income	
Gains on property revaluation	46
TOTAL COMPREHENSIVE INCOME FOR THE YEAR	267

Information to be shown on the face of the statement of profit or loss and other comprehensive income (or the statement of profit or loss, if separate) or in the notes

The following information may be shown either on the face of the statement of profit or loss or in a note to the financial statements:

- **material items** of income and expense
- an **analysis of expenses**, providing either:
 - expenses analysed by their nature, or
 - expenses analysed by the function that has incurred them.

IAS 1 encourages entities to show this analysis of expenses on the face of the statement of profit or loss, rather than in a note to the accounts.

Material items that might be disclosed separately include:

- a write-down of inventories from cost to net realisable value, or a writedown of items of property, plant and equipment to recoverable amount
- □ the cost of a restructuring of activities
- disposals of items of property, plant and equipment
- discontinued operations
- litigation settlements
- a reversal of a provision.

4.3 Analysis of expenses by their function

When expenses are analysed according to their function, the functions are commonly 'cost of sales', 'distribution costs', 'administrative expenses' and 'other expenses'. This method of analysis is also called the 'cost of sales method'.

In practice, most entities use this method.

An example of a statement of profit or loss, showing expenses by function (cost of sales, distribution costs, administrative expenses) is as follows.



Example: Analysis of expenses by function

The following is an extract from the accounts of Entity Red for the year to 30 June 20X5, after the year-end adjustments had been made:

	Debit	Credit
	₩000	N 000
Cost of sales	6,214	
Distribution costs	3,693	
Revenue		14,823
Other expenses	248	
Administrative expenses	3,901	
Other income		22

Required

Show the first part of Entity Red's statement of profit or loss using the 'cost of sales' analysis method.

Entity Red: Statement of profit or loss for the year ended 30 June 20X5

	N 000
Revenue	14,823
Cost of sales	6,214
Gross profiit	8,609
Other income	22
Distribution costs	(3,693)
Administrative expenses	(3,901)
Other expenses	(248)
Profit before tax	789

The basis for separating these costs between the functions would be given in the question.

4.4 Analysis of expenses by their nature

When expenses are analysed according to their nature, the categories of expenses will vary according to the nature of the business.

In a manufacturing business, expenses would probably be classified as:

- raw materials and consumables used;
- □ staff costs ('employee benefits costs'); and
- depreciation.

Items of expense that on their own are immaterial are presented as 'other expenses'.

There will also be an adjustment for the increase or decrease in inventories of finished goods and work-in-progress during the period.

Other entities (non-manufacturing entities) may present other expenses that are material to their business.

An example of a statement of profit or loss, showing expenses by their nature, is shown below, with illustrative figures included.



Example: Analysis of expenses by nature

The following is an alternative method of presenting the accounts of Entity Red.

	₩000
Increase in inventories of finished goods and work-in-progress	86
Revenue	14,823
Raw materials and consumables	5,565
Depreciation	1,533
Other income	22
Staff costs	4,926
Other operating expenses	2,118

Required

Show the first part of Entity Red's statement of profit or loss using the 'nature of expenditure' method, down to the operating profit level.

Entity Red: Statement of profit or loss for the year ended 30 June 20X5

Revenue Other income	₩000	₩000 14,823 22
		14,845
Changes in inventories of finished goods and work-in-		
progress (reduction = expense, increase = negative		
expense)	(86)	
Raw materials and consumables used	5,565	
Staff costs (employee benefits costs)	4,926	
Depreciation and amortisation expense	1,533	
Other operating expenses	2,118	
		14,056
Profit before tax		789

5 STATEMENT OF CHANGES IN EQUITY (SOCIE)

Section overview

- The contents of a statement of changes in equity
- Retrospective adjustments

5.1 The contents of a statement of changes in equity

A set of financial statements must include a statement of changes in equity (SOCIE).

A SOCIE shows for each component of equity the amount at the beginning of the period, changes during the period, and its amount at the end of the period.

Components of equity include:

- share capital;
- □ share premium;
- retained earnings;
- revaluation surplus.

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 should be shown separately. (Non-controlling interest is a concept used in group accounts. This is covered in a later chapter).

For each component of equity, the SOCIE should show changes resulting from:

- profit or loss for the period;
- each item of other comprehensive income;
- □ transactions with owners in their capacity as owners.

Transactions with owners in their capacity as owners

These include:

- new issues of shares;
- payments of dividends;
- repurchases and cancellation of its own shares by the company.

These transactions are not gains or losses so are not shown in the statement so comprehensive income but they do affect equity. The SOCIE highlights such transactions.

5.2 Retrospective adjustments

IAS8 Accounting policies, changes in accounting estimates and errors requires that when an entity changes an accounting policy or restates amounts in the financial statements to correct 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 restatements 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. (This is covered in more detail in chapter 4).



Illustration: statement of changes in equity					
PQR Entity:					
Statement of changes	in equity	for the year	ended 31	December 20X9)
	Share capital	Share premium	General reserve	Accumulated profits	Total
	₩m	₩m	₩m	₩m	₩m
Balance at 31 December 20X8 Change in accounting	200	70	80	510	860
policy	-	-	-	(60)	(60)
Restated balance Changes in equity for 20X9	200	70	80	450	800
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

The statement reconciles the balance at the beginning of the period to that at the end of the period for each component of equity.

6 NOTES TO THE FINANCIAL STATEMENTS

Section overview

- Introduction
- Structure
- Disclosure of accounting policies
- Other disclosures

6.1 Introduction

Notes contain information in addition to that presented in the statement of financial position, statement of profit or loss and other comprehensive income, statement of changes in equity and statement of cash flows.

Notes provide narrative descriptions of items in those statements and information about items that do not qualify for recognition in those statements. They also explain how totals in those statements are formed.

6.2 Structure

The notes to the financial statements of an entity must:

- present information about the basis of preparation of the financial statements and the specific accounting policies selected and applied for significant transactions and other significant events;
- disclose the information required by IFRSs that is not presented elsewhere in the financial statements; and
- provide additional information that is not presented on the face of the financial statements but is relevant to an understanding of them.

Notes to the financial statements must be presented in a systematic manner. Each item on the face of the statement of financial position, statement of profit or loss and other comprehensive income, statement of changes in equity and statement of cash flows must be cross-referenced to any related information in the notes.

Notes are normally presented in the following order:

- a statement of compliance with IFRS;
- a summary of significant accounting policies applied;
- supporting information for items presented on the face of each financial statement in the order in which each financial statement and each line item is presented; and
- other disclosures, including:
 - contingencies;
 - un-contracted commitments; and
 - non-financial disclosures.

6.3 Disclosure of accounting policies

An entity must disclose the following in the summary of significant accounting policies:

- □ the measurement basis (or bases) used in preparing the financial statements; and
- the other accounting policies used that are relevant to an understanding of the financial statements.
- the judgements (apart from those involving estimations) made by management in applying the accounting policies that have the most significant effect on the amounts of items recognised in the financial statements. For example:
 - whether financial assets are held-to-maturity investments;
 - when substantially all the significant risks and rewards of ownership of financial assets and lease assets are transferred to other entities;
 - whether, in substance, particular sales of goods are financing arrangements and therefore do not give rise to revenue; and
 - whether the substance of the relationship between the entity and a special purpose entity indicates that the entity controls the special purpose entity.

Which policies?

Management must disclose those policies that would assist users in understanding how transactions, other events and conditions are reflected in the reported financial performance and financial position.

If an IFRS allows a choice of policy, disclosure of the policy selected is especially useful.

Some standards specifically require disclosure of particular accounting policies. For example, IAS 16 requires disclosure of the measurement bases used for classes of property, plant and equipment.

It is also appropriate to disclose an accounting policy not specifically required by IFRSs, but selected and applied in accordance with IAS 8. (See chapter 4).

Key measurement assumptions

An entity must disclose information regarding key assumptions about the future, and other key sources of measurement uncertainty, that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year.

In respect of those assets and liabilities, the notes must include details of:

- □ their nature; and
- □ their carrying amount as at the reporting date.

Examples of key assumptions disclosed are:

- □ future interest rates;
- □ future changes in salaries;
- future changes in prices affecting other costs; and,
- useful lives.

Examples of the types of disclosures made are:

- □ the nature of the assumption or other measurement uncertainty;
- the sensitivity of carrying amounts to the methods, assumptions and estimates underlying their calculation, including the reasons for the sensitivity;
- the expected resolution of an uncertainty and the range of reasonably possible outcomes within the next financial year in respect of the carrying amounts of the assets and liabilities affected; and
- an explanation of changes made to past assumptions concerning those assets and liabilities, if the uncertainty remains unresolved.

6.4 Other disclosures

An entity must disclose in the notes:

- the amount of dividends proposed or declared before the financial statements were authorised for issue but not recognised as a distribution to owners during the period, and the related amount per share; and
- □ the amount of any cumulative preference dividends not recognised.
- An entity must disclose the following, if not disclosed elsewhere in information published with the financial statements:
- □ the domicile and legal form of the entity;
- a description of the nature of the entity's operations and its principal activities; and
- □ the name of the parent and the ultimate parent of the group.

7 FINANCIAL STATEMENT – SPECIMEN FORMATS

Section overview

- Statement of comprehensive income (analysis of expenses by function)
- Statement of financial position

IAS 1 does not specify formats for financial statements. However, it includes illustrative statements in an appendix to the Standard).

The illustrations below are based on the illustrative examples.

7.1 Statement of comprehensive income (analysis of expenses by function)



Illustration: Statement of comprehensive income (analysis of expenses by function)

Statement of comprehensive income for the year ended 31 December 2014

	₩m
Revenue	Х
Cost of sales	(X)
Gross profit	Х
Other income	Х
Distribution costs	(X)
Administrative expenses	(X)
Other expenses	(X)
Finance costs	(X)
Share of profit of associates	
Profit before tax	Х
Taxation	(X)
PROFIT FOR THE YEAR	Х
Other comprehensive income	
Gains on property revaluation	x
OTHER COMPREHENSIVE INCOME FOR THE YEAR	х
TOTAL COMPREHENSIVE INCOME FOR THE YEAR	X

7.2 Statement of financial position

G

Statement of financial position as at 31 December 2014	ŀ	
	₩m	₩m
Assets		
Non-current assets		
Property, plant and equipment	X	
Goodwill	X	
Intangible assets	X	
Investments in associates	X	
Available for sale financial assets	Х	,
Total non-current assets		Х
Current assets	v	
Inventories	X	
Trade receivables	X	
Other current assets Cash and cash equivalents	X X	
Total current assets	^	- x
Total current assets		
Total assets		X
Equity and liabilities		
Equity attributable to owners of the parent		
Share capital		Х
Share premium (not mentioned in IAS 1 but included		
for completeness)		
Retained earnings		Х
Other components of equity		X
Non-controlling interest		X
Total equity		Х
Non-current liabilities		-
Long-term borrowings	Х	
Deferred tax	Х	
Long term provisions	Х	
Total non-current liabilities	Х	
Current liabilities		-
Trade and other payables	X	
Short-term borrowings	X	
Current portion of long-term borrowing	X	
Current tax payable	X	
Short term provisions	<u>X</u>	
Total current liabilities	Х	
Total liabilities		<u> </u>
Total equity and liabilities		Х

8 TECHNIQUE OF PREPARING FINANCIAL STATEMENTS

Section overview

- Introduction
- Preparation of financial statements: Approach 1
- Preparation of financial statements: Approach 2

8.1 Introduction

In this exam you will be expected to prepare a statement of financial position and statement of profit or loss and other comprehensive income from a trial balance. These questions are usually quite time pressured so you need to develop a good technique in order to complete such tasks in an effective way.

The rest of this chapter use the following example to illustrate how such questions might be approached. You will need to choose an approach and practice it.

The example includes several straightforward year-end adjustments for illustrative purposes. In the exam you will face more complicated adjustments than these.



Example:
ABC - Trial balance as at 31 December 2014

	N	N
Sales		428,000
Purchases	304,400	
Wages and salaries	64,000	
Rent	14,000	
Heating and lighting	5,000	
Inventory as at 1 January 2014	15,000	
Drawings	22,000	
Allowance for doubtful debts		4,000
Non-current assets	146,000	
Accumulated depreciation:		32,000
Trade receivables	51,000	
Trade payables		42,000
Cash	6,200	
Capital as at 1 January 2014		121,600
	627,600	627,600

Further information:.

- a) ₩400 is owed for heating and lighting expenses.
- b) ₩700 has been prepaid for rent.
- c) It is decided that a bad debt of ₦1,200 should be written off, and that the allowance for doubtful debts should be increased to ₦4,500.
- d) Depreciation is to be provided for the year at 10% on cost on a straight line basis.
- e) Inventory at 31 December 2014 was valued at ₩16,500.

The journals

The business needs to process the following double entries to take account of the "further information" given above.

	Exar	nple: Closing journals		
•	a)	Accrual	Debit	Credit
		Heating and lighting expense	400	
		Accrual		400
		Being: Accrual for heating and lighting expense		
	b)	Rent prepayment		
		Prepayment	700	
		Rent expense		700
		Being: Adjustment to account for rent prepaymen	t	
	C)	Bad and doubtful debt		
		Bad and doubtful debt expense	1,200	
		Receivables		1,200
		Being: Write off of bad debt		
		Bad and doubtful debt expense	500	
		Allowance for doubtful debts		500
		Being: Increase in the allowance for doubtful debt	S	
	d)	Depreciation		
		Depreciation expense	14,600	
		Accumulated depreciation		14,600
		Being: Depreciation for the year (10% of 146,000)	
	e)	Closing inventory		
		Inventory (asset)	16,500	
		Inventory (cost of sales)		16,500
		Being: Recognition of inventory at the year-end		

These journals are only given to explain the double entry required. You should never write something like this in a preparation of financial statements question. It uses up too much time. You want to do double entry rather than write journals.

The chapter continues to show two possible approaches that you might follow. You do not have to do either. If you decide on a way that suits you then use it.

If you attend courses your lecture will show you how to do this. They are very experienced. Do as they advise.

8.2 Preparation of financial statements: Approach 1

Step 1: Perform double entry on the face of the question and open up new accounts as you need them in any space that you have. (DO NOT COPY OUT THE TRIAL BALANCE).

After this your question paper should look something like the following (with the double entries are shown in bold italics):



nple: ABC – Trial balance as at 31 De	ecember 2014	
	Ħ	Ħ
Sales		428,000
Purchases	304,400	
Wages and salaries	64,000	
Rent	14,000	700 ^b
Heating and lighting	5,000 + 400 ª	
Inventory as at 1 January 2014	15,000	
Drawings	22,000	
Allowance for doubtful debts		4,000+ 500 ^c
Non-current assets	146,000	
Accumulated depreciation:		32,000 + 14,600^d
Trade receivables	51,000	1,200 ^c
Trade payables		42,000
Cash	6,200	
Capital as at 1 January 2014		121,600
	627,600	627,600
Accruals		400 ^a
Prepayments	700 ^b	
Bad and doubtful debt expense	1200 ^c + 500 ^c	
Depreciation expense	1 4,600^d	
Closing inventory (asset)	16,500 ^e	
Closing inventory (cost of sales)		16,500 ^e

Step 2: Draft pro-forma financial statements including all of the accounts that you have identified. (A pro-forma is a skeleton document into which you can copy numbers later)

Step 3: Copy the numbers from the trial balance into the pro-forma statements. Note that if a number copied onto the financial statements is made up of a number provided in the original trial balance that has been adjusted, you must show the marker what you have done. This may involve adding in an additional explanation below the main answer or may be shown on the face of the statements.

Step 4: Calculate profit for the year.

Step 5: Complete statement of financial position by adding profit to the opening capital, deducting drawings to find the closing capital.

The final answer might look like this:



Example: ABC – Statement of financial position			
	¥	₩	
Assets			
Non-current assets			
Cost	146,000		
Accumulated depreciation (32,000 + 14,600)	(46,600)		
		99,400	
Current assets			
Inventories	16,500		
Trade receivables (51,000 – 1,200)	49,800		
Allowance for doubtful debts (4,000 + 500)	(4,500)		
	45,300		
Prepayments	700		
Cash	6,200		
	_	68,700	
Total assets	_	168,100	
Equity and liabilities			
Capital			
At start of year	121,600		
Profit for the year	26,100		
Drawings	(22,000)		
		125,700	
Current liabilities			
Trade payables	42,000		
Accruals (and prepaid income)	400		
	-	42,400	
Total equity and liabilities	-	168,100	



Example: ABC – Statement of comprehensive income (statement of profit or loss)

	Ħ	Ħ
Revenue		428,000
Cost of sales		
Opening inventory	15,000	
Purchases	304,400	
	319,400	
Closing inventory	(16,500)	
		(302,900)
Gross profit	-	125,100
Expenses:		
Wages and salaries	64,000	
Depreciation (W1)	14,600	
Rent (14,000 – 700)	13,300	
Heating and lighting (5,000 + 400)	5,400	
Bad and doubtful debts (1,200 + 500)	1,700	
		(99,000)
	-	26,100

Workings

W1 – Depreciation: 10% of 146,000 = 14,600

8.3 Preparation of financial statements: Approach 2

Step 1: Draft pro-forma financial statements including all of the accounts that you have identified from reading the question. Leave spaces in case you have missed an account that you might need to insert later.

Step 2: Copy the numbers from the trial balance into the pro-forma statements. If you know that a number is not to be adjusted then you can copy it straight to its destination. Otherwise set up bracketed workings next to the narrative in the proforma.

After step 2 your answer might look like this:

Exan	nple: ABC – Statement of financial position		
		Ħ	Ħ
	Assets		
I	Non-current assets		
(Cost	146,000	
/	Accumulated depreciation (32,000		
(Current assets		
I	Inventories		
-	Trade receivables (51,000		
/	Allowance for doubtful debts (4,000		
F	Prepayments		
(Cash	6,200	
-	Total assets		
	Equity and liabilities		
	Capital		
	At start of year	121,600	
	Profit for the year		
[Drawings	(22,000)	
	Current liabilities		
	Trade payables	42,000	
/	Accruals (and prepaid income)		
-	Total equity and liabilities		



Example: ABC – Statement of comprehensive income (statement of profit or loss)

	*	#
Revenue		428,000
Cost of sales		
Opening inventory	15,000	
Purchases	304,400	
	319,400	
Closing inventory		
Gross profit	-	
Expenses:		
Wages and salaries	64,000	
Depreciation		
Rent (14,000		
Heating and lighting (5,000		
Bad and doubtful debts		

Step 3: Perform double entry on the face of your answer.

Step 4: Complete the bracketed workings and copy totals into their final destinations.

Step 5: Calculate profit for the year.

Step 6: Complete statement of financial position by adding profit to the opening capital, deducting drawings to find the closing capital.

The final answer might look like this:

Example: ABC – Statement of financial position			
	Ħ	N	
Assets			
Non-current assets			
Cost	146,000		
Accumulated depreciation (32,000 + 14,600)	(46,600)		
		99,400	
Current assets			
Inventories	16,500		
Trade receivables (51,000 – 1,200)	49,800		
Allowance for doubtful debts (4,000 + 500)	(4,500)		
	45,300		
Prepayments	700		
Cash	6,200		
		68,700	
Total assets		168,100	
Equity and liabilities			
Capital			
At start of year	121,600		
Profit for the year	26,100		
Drawings	(22,000)		
		125,700	
Current liabilities			
Trade payables	42,000		
Accruals (and prepaid income)	400		
		42,400	
Total equity and liabilities		168,100	
	-		



Example: ABC – Statement of comprehensive income (statement of profit or loss)

	Ħ	Ħ
Revenue		428,000
Cost of sales		
Opening inventory	15,000	
Purchases	304,400	
	319,400	
Closing inventory	(16,500)	
		(302,900)
Gross profit	-	125,100
Expenses:		
Wages and salaries	64,000	
Depreciation (W1)	14,600	
Rent (14,000 – 700)	13,300	
Heating and lighting (5,000 + 400)	5,400	
Bad and doubtful debts (1,200 + 500)	1,700	
		(99,000)
	-	26,100

Workings

W1 – Depreciation: 10% of 146,000 = 14,600

9 IAS 10: EVENTS AFTER THE REPORTING PERIOD

Section overview

- Purpose of IAS 10
- Accounting for adjusting events after the reporting period
- Disclosures for non-adjusting events after the reporting period
- Dividends
- The going concern assumption

9.1 Purpose of IAS 10

IAS 10 Events after the reporting period has two main objectives:

- □ to specify when a company should adjust its financial statements for events that occur after the end of 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 end of 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.

IAS 10 sets out the following key definitions.



Definitions

Events after the reporting period: Those events, favourable and unfavourable that occur between the end of the reporting period and the date the financial statements are authorised for issue.

Adjusting events: Events that provide evidence of conditions that already existed as at the end of the reporting period.

Non-adjusting events: Events that have occurred due to conditions arising after the end of the reporting period.

9.2 Accounting for adjusting events after the reporting period

IAS 10 states that if a company obtains information about an adjusting event after the reporting period, it should update the financial statements to allow for this new information.

'A company shall adjust the amounts recognised in its financial statements to reflect adjusting events after the reporting period.'

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 company had a present obligation as at the end of the reporting period as a consequence of the case.
- □ The receipt of information after the reporting period indicating that an asset was impaired as at the end of the reporting period. For example, information may be obtained about the bankruptcy of a customer, indicating the need to make a provision for a bad (irrecoverable) debt against a trade receivable in the year-end statement of financial position. Similarly, information might be obtained after the reporting period has ended 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.
- □ 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 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:

On 31 December Year 1, Company G is involved in a court case. It is being sued by a supplier.

On 15 April Year 2, the court decided that Company G should pay the supplier $\frac{15}{100}$ 45,000 in settlement of the dispute.

The financial statements for Company 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 company had an obligation to the supplier as 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.

9.3 Disclosures for non-adjusting events after the reporting period

Non-adjusting events after the reporting period are treated differently. A nonadjusting 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: 'A company 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 company 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 of:

- □ the nature of the event; and
- an estimate of its financial effect, or a statement that such an estimate cannot be made.

This information should be disclosed in a note to the financial statements.

(Note: There are no disclosure requirements for adjusting events 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 after the end of the reporting period, such as a large fall in the market value of some investments owned by the company, 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, not conditions already existing as at the end of the reporting period.
- The acquisition or disposal of a major subsidiary.
- The formal announcement 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 end of 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.

9.4 Dividends

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 reporting period, they should not be recognised, because they did not exist as an obligation at the end of the reporting period.

Dividends proposed after the reporting period (but before the financial statements are approved) should be disclosed in a note to the financial statements, in accordance with IAS 1.

9.5 The going concern assumption

There is one important exception to the normal rule that the financial statements reflect conditions as at the end of the reporting period.

A deterioration in operating results and financial position after the end of the reporting period may indicate that the going concern presumption is no longer appropriate.

There are a large number of circumstances that could lead to going concern problems. For example:

- □ The financial difficulty of a major customer leading to their inability to pay their debt to the agreed schedule if at all.
- An event leading to the net realisable value of lines of inventory falling to less than cost.
- An event leading to a crucial non-current asset falling out of use. This might cause difficulties in supplying customers and fulfilling contracts.
- A change in market conditions leading to a loss in value of major investments.
- □ Shortages of important supplies
- □ The emergence of a highly effective competitor.

If it becomes clear that the client cannot be considered to be a going concern, the financial statements will need to disclose this and the basis for preparing them will change to the 'break-up' basis.

This means that values will have to be adjusted to the amounts expected to be realised through sale.

10 CHAPTER REVIEW

Chapter review

Before moving on to the next chapter check that you now know how to:

- State the components of a set of financial statements according to IAS 1
- Explain the general features of financial statements described in IAS 1
- Define current and non-current assets
- Define current and non-current liabilities
- Explain the IAS 1 guidance on the structure of the statement of financial position
- Explain the IAS 1 guidance on the structure of the statement of profit or loss and other comprehensive income
- Explain the IAS 1 guidance on the structure of the statement of changes in equity
- Describe the IAS 1 rules on notes to the financial statements
- Distinguish between adjusting and non-adjusting items
- Explain and apply the IAS 10 guidance on the recognition of dividends

Skills level Financial reporting

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IAS 8: Accounting policies, changes in accounting estimates and errors

Contents

- 1 Accounting policies
- 2 Accounting estimates
- 3 Errors
- 4 Chapter review

INTRODUCTION

Purpose

In this element the accounting from the foundation level is taken up a level into financial accounting in the context of more complex events and transactions with a greater emphasis on compliance with regulations including International Accounting Standards and generally accepted accounting practices in the private sectors.

Students will be expected to demonstrate an understanding of and competence in financial statement analysis and basic analysis of choices in accounting treatments.

Competencies

2	Preparing separate financial statements
2(b)	Identify and state the laws, regulations accounting standards and other requirements that govern the production of financial statements by such entities.
2(c)	Draft and compile financial statements, or extracts from them, of an entity in accordance with its chosen policies and in accordance with IFRS and local

law. IAS 8 is an examinable document.

Exam context

This chapter explains the IAS 8 rules on the selection of accounting policies, accounting for change in accounting policies and the use of accounting estimates and the correction of errors.

By the end of this chapter you will be able to:

- Define accounting policy
- Explain the guidance on the selection of accounting policies
- Account for changes in accounting policy
- Distinguish between accounting policy and accounting estimate
- Account for changes in accounting estimates
- Correct errors

1 ACCOUNTING POLICIES

Section overview

- Introduction to IAS 8
- Accounting policies
- Selection of accounting policies
- Changes in accounting policies
- Retrospective application of a change in accounting policy
- Limitation on retrospective application
- Disclosure of a change in accounting policy

1.1 Introduction to IAS 8

The aim of *IAS 8: Accounting policies, changes in accounting estimates and errors* is to enhance comparability of the entity's financial statements to previous periods and to the financial statements of other entities.

It does this by prescribing:

- □ the criteria for selecting accounting policies; and,
- □ the accounting treatment and disclosure of:
 - changes in accounting policies;
 - changes in accounting estimates; and
 - errors.

Much of IAS 8 is concerned with how changes or corrections should be reported in the financial statements.

1.2 Accounting policies



Definition: Accounting policies

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

IFRSs set out accounting policies that result in financial statements containing relevant and reliable information about the transactions, other events and conditions to which they apply. Those policies need not be applied when the effect of applying them is immaterial.



Definition: Material

Omissions or misstatements of items are material if they could, individually or collectively, influence the economic decisions that users make on the basis of the financial statements. Materiality depends on the size and nature of the omission or misstatement judged in the surrounding circumstances. The size or nature of the item, or a combination of both, could be the determining factor.

1.3 Selection of accounting policies

Selection of accounting policies – Areas covered by IFRS

If an IFRS (or an Interpretation) applies to an item in the financial statements, the accounting policy or policies applied to that item must be determined by applying the Standard or Interpretation and any relevant implementation guidance issued.

Selection of accounting policies – Area not covered by IFRS

If there is no rule in IFRS that specifically applies to an item in the financial statements, management must use its judgement to develop and apply an accounting policy that results in information that is:

- relevant to the decision-making needs of users; and
- reliable in that the financial statements;
- represent faithfully the results and financial position of the entity;
- reflect the economic substance of transactions and other events and not merely the legal form;
- are neutral, i.e. free from bias;
- are prudent; and
- are complete in all material respects.

In making the judgement management must consider the following sources in descending order:

- the requirements and guidance in IFRS dealing with similar and related issues;
- □ the definitions, recognition criteria and measurement concepts for assets, liabilities, income and expenses set out in the "Framework".

Management may also consider the most recent pronouncements of other standard-setting bodies that use a similar conceptual framework to the extent that these do not conflict with the above sources.

Consistency of accounting policies

An entity must apply consistent accounting policies in a period to deal with similar transactions, and other events and circumstances, unless IFRS specifically requires or permits categorisation of items for which different policies may be appropriate.



Illustration: Consistency

IAS 16: Property, plant and equipment allows the use of the cost model or the revaluation model for measurement after recognition.

This is an example of where IFRS permits categorisation of items for which different policies may be appropriate.

If chosen, each model must be applied to an entire class of assets. Each model must be applied consistently within each class that has been identified.

1.4 Changes in accounting policies

Users of financial statements need to be able to compare financial statements of an entity over time, so that they can identify trends in its financial performance or financial position. Frequent changes in accounting policies are therefore undesirable because they make comparisons with previous periods more difficult.

The same accounting policies must be applied within each period and from one period to the next unless a change in accounting policy meets one of the following criteria. A change in accounting policy is permitted only if the change is:

- required by IFRS; or
- results in the financial statements providing reliable and more relevant financial information.

A new or revised standard usually include specific *transitional provisions*' to explain how the change required by the new rules should be introduced.

In the absence of specific transitional provisions, a change in policy should be applied retrospectively. This is explained shortly.

Determining when there is a change in accounting policy

A change in accounting policy can be established as follows. The accounting policies chosen by an entity should reflect transactions and events through:

- recognition (e.g. capitalising or writing off certain types of expenditure)
- measurement (e.g. measuring non-current assets at cost or valuation)
- presentation (e.g. classification of costs as cost of sales or administrative expenses)

If at least one of these criteria is changed, then there is a change in accounting policy.



Illustration: Determining when there is a change in accounting policy

IAS 23 requires the capitalisation of borrowing costs that are directly attributable to the acquisition, construction or production of a qualifying asset.

Previously, IAS 23 allowed companies to expense or capitalise borrowing costs.

The revision to IAS 23 led to a change in accounting policy for some companies as it affected:

- recognition the interest cost previously recognised as an expense had to be recognised as an asset; and
- presentation the interest cost previously presented in the statement of profit or loss had to be presented in the statement of financial position.

IAS 8 specifies that the application of a new accounting policy to transactions or events that did not occur previously or differ in substance from those that occurred previously, is **not** a change of accounting policy. It is simply the application of a suitable accounting policy to a new type of transaction.

The initial application of a policy to revalue assets in accordance with IAS 16 Property, Plant and Equipment or IAS 38 Intangible Assets is a change in an accounting policy. However, it is accounted for in accordance guidance in those standards rather than in accordance with IAS 8.

1.5 Retrospective application of a change in accounting policy

When a change in accounting policy is required, and there are no transitional provisions relating to the introduction of a new accounting standard, the change in policy should be applied retrospectively.



Definition: Retrospective application

Retrospective application is applying a new accounting policy to transactions, other events and conditions as if that policy had always been applied.

The entity should adjust the opening balance for each item of equity affected by the change, for the earliest prior period presented, and the other comparative amounts for each prior period presented, as if the new accounting policy had always been applied.

IAS 1: Presentation of Financial Statements requires a statement of financial position at the beginning of the earliest comparative period when a new accounting policy is applied retrospectively.



Illustration: Retrospective application

A company presents comparatives for the previous year only.

During the year ended 31 December 2015 it changes an accounting policy and this change must be applied retrospectively.

If there were no change in accounting policy the company would present statements of financial position as at December 2015 and December 2014 only.

However, because there is a change in policy the company must also present a statement of financial position as at 1 January 2014 (the beginning of the earliest comparative period).

The change in accounting policy is applied retrospectively. This means that the change should be applied to the balances at as at 1 January 2014 as if the new policy had always been applied.

Similarly, any other comparative amounts in previous periods should be adjusted as if the new accounting policy had always been applied.

If this is impracticable, retrospective application should be applied from the earliest date that is practicable.

1.6 Limitation on retrospective application

It might be impracticable to retrospectively apply an accounting policy. This could be because the information necessary for the application of the policy to earlier periods is not available because it had not been collected then.



Definition: Impracticable

Applying a requirement is impracticable when the entity cannot apply it after making every reasonable effort to do so. For a particular prior period, it is impracticable to apply a change in an accounting policy retrospectively or to make a retrospective restatement to correct an error if:

- (a) the effects of the retrospective application or retrospective restatement are not determinable;
- (b) the retrospective application or retrospective restatement requires assumptions about what management's intent would have been in that period; or
- (c) the retrospective application or retrospective restatement requires significant estimates of amounts and it is impossible to distinguish objectively information about those estimates that:
 - (i) provides evidence of circumstances that existed on the date(s) as at which those amounts are to be recognised, measured or disclosed; and
 - (ii) would have been available when the financial statements for that prior period were authorised for issue from other information.

There are different degrees of impracticability.

Period specific effect

It might be impracticable to determine the effect of changing an accounting policy on comparative information for one or more prior periods presented. For example, it might be impracticable to determine the impact on profit for the prior year.

In this case a company must apply the new accounting policy to the carrying amounts of assets and liabilities (and therefore equity) as at the beginning of the earliest period for which retrospective application is practicable. This may be the current period.

Cumulative effect

It might be impracticable to determine the cumulative effect, at the beginning of the current period, of applying a new accounting policy to all prior periods,

In this case a company must adjust the comparative information to apply the new accounting policy prospectively from the earliest date practicable.

When the cumulative effect of applying the policy to all prior periods cannot be determined, a company must apply the new policy prospectively from the start of the earliest period practicable. This means that it would disregard the portion of the cumulative adjustment to assets, liabilities and equity arising before that date.



Definition: Prospective application

Prospective application of a change in accounting policy and of recognising the effect of a change in an accounting estimate, respectively, are:

- (a) applying the new accounting policy to transactions, other events and conditions occurring after the date as at which the policy is changed; and
- (b) recognising the effect of the change in the accounting estimate in the current and future periods affected by the change.

1.7 Disclosure of a change in accounting policy

When a change in accounting policy has an effect on the current period or any prior period (or would have an effect that period, except that it is impracticable to determine the amount of the adjustment) or might have an effect on future periods the following must be disclosed:

Disclosure:	Change due to IFRS	Voluntary change
The title of the Standard or Interpretation	\checkmark	
The nature of the change in accounting policy	\checkmark	\checkmark
A description of any transitional provisions	\checkmark	
The reason why the new accounting policy provides reliable and more relevant information		\checkmark
For the current and previous period(s), to the extent practicable, the amount of the adjustment to each item in the financial statements.	\checkmark	\checkmark
To the extent practicable, the adjustment relating to accounting periods before those presented in the financial statements	✓	~
If retrospective application is impracticable, an explanation of how the accounting policy change has been applied	\checkmark	✓

2 ACCOUNTING ESTIMATES

Section overview

- Accounting estimates
- Changes in accounting estimates
- Disclosures

2.1 Accounting estimates

An accounting estimate is made for an item in the financial statements when the item cannot be measured with precision, and there is some uncertainty about it.

An estimate is therefore based, to some extent, on management's judgement. Management estimates might be required, for example, for the following items:

- bad debts;
- inventory obsolescence;
- □ the fair value of financial assets or liabilities;
- the useful lives of non-current assets;
- the most appropriate depreciation pattern (depreciation method, for example straight line or reducing balance) for a category of non-current assets;
- measurement of warranty provisions.

The use of reasonable estimates is an essential part of the preparation of financial statements and does not undermine their reliability.

Accounting policy vs accounting estimate

It is important to distinguish between an accounting policy and an accounting estimate.

Sometimes it can be difficult to distinguish between changes in accounting policy from changes in accounting estimate. In such cases any change is treated as a change in accounting estimate.



Illustration: Accounting policy vs accounting estimate

Accounting policy: Depreciating plant and equipment over its useful life

Accounting estimate: How to apply the policy. For example whether to use the straight line method of depreciation or the reducing balance method is a choice of accounting estimate.

A change in the measurement basis applied is a change in an accounting policy, and is not a change in an accounting estimate.



Illustration: Accounting policy vs accounting estimate

IAS 16: Property, plant and equipment allows the use of the cost model or the revaluation model for measurement after recognition.

This is a choice of accounting policy.

2.2 Changes in accounting estimates



Definition: Change in accounting estimate

A change in accounting estimate is an adjustment of the carrying amount of an asset or a liability, or the amount of the periodic consumption of an asset, that results from the assessment of the present status of, and expected future benefits and obligations associated with, assets and liabilities. Changes in accounting estimates result from new information or new developments and, accordingly, are not corrections of errors.

A change in accounting estimate may be needed if changes occur in the circumstances on which the estimate was based, or if new information becomes available. A change in estimate is **not** the result of discovering an error in the way an item has been accounted for in the past and it is **not** a correction of an error.

IAS 8 requires a change in an accounting policy to be accounted for retrospectively whereas a change in an accounting estimate is normally recognised from the current period.

The effect of a change in accounting estimate should be recognised prospectively, by including it:

- □ in profit or loss for the period in which the change is made, if the change affects that period only, or
- □ in profit or loss for the period of change and future periods, if the change affects both.

To the extent that a change in estimate results in a change in assets and liabilities, it should be recognised by adjusting the carrying amount of the affected assets or liabilities in the period of change.



Example: Change in accounting estimate

A non-current asset was purchased for ₩200,000 two years ago, when its expected economic life was ten years and its expected residual value was nil. The asset is being depreciated by the straight-line method.

A review of the non-current assets at the end of year 2 revealed that due to technological change, the useful life of the asset is only six years in total, and the asset therefore has a remaining useful life of four years.

The original depreciation charge was 120,000 per year ($^{1200,000}/_{10 \text{ years}}$) and at the beginning of Year 2, its carrying value was 180,000 (10,000 - 10,000).

The change in the estimate occurs in Year 2. The change in estimate should be applied prospectively, for years 2 onwards (years 2 - 6). From the beginning of year 2, the asset has a revised useful remaining life of five years.

The annual charge for depreciation for year 2 (the current year) and for the future years 3 – 6 will be changed from 20,000 to 36,000 (10,100)/5,100 years).

2.3 Disclosures

The following information must be disclosed:

- □ The nature and amount of a change in an accounting estimate that has an effect in the current period or is expected to have an effect in future periods, except for the effect on future periods when it is impracticable to estimate that effect.
- □ The fact that the effect in future periods is not disclosed because estimating it is impracticable (if this is the case).

3 ERRORS

Section overview

- Errors
- The correction of prior period errors
- Limitation on retrospective restatement
- Disclosure of prior period errors

3.1 Errors

Errors might happen in preparing financial statements. If they are discovered quickly, they are corrected before the finalised financial statements are published. When this happens, the correction of the error is of no significance for the purpose of financial reporting.

A problem arises, however, when an error is discovered that relates to a prior accounting period or if after the financial statements have been published. For example, in preparing the financial statements for Year 3, an error may be discovered affecting the financial statements for Year 2, or even Year 1.



Definition: Prior period errors

Prior period errors are omissions from, and misstatements in, the entity's financial statements for one or more prior periods arising from a failure to use, or misuse of, reliable information that:

- (a) was available when financial statements for those periods were authorised for issue; and
- (b) could reasonably be expected to have been obtained and taken into account in the preparation and presentation of those financial statements.

Such errors include the effects of mathematical mistakes, mistakes in applying accounting policies, oversights or misinterpretations of facts, and fraud.

3.2 Correction of prior period errors

All material prior period errors should be corrected retrospectively in the first set of financial statements following the discovery of the error.

Comparative amounts for the previous period should be re-stated at their corrected amount.

If the error occurred before the previous year, the opening balances of assets, liabilities and equity for the previous period should be re-stated at their corrected amount unless that is impracticable.

The correction of a prior period error is excluded from profit or loss in the period when the error was discovered.



Illustration: Correction of prior period errors

In preparing its financial statements for 31 December 2014 Company A discovers an error affecting the 31 December 2013 financial statements.

The error should be corrected in the 31 December 2014 financial statements by restating the comparative figures for 31 December 2013 at their correct amount.

If the error had occurred in 31 December 2012, the comparative opening balances for the beginning of 31 December 2013 should be re-stated at their correct amount.

The reported profit for 31 December 2014 is not affected.

Example: Correction of prior period errors

Kano Transport Company (KTC) is preparing its financial statements for 2014.

The draft statement of changes in equity is as follows:

	Share capital	Share premium	Retained earnings	Total
Balance at 31/12/11 Profit for the year	#000 500 -	₩000 50 -	₩000 90 150	₩000 640 150
Balance at 31/12/12 2014	500	50	240	790
Dividends Profit for the year			(100) 385	(100) 385
Balance at 31/12/13	500	50	525	1,075

KTC has now discovered an error in its inventory valuation. Inventory was overstated by $\frac{1}{70,000}$ at 31 December 2014 and by $\frac{1}{60,000}$ at 31 December 2013. The rate of tax on profits was 30% in both 2013 and 2014.

The error in 2014 is corrected against the current year profit.

The error in 2013 is corrected against the prior year profit. (Note that the 2013 closing inventory is the opening inventory in 2014 so the 2013 adjustment will impact both periods statements comprehensive income.

Profit adjustments:	2014	2013
Profit (2014 draft and 2013 actual)	₩000 385	₩000 150
Deduct error in closing inventory	(70)	(60)
Add error in opening inventory	60	
	(10)	(60)
Tax at 30%	3	18
	(7)	(42)
Adjusted profit	378	108

The statement of changes in equity as published in 2014 becomes:

Balance at 31/12/11 Profit for the year (restated)	Share capital ₩000 500	Share premium ₩000 50	Retained earnings ¥000 90 108	Total ₩000 640 108
Balance at 31/12/12 2014 Dividends Profit for the year	500	50	198 (100) 378	748 (100) 378
Balance at 31/12/13	500	50	476	1,026

3.3 Limitation on retrospective restatement

A prior period error must be corrected by retrospective restatement except to the extent that it is impracticable to determine either the period-specific effects or the cumulative effect of the error.

Period specific effect

It might be impracticable to determine the effect of correcting an error in comparative information for one or more prior periods presented. For example, it might be impracticable to determine the impact on profit for the prior year.

In this case a company must restate the carrying amounts of assets and liabilities (and therefore equity) as at the beginning of the earliest period for which retrospective restatement is practicable. This may be the current period.

Cumulative effect

It might be impracticable to determine the cumulative effect, at the beginning of the current period, of correcting an error in all prior periods,

In this case a company must correct the error prospectively from the earliest date practicable.

3.4 Disclosure of prior period errors

The following information must be disclosed:

- □ the nature of the prior period error;
- □ for each period presented in the financial statements, and to the extent practicable, the amount of the correction for each financial statement item and the change to basic and fully diluted earnings per share;
- the amount of the correction at the beginning of the earliest prior period in the statements (typically, a the start of the previous year);
- □ if retrospective re-statement is not practicable for a prior period, an explanation of how and when the error has been corrected.

IAS 8 therefore requires that a note to the financial statements should disclose details of the prior year error, and the effect that the correction has had on 'line items' in the prior year.



Example: Disclosure of prior period errors

Returning to the above example the following note would be needed to the financial statements for the year to 31 December 2014 to explain the adjustments made to figures previously published for the year to 31 December 2013.

Note about statement of profit or loss.	# 000
(Increase) in cost of goods sold	(60)
Decrease in tax	18
(Decrease) in profit	(42)
Note about statement of financial position	₩000
(Decrease) in closing inventory	(60)
Decrease in tax payable	18
(Decrease) in equity	(42)

4 CHAPTER REVIEW

Chapter review

Before moving on to the next chapter check that you now know how to:

- Define accounting policy
- Explain the guidance on the selection of accounting policies
- Account for changes in accounting policy
- Distinguish between accounting policy and accounting estimate
- Account for changes in accounting estimates
- Correct errors

Skills level Financial reporting



Revenue standards

Contents

- 1 Recognition of elements of financial statements
- 2 IAS 18: Revenue
- 3 IAS 11: Construction contracts
- 4 Chapter review

INTRODUCTION

Purpose

In this element the accounting from the foundation level is taken up a level into financial accounting in the context of more complex events and transactions with a greater emphasis on compliance with regulations including International Accounting Standards and generally accepted accounting practices in the private sectors.

Students will be expected to demonstrate an understanding of and competence in financial statement analysis and basic analysis of choices in accounting treatments.

Competencies

1 Accounting and reporting concepts, frameworks and practices

1(c) Explain and present the quantitative characteristics of financial statement disclosures

2 Preparing separate financial statements

- **2(b)** Identify and state the laws, regulations accounting standards and other requirements that govern the production of financial statements by such entities.
- **2(c)** Draft and compile financial statements, or extracts from them, of an entity in accordance with its chosen policies and in accordance with IFRS and local law.

IAS 18 and IAS 11 are examinable documents.

Exam context

This chapter explains the rules on revenue recognition as set out in IAS 18 for sale of goods, rendering of services and for allowing others to use owned assets and those set out in IAS 11 on revenue from construction contracts

By the end of this chapter you will be able to:

- Describe revenue
- Describe and demonstrate the accounting treatment (measurement and recognition) for revenue arising from sale of goods;
- Describe and demonstrate the accounting treatment (measurement and recognition) for revenue arising from rendering of services
- Describe and demonstrate the accounting treatment (measurement and recognition) for revenue arising from use by others of entity assets yielding interest, royalties and dividends.
- Describe and demonstrate the accounting treatment (measurement and recognition) for revenue arising from construction contracts including the application of cost based and revenue based methods for measuring the stage of completion of contracts
- Measure amounts to be included in the statement of financial position for construction contracts.

1 RECOGNITION IN THE FINANCIAL STATEMENTS

Section overview

- Probability of future economic benefit flowing in or out
- Reliability of measurement
- Recognition of assets, liabilities, income and expenses

The IASB Conceptual Framework states that an element (asset, liability, equity, income or expense) should be recognised in the statement of financial position or statement of profit or loss and other comprehensive income 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 of these items may have to be disclosed as additional details in a **note** to the financial statements.

The criteria for recognition are as follows:

- Let 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.

1.1 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 doubtful debts).

1.2 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 profit or loss and other 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.

1.3 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 its cost 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 statement of profit or loss and other comprehensive income when an increase in future economic benefit arises from an increase in an asset (or a reduction in a liability) and this can be measured reliably.

Note that this is approach to income recognition is based on changes in assets or liabilities in the statement of financial position. It is what has been called a 'balance sheet approach' to income and expense recognition. Income is recognised as an increase in an asset (for example, cash or trade receivables) or a simultaneous reduction in a liability (for example a bank overdraft).

Recognition of expenses

Expenses are recognised in the statement of profit or loss and other comprehensive income when a decrease in future economic benefit arises from a decrease in an asset or an increase in a liability, which can be measured reliably.

2 IAS 18: REVENUE

Section overview

- The purpose of IAS 18
- Measurement of revenue
- Revenue recognition from the sale of goods
- Revenue recognition from providing a service
- Revenue recognition from sales of goods with service agreements
- Other revenue recognition: interest, royalties and dividends

2.1 The purpose of IAS 18

Revenue is recognised in the statement of 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.

Revenue is income that arises in the ordinary course of activities and it is referred to by a variety of different names including sales, fees, interest, dividends and royalties.

IAS 18 **Revenue** defines revenue as 'the gross inflow of economic benefits during the period in the course of the ordinary activities of an entity, when those inflows result in increases in equity, other than increases relating to contributions from equity participants.'

It adds that revenue relates only to economic benefits receivable by the entity for its own account. Amounts collected on behalf of a third party, such as sales tax collected on behalf of the government, must be excluded from revenue because they do not result in an increase in equity.

2.2 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.

The difference between the nominal sale value and the fair value of the consideration is recognised as interest income.



Example: Deferred consideration

An enterprise sells a machine on 1 January 2012. The terms of sale are that the enterprise will receive \$5 million on 31 December 2014 (2 years later). An appropriate discount rate is 6%

Initial measurement of the consideration N5m	$1 \times \frac{1}{(1+0.06)^2}$	= ₩4,449,982
Deschables	Debit	Credit
Receivables Revenue	4,449,982	4,449,982
31 December 2013		
Recognition of interest revenue	₩4,449,982	@ 6% = 266,999
	Debit	Credit
Receivables	266,999	
Revenue – interest		266,999
Balance on the receivable		N
Balance brought forward		4,449,982
Interest revenue recognised in the pe	eriod	266,999
Carried forward		4,716,981
31December 2014		
Recognition of interest revenue	₩4,716,981	@ 6% = 283,019
	Debit	Credit
Receivables	283,019	
Devenue Interest		283,019
Revenue – Interest		
		₩
Balance on the receivable		₩ 4,716,981
Balance on the receivable Balance brought forward	eriod	
Revenue – interest Balance on the receivable Balance brought forward Interest revenue recognised in the pe Consideration received	eriod	4,716,981

2.3 Revenue recognition from the sale of goods

IAS 18 says that 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.

Risks and rewards of ownership

Transfer of risks and rewards of ownership is critical to revenue recognition. Usually risks and rewards are transferred at the same time as legal title or ownership passes to the buyer. However this is not always the case.

If legal title passes but risk and rewards are retained, a sale is not recognised.

- an entity may retain obligations for unsatisfactory performance not covered by normal warranty provisions;
- the receipt of revenue may be contingent on the buyer selling the goods on;
- goods are to be installed and the installation is a significant part of the contract and remains uncompleted; or,
- the buyer has the right to rescind and the seller is uncertain about the outcome.

If legal title does not pass but the risks and rewards do, a sale is recognised.

- □ A seller may retain the legal title to the goods to protect the collectability of the amount due but if the entity has transferred the significant risks and rewards of ownership, the transaction is a sale and revenue is recognised.
- A seller may offer a refund if the customer is not satisfied.
 - revenue is recognised at the time of sale provided the seller can reliably estimate future returns;
 - the seller recognises a liability for returns based on previous experience and other relevant factors.

Cost recognition

Revenue and expenses must be recognised simultaneously.

Expenses can normally be measured reliably when other conditions for revenue recognition have been satisfied.

Revenue cannot be measured when the related expenses cannot be measured reliably. In such cases proceeds should be recognised as a liability not a sale.

Illustrations

The implementation guidance to IAS 18 includes specific guidance on how the rules in the standard would be applied to revenue recognition in a series of circumstances.

The following examples are based on this guidance.



Example: Simple transaction

X Plc has received an order for a "grade 1" widget machine under the following terms for a sale price of \$100,000 with delivery on 30 September.

When should X PIc recognise revenue from this sale?

Analysis:

Assuming that there are no significant risks or rewards remaining with X Plc; and that X Plc will have no continuing involvement with the units, the risks and rewards of ownership pass to the customer when the machine is delivered.

Revenue should be recognised on delivery being 30 September.



Example: Sale with right of inspection

X Plc has received an order for a "grade 1" widget machine under the following terms for a sale price of ₦100,000 with delivery on 30 September.

The customer has the right to inspect and test the delivery before accepting the goods.

When should X Plc recognise revenue from this sale?

Analysis:

Assuming that there are no significant risks or rewards remaining with X Plc; and that X Plc will have no continuing involvement with the units the risks and rewards of ownership pass to the customer upon completion of inspection and testing and acceptance by the customer.



Example: Goods supplied on sale or return basis

Goods are sold by a manufacturer to a retailer.

The retailer has the right to return the goods if he is unable to sell them. (The goods are supplied on a 'sale or return' basis.)

Analysis:

The manufacturer retains significant risks of ownership until the retailer sells the goods.

Revenue should be recognised when the customer sells the goods, and not before.

Subscriptions to publications

Where a series of publications is subscribed to and each publication is of a similar value revenue is recognised on a straight-line basis over the period in which the publications are despatched

If the value of each publication varies revenue is recognised on the basis of the sales value in relation to the estimated sales value of all items covered by the subscription



Example: Subscriptions to publications

A publisher of a monthly magazine has received ₩480,000 in annual subscriptions in advance and has produced four issues by the year end 31 March 2013.

The advance payments are non-refundable.

What revenue should be recognised for the year ended 31 March 2013?

Analysis:

Revenue for the magazines should be recognised in the periods in which they are despatched.

The revenue recognised in the year ended 31 March 2013 = 120,000 ($480,000 \times \frac{3}{12}$).

The fact that the amount received is non-refundable does not affect how revenue is recognised.

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.

Sale and repurchase agreement

This is an agreement whereby the seller agrees to repurchase the same goods at a later date.

Such a transaction may or may not be a sale depending on the substance of the agreement.

If it is not a sale it is treated as a secured loan.



Example: Sale and repurchase agreement

X Plc is in the forestry business. It cuts wood and seasons it for 3 to 4 years before selling it to furniture manufacturers.

X Plc sells 1,000 tonnes of wood to a bank for 10,000 per tonne (which is below cost).

X Plc has a contract under which it will buy the wood back from the bank in two years' time for ₩10,000,000 plus interest.

The wood will never leave X PIc's premises.

When should X PIc recognise the revenue from this transaction?

Analysis:

Never because this is not a real sale.

There are a series of features which indicate that this is not a real sale. The facts that the sale is for less than cost, it is to an unusual customer for this type of transaction and that the wood never leaves the premises are all indicative that this is not a real sale transaction. However, the most important feature in the fact pattern is that X Plc has a contract under which it will buy the wood back at the sale proceeds plus a lender's return.

X Plc has borrowed cash using its inventory as security.

X Plc must recognise the "sale proceeds" as a liability (Dr Cash / Cr Liability).

2.4 Revenue recognition from providing a service

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 reporting date.

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** 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 at the reporting date 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.



Example: Providing a service

X Plc is engaged on a contract to develop new computer software for a customer. The contract has not been completed by the reporting date (31 December 2013). X Plc is reasonably certain of the outcome to this contract.

The total revenue from the contract will be 1700,000 and total costs are expected to be 1400,000. Costs of 150,000 have been incurred to date.

A plc measure percentage completion by comparing costs incurred to date against total expected costs.

What revenue should be recognised for the year ended 31 December 2013?

Analysis:

Revenue in the current period should be $262,500 (1700,000 \times 150,000/400,000)$. Costs of 150,000 should also be recognised as cost of sales.

Outcome cannot be measured reliably

If the outcome cannot be measured reliably, an entity should recognise the revenue only to the extent of the expenses recognised that are recoverable.

This is often the case in the early stages of a contract.



Example: Providing a service

X Plc is engaged on a contract to develop new computer software for a customer. The contract has not been completed by the reporting date (31 December 2013). The total revenue from the contract will be ₦700,000.

Costs of №120,000 have been incurred to date. It is not yet certain what stage of completion has been reached, or what the further costs to completion will be. What revenue should be recognised for the year ended 31 December 2013?

Analysis:

Revenue in the current period should be \$120,000 and matching costs should be \$120,000, so that there is neither a profit nor a loss in the current financial period

When it is not probable that the costs incurred will be recovered, revenue is not recognised. The costs incurred are recognised as an expense.

Tuition fees

Revenue should be recognised over a period of time (the period of instruction), in line with the way the services are provided over that period of time



Example: Tuition providers

A firm of accountants pay a tuition provider in advance to provide training for 10 trainees over a 3 year period.

The fee is structured at ₦1,000 per day.

The advance payment is non-refundable if any of the trainees leave the accountant's employment

When should the tuition provider recognise the fee?

Analysis:

Fees should be recognised at ₩1,000 per training day given.

If a trainee leaves his job the tuition provider should recognise the balance of the fee for that person immediately.

Any amount unrecognised should be shown as a liability.

Advertising commissions

Media commissions (e.g. payment for a series of adverts) should be recognised when the related advertisement or commercial appears before the public

Agency

A person or company might act for another company. In this case the first company is said to be an agent of the second company and the second company is described as the principal.

An agent might sell goods for a principal and collect the cash from the sale. The agent then hands the cash to the principal after deducting an agency fee.

The agent is providing a selling service to the principal. The agent should not recognise the whole sale price of the goods but only the fee for selling them.

An entity acts as principal only where it is exposed to the significant risks and rewards associated with the sale of goods. If this is not the case the entity is acting as agent. The risks and rewards to be considered include responsibility for fulfilling the order, inventory risk, ability to set the selling price and credit risk.



Example: Agency

Peshawar Sales Factors (PSF) distributes goods for Marden Manufacturing (MM) under an agreement with the following terms.

- **1**. **PSF** is given legal title to the goods by MM and sells them to the retailers.
- 2. MM sets the selling price and PSF is given a fixed margin on all sales.
- 3. MM retains all product liability and is responsible for any manufacturing defects.
- 4. PSF has the right to return inventory to MM without penalty.
- 5. PSF is not responsible for credit risk on sales made.

During the year ended 31 December 2013 MM transferred legal title of goods to PSF which cost MM ₩1,000,000. These are to be sold at a mark-up of 20%. PSF is entitled to 5% of the selling price of all goods sold.

As at 31 December PSF had sold 90% of the goods and held the balance of the inventory in its warehouse. All amounts had been collected by PSF but the company has not yet remitted any cash to MM.

Analysis:

In substance PSF is acting as an agent for MM. MM retains all significant risks and rewards of ownership of the goods transferred to PSF.

PSF would recognise:	Dr	Cr		
Cash (90% × (₦1,000,000 × 120%))	1,080,000			
Revenue (5% × 90% × (₦1,000,000 × 120%))		54,000		
Liability		1,026,000		
MM would recognise:	Dr	Cr		
Receivable	1,026,000			
Revenue		1,026,000		
MM would also recognise the unsold inventory in as part of its closing inventory.				

Franchising



Definition: Franchise

Franchising is a form of business by which the owner (franchisor) of a product, service or method obtains distribution through affiliated dealers (franchisees).

The franchisor provides the franchises with a licensed right to carry out a business activity under the franchisor's name. The franchisee owns a business which from the outside looks as if it is part of a much larger entity.

The franchisor provides services such as training and marketing and supplies inventory to the franchisee. The franchisee pays a fee for the services.



Example: Franchise

Chicken Republic is a large franchise with many outlets in Nigeria.

Each outlet is owned by an investor and operated under the Chicken Republic umbrella.

The franchisor must recognise franchise fees in a way that reflects the purpose for which the fee is charged.



Example: Franchising

Juicy Kebab of Lamb (JKL) is a successful food retailing business.

It has expanded greatly by offering people the opportunity to open JKL outlets across Nigeria and in other countries.

Any person setting up a franchise must pay JKL an initial fee of 42,000,000 and a quarterly fee of 15% of gross revenue.

The initial fee covers:

- 1. Training (₩100,000)
- 2. Supply and installation of assets (cookers, shop fittings, signage, etc. №500,000);
- 3. Management assistance over first year of the business (\\$10,000 per month);
- 4. Advertising costs (covering local advertising for the launch of the business (₩200,000) and a contribution to JKL national advertising over the first two years of the business (₩45,000 per month).

Analysis:

JKL would recognise revenue as follows:

Training – as the training is delivered (reflecting the pattern of delivery)

Supply and installation of assets – On completion of installation of each asset.

Management service – On a monthly basis.

Adverting costs:

Local advertising - as the advertising is delivered

National advertising - On a monthly basis or to reflect advertising activity.

Quarterly fee – As earned in relation to sales made.

2.5 Revenue recognition from sales of goods with service agreements

Sometimes it is necessary to apply the recognition criteria to the separately identifiable components of a single transaction in order to reflect the substance of the transaction.

When the selling price of a product includes an identifiable amount for subsequent servicing, that amount is deferred and recognised as revenue over the period during which the service is performed.

The amount deferred should be sufficient to cover both the cost of servicing and a reasonable profit.



Example: Servicing in selling price

X Plc sells a new system to a client and invoices ₩800,000.

This price includes after-sales support for the next 2 years with an estimated cost \$35,000 each year.

The normal gross profit margin for such support is 17.5%.

How should the revenue be recognised?

Analysis:

The \$800,000 must be split between the amount received for the system and the amount received for providing the service.

The amount for the system would be recognised in the usual way (on delivery or acceptance by the client). The revenue for providing the service is deferred and recognised over the period of service.

The revenue for providing the service is calculated to cover the costs and provide a margin of 17.5%.

	₩
Revenue deferred (after sales support)	
2 years $\times \frac{N_{35,000}}{0.825}$	84,848
Revenue for sale of system	715,152
Total revenue	800,000

2.6 Other revenue recognition: interest, royalties and dividends

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 contains the following guidance.

Interest

Interest income should be recognised on a time proportion basis that takes into account the effective yield on the interest-earning asset.



Example: Interest

X Plc has made a loan of ₦1,000,000.

It will receive interest at 5% in the first 2 years and then interest at 7% in the third and fourth year. All interest is received at the year ends.

The loan (1,000,000) will be repaid at the end of the fourth year.

The effective yield on the loan is 5.9424%.

Interest income is recognised as follows:

ιιc		ceognised as h	0110113.			
	Year	b/f	Interest	Cash	c/f	
	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	60,017	(1,070,000)	0	
	The journals in	year 1 would b	be:	Debit	Credit	
	Receivables		:	1,000,000		
	Cash				1,000,000	
	Being: initial re	ecognition of loa	an receivable			
	Cash (interest	received)		50,000		
	Receivables				50,000	
	Being: Nomina	l interest receiv	/ed.			
	Receivables			59,424		
	Statement of p	profit or loss			59,424	
	Being: Interest	income recogn	ised at the ef	fective rate.		

Royalties

Revenue from royalties should be recognised on an accruals basis, in accordance with the terms of the royalty agreement.



Example: Royalties

Peshawar Software Design (PSD) has developed a strategy game that is played on mobile phones. PSD has a 31 December year end.

Pineapple Inc. a major multi-national manufacturer pre-installs the game on the smart phones which they manufacture and pays PSD a royalty of \$50 per smart phone sold.

The payment is made based on Pineapple Inc.'s monthly sales. Cash is received two weeks after the end of each month.

In December Pineapple's monthly sales were 1,800,000 units.

PSD would recognise revenue of \$90,000,000 (1,800,000 \times \$50) in December.

Receivables

90,000,000

Revenue

90,000,000

Dividends

Revenue from dividends should be recognised when the right to receive the dividend is established.



Example: Dividends

Karachi International Investments (KII) owns shares in two foreign companies.

It owns 5% of the ordinary shares of Overseas Inc. and 10% of shares in Foreign Ltd. These companies operate in different jurisdictions.

The directors of Foreign Ltd declared a dividend that would translate into \$2,000,000 on 15 November 2013. Foreign Ltd operates in a jurisdiction where the declaration of a dividend must be approved by the shareholders in a general meeting. Foreign Ltd will hold the next shareholders' meeting in February.

The directors of Overseas Inc. declared a dividend that would translate into 1,000,000 on 21 December 2013. Overseas Inc. operates in a jurisdiction where there is no requirement for further approval before a dividend is paid.

What amount of dividend income should Karachi International Investments recognise in its 13 December 2013 financial statements?

	₩
Dividend from Foreign Ltd	nil
KII's right to receive dividend from Foreign Ltd will only be established if it is approved in the February meeting. If this is the case KII will recognise its share of the dividend in 2014.	
Dividend from Overseas Inc. ($\$1,000,000 \times 5\%$)	50,000
KII's right to receive the dividend is established by the declaration of the directors	
	50,000

3 IAS 11: CONSTRUCTION CONTRACTS

Section overview

- Introduction to accounting for construction contracts
- Application of the rules in IAS 11
- Measurement and recognition of contract revenue and contract costs
- Measuring revenue, costs and profit or loss for a contract
- Double entry
- Presentation and disclosure

3.1 Introduction to accounting for construction contracts

IAS 11: Construction contracts sets out the rules on how a contractor should account for construction contracts.



Definition

A construction contract is a contract specifically negotiated for the construction of an asset or a combination of assets that are closely interrelated or interdependent in terms of their design, technology and function or their ultimate purpose or use.

A fixed price contract is a construction contract in which the contractor agrees to a fixed contract price, or a fixed rate per unit of output, which in some cases is subject to cost escalation clauses.

A cost plus contract is a construction contract in which the contractor is reimbursed for allowable or otherwise defined costs, plus a percentage of these costs or a fixed fee.

Construction contracts include:

- contracts for the rendering of services which are directly related to the construction of the asset, for example, those for the services of project managers and architects; and,
- contracts for the destruction or restoration of assets, and the restoration of the environment following the demolition of assets.

In practice, a construction contract is usually 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.

Contract revenue

Contract revenue is:

- □ the initial amount of revenue agreed in the contract; plus
- variations in contract work, claims and incentive payments (provided that these will probably result in revenue and can be reliably measured).

Contract costs

Contract costs are:

- □ the direct costs of the contract (such as labour costs, costs of materials, depreciation of plant used in the construction work), 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)
- any other costs that are specifically chargeable to the customer under the terms of the contract.

Contract costs are recognised as an expense in the accounting period in which the work to which they relate is performed.

3.2 Application of the rules in IAS 11

Usually the rules in IAS 11 are applied separately to each construction contract. However, sometimes it is necessary sub-divide a contract, or to account for a group of contracts as a single contract in order to reflect the substance of the transaction(s).

Accounting for a single contract as a series of separate contracts

The construction of each individual asset should be treated as a separate contract where:

- separate proposals have been submitted for each asset;
- each asset has been subject to separate negotiation and the contractor and customer have been able to accept or reject that part of the contract relating to each asset; and
- □ the costs and revenues of each asset can be identified.

Accounting for a series of separate contracts as a single contract

The group of contracts should be treated as a single contract where:

- □ the group of contracts is negotiated as a single package;
- the contracts are so closely interrelated that they are, in effect, part of a single project with an overall profit margin; and,
- □ the contracts are performed concurrently or in a continuous sequence.

Key issue

Construction contracts often span several accounting periods.

If contract revenue and contract costs were only recognised on completion of a contract the intervening financial statements would not fairly present the efforts of the contractor over the life of the project.

IAS 11 requires that contract revenue and contract costs must be recognised over the life of the contract. In this way the financial statements will fairly present the efforts of the contractor in each period.

3.3 Measurement and recognition of contract revenue and contract costs

The following rules apply to the recognition of the revenue and costs for a construction contract in the financial statements of the contractor.

Provided that the outcome of the contract can be estimated reliably, contract revenue is recognised in the statement of profit or loss as the contract progresses. This is known as the percentage (or stage) of completion method.

This results in a fair presentation of the underlying situation, which is that profits are earned over the life of the construction contract, not on the date that the contract is finally completed.

However, IAS 11 also applies the following requirements.

- Revenue and costs can only be recognised when the outcome of a contract can be estimated reliably.
- □ If a contract is expected to make a loss, the whole of the loss must be recognised immediately.
- □ When the outcome of a contract cannot be estimated reliably:
 - revenue should be recognised only to the extent of contract costs incurred that are expected to be recoverable
 - contract costs should be recognised as an expense in the period in which they are incurred.

Estimating the stage of completion

IAS 11 does not specify a method of estimating the stage of completion of a contract. Possible methods include:

- □ The cost basis: This estimates the stage of completion by comparing the contract costs incurred to date to the total contract costs expected to be incurred over the life of the contract. This involves estimating the future costs that will be necessary to complete the contract.
- Sales basis (work certified basis): This estimates the stage of completion by comparing the sales value of the work performed to date to the total contract revenue. 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.
- Use the physical proportion of the contract work that has been completed.

Reliable estimate of outcome

In the case of a fixed price contract, the outcome of a construction contract can be estimated reliably when all the following conditions are satisfied:

- □ total contract revenue can be measured reliably;
- it is probable that the economic benefits associated with the contract will flow to the entity;
- □ both the contract costs to complete the contract and the stage of contract completion at the balance sheet date can be measured reliably; and,
- the contract costs attributable to the contract can be clearly identified and measured reliably so that actual contract costs incurred can be compared with prior estimates.

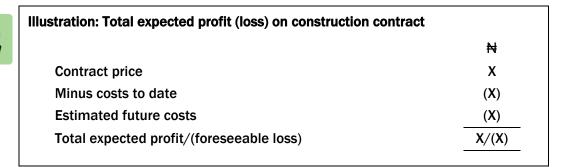
In the case of a cost plus contract, the outcome of a construction contract can be estimated reliably when all the following conditions are satisfied:

- it is probable that the economic benefits associated with the contract will flow to the entity; and,
- □ the contract costs attributable to the contract, whether or not specifically reimbursable, can be clearly identified and measured reliably.

3.4 Measuring revenue, costs and profit or loss for a contract

To calculate the figures for contract revenue and contract costs that should be recognised as income or expense in a period, the following steps should be taken.

Step 1: Calculate the total profit (loss) expected on the contract.



This step is necessary in order to identify whether the contract is loss making or not, as this would have an impact on the measurement of costs recognition. It also calculates totals that will be used later in the process

Step 2: Calculate the proportion of the work completed. An examination question will indicate which basis to use.

Step 3: Calculate cumulative contract revenue that should be recognised by the reporting date and compare this to the contract revenue recognised by the start of the period to find the contract revenue to be recognised in the period.

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 by making revenue equal to the costs for the contract so far.

Step 4: Calculate cumulative contract costs that should be recognised by the reporting date and compare this to the contract costs recognised by the start of the period to find the contract costs to be recognised in the period.

If step 1 reveals that the contract is expected to make a loss, the cumulative contract costs is measured as a balancing figure equal to the loss plus the cumulative contract revenue measured at step 3.

Example: Profit making contract using cost basis measurement of stage of completion



Example: Measurement of contract revenue and contract costs (cost basis)

The following are figures in relation to a construction contract undertaken by Entity D. The figures are for the year ended 31 December Year 2.

	₩000
Contract price	1,500
Costs to date	1,000
Expected future costs	200
Costs recognised in earlier years	650
Revenue recognised in earlier years	750

Contract revenue and contract costs recognised on the cost basis for the year ended 31 December Year 2 are calculated as follows:

Step 1: Calculate the total profit (loss) expected on the contract.

	₩000
Contract price	1,500
Minus costs to date	1,000
Estimated future costs	200
Total expected costs for the contract	(1,200)
Total expected profit	300

Step 2: Calculate the proportion of work completed to date.

Percentage completion = Costs to date/Total costs = 1,000/1,200 = 83.3%.

Step 3: Calculate the contract revenue to be recognised in the period

Revenue	₩000
Cumulative to year end (1,500 × 83.3%)	1,250
Less: revenue recognised in previous years	(750)
Revenue this year (balancing figure)	500
Step 4: Calculate the contract cost to be recognised in the period	
Costs	₩000
Cumulative to year end (1,200 × 83.3%)	1,000
Less: revenue recognised in previous years	(650)
Costs this year	350
This results in the recognition of profit of ₩150 (500 – 350) in this p	eriod.

Example: Profit making contract using sales basis measurement of stage of completion



Example: Measurement of contract revenue and contract costs (sales basis)

The following are figures in relation to a construction contract undertaken by Entity D. The figures are for the year ended 31 December Year 2.

	₩000
Contract price	1,500
Costs to date	1,000
Expected future costs	200
Costs recognised in earlier years	650
Revenue recognised in earlier years	750
Work certified to date	1,100

Contract revenue and contract costs recognised on a sales basis for the year ended 31 December Year 2 are calculated as follows:

Step 1: Calculate the total profit (loss) expected on the contract.

	₩000
Contract price	1,500
Minus costs to date	1,000
Estimated future costs	200
Total expected costs for the contract	(1,200)
Total expected profit	300

Step 2: Calculate the proportion of work completed to date.

Percentage completion

= Work certified to date/Total sales value = 1,100/1,500 = 73.3%.

Step 3: Calculate the contract revenue to be recognised in the period

Revenue	₩000
Cumulative to year end (1,500 × 73.3%)	1,100
Less: revenue recognised in previous years	(750)
Revenue this year (balancing figure)	350
Step 4: Calculate the contract cost to be recognised in the period	
Costs	₩000
Cumulative to year end (1,200 × 73.3%)	880
Less: revenue recognised in previous years	(650)
Costs this year	230

This results in the recognition of profit of \$120(350 - 230) in this period.



Practice question

Company X entered into a construction contract this year. It is proceeding well and Company X is reasonably certain of the outcome of the contract.

1

2

The following are figures are relevant as at the year end.

	₩000
Contract price	2,800
Costs to date	1,800
Expected future costs	400
Costs recognised in earlier years	XXX
Revenue recognised in earlier years	XXX

Contract revenue and contract costs recognised on the cost basis.

Calculate the amounts that should be recognised as contract revenue and contract costs for the year.



Practice question

Company X entered into a construction contract last year. It is proceeding well and Company X is reasonably certain of the outcome of the contract.

The following are figures are relevant as at the year end.

	₩000
Contract price	2,800
Costs to date	1,800
Expected future costs	400
Costs recognised in earlier years	550
Revenue recognised in earlier years	800
Work certified	2,380

Contract revenue and contract costs recognised on the sales basis.

Calculate the amounts that should be recognised as contract revenue and contract costs for the year.

Example: Loss making contract using cost basis measurement of stage of completion



Example: Measurement of contract revenue and contract costs (expected loss)

The following are figures in relation to a construction contract undertaken by Entity D. The figures are for the year ended 31 December Year 2.

	N 000
Contract price	1,500
Costs to date	1,000
Expected future costs	600
Costs recognised in earlier years	650
Revenue recognised in earlier years	750

Contract revenue and contract costs recognised on the cost basis for the year ended 31 December Year 2 are calculated as follows:

Step 1: Calculate the total profit (loss) expected on the contract.

	₩000
Contract price	1,500
Minus costs to date	1,000
Estimated future costs	600
Total expected costs for the contract	(1,600)
Total expected loss	(100)

Step 2: Calculate the proportion of work completed to date.

Percentage completion = Costs to date/Total costs = 1,000/1,600 = 62.5%.

Step 3: Calculate the contract revenue to be recognised in the period

	₩000
Cumulative to year end (1,500 × 62.5%)	938
Less: revenue recognised in previous years	(750)
Revenue this year (balancing figure)	188
Step 4: Calculate the contract cost to be recognised in the period	
The total cost that must be recognised by this year end to ensure recognition of a loss of №100,000 is №1,038,000 (№938,000 + №100,000).	e
Costs	₩000
Cumulative to year end	1,038
Less: revenue recognised in previous years	(650)
Costs this year (balancing figure)	388

A profit of \$100,000 had been recognised by the start of the period. Recognition of the loss of \$200,000 in this period results in the recognition of an overall loss of \$100,000.



Practice question

Company X entered into a construction contract last year. There are problems on the contract.

3

The following are figures are relevant as at the year end.

	₩ 000
Contract price	2,000
Costs to date	1,800
Expected future costs	700
Costs recognised in earlier years	1,000
Revenue recognised in earlier years	920

Contract revenue and contract costs recognised on the cost basis.

Calculate the amounts that should be recognised as contract revenue and contract costs for the year.

3.4 Double entry

A single contract account is used to record the balances of each contract. (This is known as **amount due to(from) customer** account).

Incurring contract costs

Debit	Credit	
Х		
	Х	
	Debit X	Debit Credit X X

Recognising contract revenue and contract costs (as measured in the previous section)



I

Ilustration: Double entry: Recognising contract revenue and contract costs		
	Debit	Credit
Revenue		Х
Cost of sale	Х	
Contract account		Х

Both contract revenue and contract costs are recognised in the statement of profit or loss with the difference recognised in the contract account. This difference is either a profit or loss in any one period.

This is different to revenue recognition for sale of goods (for example). When goods are sold the double entry is between revenue and trade receivables but this is not the case for construction contracts.

Invoicing (billings)

Illustration: Double entry: Invoicing (billings)		
Debit	Credit	
Х		
	Х	
	Debit X	

Invoices for construction contracts will be raised according to some formula contained in the contract. Periodically the contractor will be able to issue an invoice to the customer.

This is different to raising an invoice for sale of goods (for example). As stated above, when goods are sold the double entry is between revenue and trade receivables but this is not the case for construction contracts.

Example: Double entry



Example: Double entry

The following are figures in relation to a construction contract undertaken by Entity D.

This is the second year of the contract.

This is the second year of	the contract.				
		ar 1	Year 2		mulative
		000	₩000		₩000
Costs incurred in peri		400	600		1,000
Revenue recognised		750	500		1,250
Costs recognised in P	and L	650	350)	1,000
Double entries are as follo	WS::				
Double entry in year 1		l	Dr	Cr	
		Ħ	000	₩000	
Contract account			400		
Cash				400	
Revenue				750	
Cost of sales			650		
Contract account			100		
Balance on contract ac	count				₩000
Costs incurred					500
Profit recognised in the	year (750 – 650)			_	100
Revenue this year (bala	incing figure)			_	600
Double entry in year 2			Dr	Cr	
		Ħ	000	₩000	
Contract account		(600		
Cash				600	
Revenue				500	
Cost of sales		:	350		
Contract account			150		
Balance on contract ac	count				₩000
Balance b/f					600
Costs incurred					500
Profit recognised in the	year (750 – 650)			_	150
Amount due from custo	omer			_	1,250

The balance on the contract account has a meaning. The company has spent 1,000,000 on this contract and it expects to recover this from its customer. In addition the company expects to recover an extra 250,000. The balance is described as being the gross amount due from a customer.

The gross amount due from the customer could have been calculated in cumulative terms (indeed this is how IAS 11 explains this balance.

	Year 1	Year 2	Cumulative
	₩000	₩ 000	₩000
Costs incurred in period	400	600	1,000
Revenue recognised	750	500	1,250
Costs recognised in P and L	650	350	1,000
Balance on contract account	N 000		
Total costs incurred to date			1,000
Total profit recognised to date (100 + 150)			250
Amount due from customer			1,250

Any billings would reduce the amount due from the customer.



ample (continued): Amount due fr	om customer (using cumula	tive amounts
• • •	Year 1	Year 2	Cumulative
	N 000	N 000	₩000
Costs incurred in period	400	600	1,000
Revenue recognised	750	500	1,250
Costs recognised in P and L	650	350	1,000
Billings		(520)	(520)
Balance on contract account			₩000
Total costs incurred to date			1,000
Total profit recognised to date (100 + 150)			250
Billings			(520)
Amount due from customer			730
Trade receivables			₩000
Would include:			520

The balance on the contract account could be negative. This might be because billings are higher than the other amounts recognised on the account or perhaps because a loss has been recognised.



Example (continued): Amount due from customer						
	Year 1	Year 2	Cumulative			
	₩000	₩000	₩000			
Costs incurred in period	400	600	1,000			
Revenue recognised	750	188	938			
Costs recognised in P and L	650	388	1,038			
Billings		(950)	(950)			
Balance on contract account			₩000			
Total costs incurred to date	1,000					
Less loss recognised to date (988	(100)					
Billings	(950)					
Amount due to customer			(50)			
Trade receivables			₩000			
Would include:			950			

3.5 Presentation and disclosure

Presentation

The gross amount due from customers or the gross amount due to customers for contract work. This was shown in examples in the previous section. A pro-forma is repeated here for your convenience.

Illustration:	
	₩
Costs incurred	Х
Plus recognised profits to date/(or minus recognised losses)	X/(X)
Minus progress billings	(X)
Amounts due from customers (if positive) or amounts due to customers (if negative)	X/(X)

Disclosure

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)

4 CHAPTER REVIEW

Chapter review

Before moving on to the next chapter check that you now know how to:

- Describe revenue
- Describe and demonstrate the accounting treatment (measurement and recognition) for revenue arising from sale of goods;
- Describe and demonstrate the accounting treatment (measurement and recognition) for revenue arising from rendering of services
- Describe and demonstrate the accounting treatment (measurement and recognition) for revenue arising from use by others of entity assets yielding interest, royalties and dividends.
- Describe and demonstrate the accounting treatment (measurement and recognition) for revenue arising from construction contracts including the application of cost based and revenue based methods for measuring the stage of completion of contracts
- Measure amounts to be included in the statement of financial position for construction contracts.

SOLUTIONS TO PRACTICE QUESTIONS

Solution		1
Step 1: Calculate the total profit expected on the cont	tract.	
	₩000	
Contract price Minus costs to date Estimated future costs	2,800 1,800 400	
Total expected costs for the contract	(2,200)	
Total expected profit	600	
Step 2: Calculate the proportion of work completed to	o date.	
Percentage completion = Costs to date/Total costs =	1,800/2,200 = 8:	1.8%.
Step 3: Calculate the contract revenue to be recognis	ed in the period	
Revenue Cumulative to year end (2,800 × 81.8%) Less: revenue recognised in previous years		₩000 2,291 -
Revenue this year (balancing figure)		2,291
Step 4: Calculate the contract cost to be recognised in Costs Cumulative to year end Less: revenue recognised in previous years	n the period	₩000 1,800
Costs this year		1,800
This results in the recognition of profit of ₩491 (2,291– 1,800) in this period.		

Solution	
Step 1: Calculate the total profit expected or	the contract.
	₩000
Contract price Minus costs to date Estimated future costs	2,800 1,800 400
Total expected costs for the contract	(2,200)
Total expected profit	600
Step 2: Calculate the proportion of work com	pleted to date.
Percentage completion = Work certified/Con	1tract price = 2,380/2,800 = 85%.
Step 3: Calculate the contract revenue to be	recognised in the period
Revenue Cumulative to year end (2,800 × 85%) Less: revenue recognised in previous yea	₩000 2,380 ars (800)
Revenue this year (balancing figure)	1,580
Step 4: Calculate the contract cost to be reco Costs Cumulative to year end (2,200 × 85 Less: revenue recognised in previou	₩000 5%) 1,870
Costs this year	1,320

Solution		
Step 1: Calculate the total profit (loss) expected	I on the contract.	
	N 000	
Contract price	2,000	
Minus costs to date	1,800	
Estimated future costs	700	
Total expected costs for the contract	(2,500)	
Total expected loss	500	
Step 2: Calculate the proportion of work comple	eted to date.	
Percentage completion = Costs to date/Total co	osts = 1,800/2,500 = 729	6.
Step 3: Calculate the contract revenue to be red	cognised in the period	
Revenue		₩000
Cumulative to year end (2,000 × 72%)		1,440
Less: revenue recognised in previous y	ears	(920)
Revenue this year (balancing figure)		520
Step 4: Calculate the contract cost to be recogr	ised in the period	
The total cost that must be recognised recognition of a loss of ₦500,000 is ₦ ₦500,000).		
Costs		₩000
Cumulative to year end		1,940
Less: revenue recognised in previous y	ears	(1,000)
Costs this year (balancing figure)		940
This results in the recognition of loss of ₦420 (520 - 940 in this period	
A loss of \$80,000 had been recognised by th	, .	

A loss of \$80,000 had been recognised by the start of the period. Recognition of the loss of \$420,000 in this period results in the recognition of an overall loss of \$500,000.

Skills level Financial reporting



IAS 2: Inventories

Contents

- 1 Inventory
- 2 Measurement of inventory
- 3 FIFO and weighted average cost methods
- 4 Chapter review

INTRODUCTION

Purpose

In this element the accounting from the foundation level is taken up a level into financial accounting in the context of more complex events and transactions with a greater emphasis on compliance with regulations including International Accounting Standards and generally accepted accounting practices in the private sectors.

Students will be expected to demonstrate an understanding of and competence in financial statement analysis and basic analysis of choices in accounting treatments.

Competencies

2	Preparing separate financial statements
2(b)	Identify and state the laws, regulations accounting standards and other requirements that govern the production of financial statements by such entities.
2(c)	Draft and compile financial statements, or extracts from them, of an entity in accordance with its chosen policies and in accordance with IFRS and local law.

IAS 2 is an examinable document.

Exam context

This chapter explains the IAS 2 requirements on accounting for inventories.

By the end of this chapter you will be able to:

- Define inventory
- Measure inventory at the lower of cost and net realisable value
- Use cost formulas to arrive at an approximation to the cost of inventory
- Explain how inventory valuation impacts profit or loss for the period

1 INVENTORY

Section overview

- Definition of inventory
- Periodic inventory system (period end system) summary
- Perpetual inventory method
- Summary of journal entries under each method
- Inventory counts (stock takes)
- Disclosure requirements for inventory

1.1 Definition of inventory

The nature of inventories varies with the type of business. 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).

IAS 2: Inventories sets out the requirements to be followed when accounting for inventory.

Recording inventory

In order to prepare a statement of profit or loss it is necessary to be able to calculate gross profit. This requires the calculation of a cost of sales figure.

There are two main methods of recording inventory so as to allow the calculation of cost of sales.

- Periodic inventory system (period end system)
- Perpetual inventory system

Each method uses a ledger account for inventory but these have different roles.

1.2 Periodic inventory system (period end system) – summary

Opening inventory in the trial balance (a debit balance) and purchases (a debit balance) are both transferred to cost of sales.

This clears both accounts.

Closing inventory is recognised in the inventory account as an asset (a debit balance) and the other side of the entry is a credit to cost of sales.

Cost of sales comprises purchase in the period adjusted for movements in inventory level from the start to the end of the period.

Illustration: Cost of sales	
	Year 1 Year 2
	H H
Opening inventory (a debit)	– X
Purchases (a debit)	<u>x / x</u>
	x / x
Closing inventory (a credit)	(X) /(X)
Cost of sales	X X

Any loss of inventory is automatically dealt with and does not require a special accounting treatment. Lost inventory is simply not included in closing inventory and thus is written off to cost of sales. There might be a need to disclose a loss as a material item of an unusual nature either on the face of the incomes statement or in the notes to the accounts if it arose in unusual circumstances

1.3 Perpetual inventory method

This is a system where inventory records are continuously updated so that inventory values are always available.

A single account is used to record all inventory movements. The account is used to record purchases in the period and inventory is brought down on the account at each year-end. The account is also used to record all issues out of inventory. These issues constitute the cost of sales.

When the perpetual inventory method is used, a record is kept of all receipts of items into inventory (at cost) and all issues of inventory to cost of sales.

Each issue of inventory is given a cost, and the cost of the items issued is either the actual cost of the inventory (if it is practicable to establish the actual cost) or a cost obtained using a valuation method.

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

All transactions involving the receipt or issue of inventory must be recorded, and at any time, the balance on the inventory account should be the value of inventory currently held.



Example:

Zaria Trading Company had opening inventory of ₦10,000.

Purchases during the year were \$30,000.

During the year inventory at a cost of \$28,000 was transferred to cost of sales.

Closing inventory at the end of Year 2 was ₩12,000.

The following entries are necessary during the period.

Inventory account			
Balance b/d	N 10,000	Cost of sales	\ 28,000
Cash or creditors	,		28,000
(purchases in the year)	30,000		
		Closing balance c/d	12,000
	40,000		40,000
Opening balance b/d	12,000		

Furthermore, all transactions involving any kind of adjustment to the cost of inventory must be recorded in the inventory account.



Example:

Gombe Retail Limited (GR) had opening inventory of ₦100,000.

Purchases during the year were \$500,000. Inventory with a cost of \$18,000 was returned to a supplier. One of the purchases in the above amount was subject to an express delivery fee which cost the company an extra \$15,000 in addition to the above amount.

GR sold goods during the year which had cost \$520,000. Goods which had cost \$20,000 were returned to the company.

Just before the year end goods which had cost \$5,000 were found to have been damaged whilst being handled by GR's staff.

The following entries are necessary during the period.

	Inventor	ry account	
	Ħ		4
Balance b/d	100,000		
Cash or creditors		Returns to supplier	18,000
(purchases in the year)	500,000		
Special freight charge	15,000		
Returns from customers	20,000	Cost of goods sold	500,000
		Normal loss	5,000
		Closing balance c/d	112,000
	635,000		635,000
Opening balance b/d	112,000	1	

Inventory cards

The receipts and issues of inventory are normally recorded on an inventory ledger card (bin card). In modern systems the card might be a computer record.



Example: Inventory ledger card

On 1 January a company had an opening inventory of 100 units.

During the month it made the following purchases:

5 April: 300 units

14 July: 500 units

22 October: 200 units

During the period it sold 800 units as follows:

9 May: 200 units

25 July: 200 units

23 November: 200 units

12 December: 200 units

Each of these can be shown on an inventory ledger card as follows:

	Receipts (units)	lssues (units)	Balance (units)
Date	Units	Units	Units
1 January b/f	100		100
5 April (purchase)	300		300
			400
9 May (issue)		200	(200)
			200
14 July (purchase)	500		500
			700
25 July (issue)		200	(200)
			500
2 Oct (purchase)	200		200
			700
23 November (issue)		200	(200)
			500
12 December (issue)		200	(200)
	1,100	800	300

Inventory ledger cards also usually record cost information. This is covered in section 3 of this chapter.

Entry	Periodic inventory method	Perpetual inventory method
Opening inventory	Closing inventory as measured and recognised brought forward from last period	Closing balance on the inventory account as at the end of the previous period
Purchase of inventory	Dr Purchases	Dr Inventory
	Cr Payables/cash	Cr Payables/cash
Freight paid	Dr Carriage inwards	Dr Inventory
	Cr Payables/cash	Cr Payables/cash
Return of inventory to	Dr Payables	Dr Payables
supplier	Cr Purchase returns	Cr Inventory
Sale of inventory	Dr Receivables	Dr Receivables
	Cr Sales	Cr Sales
		and
		Dr Cost of goods sold
		Cr Inventory
Return of goods by a	Dr Sales returns	Dr Sales returns
supplier	Cr Receivables	Cr Receivables
		and
		Dr Inventory
		Cr Cost of goods sold
Normal loss	No double entry	Dr Cost of goods sold
		Cr Inventory
Abnormal loss	Dr Abnormal loss	Dr Abnormal loss
	Cr Purchases	Cr Inventory
Closing inventory	Counted, valued and recognised by:	Balance on the inventory account
	Dr Inventory (statement of financial position)	
	Cr Cost of sales (cost of goods sold)	

1.4 Summary of journal entries under each system

1.5 Inventory counts (stock takes)

A stock take is a physical verification of the amount of inventory that a business has.

Each item of inventory is counted and entered onto inventory sheets. The inventory counted can then be valued.

Periodic inventory systems

Inventory counts are vital for the operation of the periodic inventory system as it depends on the closing inventory at the end of each period being recognised in the system of accounts.

Perpetual inventory systems

Inventory counts are also important to the operation of perpetual inventory systems as the identify differences between the balance on the inventory account (the inventory that should be there) and the actual physical quantity of inventory.

The inventory account must be adjusted for any material difference.

Any difference should be investigated. Possible causes of difference between the balance on the inventory account and the physical inventory counted include the following.

- □ Theft of inventory.
- Damage to inventory with failure to record that damage.
- Mis-posting of inventory receipts or issues (for example posting component A as component B).
- □ Failure to record a receipt.
- □ Failure to record an issue.

Timing of inventory counts

Ideally the inventory count takes place on the last day of an accounting period (the reporting date). However, this is not always possible due to the day on which the last day of the accounting period falls or perhaps, not having enough employees to count the inventory at all sites at the same time.

If the inventory is counted at a date that differs from the reporting date the balance must be adjusted for transactions between the two dates.



Example: Timing of inventory counts

Sokoto Trading has a 31 December year end. It carried out an inventory count on 5^{th} January 2014. The count was valued at 2,800,000.

The following transactions took place between the **31** December and **5** January.

- **1.** Sales of goods for ₩120,000. These goods cost ₩96,000.
- **2.** Purchases of goods for \$136,000.

The inventory at the reporting date is calculated as follows:

	N
Inventory on 5 January	2,800,000
Add back cost of inventory sold since 31 December	96,000
Deduct purchase since 31 December	(136,000)
Inventory at 31 December	2,760,000

ы

1.6 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 measurement 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.
- □ 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.
- □ The amount of any reversal of any write-down that is recognized as a reduction in the amount of inventories recognized as expense in the period.
- □ The circumstances or events that led to the reversal of a write-down of inventories.

2 MEASUREMENT OF INVENTORY

Section overview

- Introduction
- Cost of inventories
- Net realisable value
- Accounting for a write down

2.1 Introduction

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

There are several aspects of inventory measurement to consider:

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

IAS 2 gives guidance on each of these areas.

Measurement rule

IAS 2 requires that inventory must be measured in the financial statements at the **lower** of:

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

The standard gives guidance on the meaning of each of these terms.

2.2 Cost of inventories

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

Purchase cost

The purchase cost of inventory will consist of the following:

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

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

•••

e,

Example: Purchase cost I

Kaduna Consumer Electrics (KCE) buys goods from an overseas supplier.

It has recently taken delivery of 1,000 units of component X.

The quoted price of component X was \$1,200 per unit but KCE has negotiated a trade discount of 5% due to the size of the order.

The supplier offers an early settlement discount of 2% for payment within 30 days and KCE intends to achieve this.

Import duties of \$60 per unit must be paid before the goods are released through custom.

Once the goods are released through customs KCE must pay a delivery cost of \$5,000 to have the components taken to its warehouse.

	74
Purchase price (1,000 × ₦1,200 × 95%)	1,140,000
Import duties (1,000 × ₩60)	60,000
Delivery cost	5,000
Cost of inventory	1,205,000
The intention to take settlement discount is irreleva	ant.

Conversion costs

When materials purchased from suppliers are converted into another product in a manufacturing or assembly operation, there are also conversion costs to add to the purchase costs of the materials. Conversion costs must be included in the cost of finished goods and unfinished work in progress.

Conversion costs consist of:

- costs directly related to units of production, such as costs of direct labour (i.e. the cost of the labour employed to perform the conversion work)
- fixed and variable production overheads, which must be allocated to costs of items produced and closing inventories. (Fixed production overheads must be allocated to costs of finished output and closing inventories on the basis of the normal production capacity in the period)
- other costs incurred in bringing the inventories to their present location and condition.

You may not have studied cost and management accounting yet but you need to be aware of some of the costs that are included in production overheads (also known as factory overheads). Production overheads include:

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

Only production overheads are included in costs of finished goods inventories and work-in-progress. Administrative costs and selling and distribution costs must not be included in the cost of inventory. Note that the process of allocating costs to units of production is usually called absorption. This is usually done by linking the total production overhead to some production variable, for example, time, wages, materials or simply the number of units expected to be made.



Example: Conversion costs

Kaduna Consumer Electrics (KCE) manufactures control units for air conditioning systems.

The following information is relevant:

Each control unit requires the following:

- 1 component X at a cost of ₦ 1,205 each
- 1 component Y at a cost of ₦ 800 each
- Sundry raw materials at a cost of ₩150.

The company faces the following monthly expenses:	N
Factory rent	16,500
Energy cost	7,500
Selling and administrative costs	10,000

Each unit takes two hours to assemble. Production workers are paid \aleph 300 per hour.

Production overheads are absorbed into units of production using an hourly rate. The normal level of production per month is 1,000 hours.

The cost of a single control unit is as follows:	₩
Materials:	
Component X	1,205
Component Y	800
Sundry raw materials	150
	2,155
Labour (2 hours × ₩300)	600
Production overhead ($^{116,500 + 7,500}/_{1,000 \text{ hours}} \times 2 \text{ hours}$	48
	2,803

The selling and administrative costs are not part of the cost of inventory

Normal production capacity

Production overheads must be absorbed based on normal production capacity even if this is not achieved in a period.

If production capacity is unusual in a particular period the overhead might be under or over absorbed.



Example: Normal production capacity

A business plans for production overheads of ₦1,000,000 per annum.

The normal level of production is 100,000 units per annum.

Due to supply difficulties the business was only able to make 75,000 units in the current year.

Other costs per unit were ₦126.

The cost per unit is:	Ħ
Other costs	126
Production overhead (^{₩1,000,000} /100,000 units)	10
Unit cost	136
Note:	4
The amount absorbed into inventory is (75,000 × ₩10)	750,000
Total production overhead	1,000,000
The amount not absorbed into inventory	250,000

2.3 Net realisable value



Definition

Net realisable value is the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary to make the sale.

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

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

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



Example:

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

	Ħ		
	Cost	Sales price	Selling costs
Inventory item A1	8,000	7,800	500
Inventory item A2	14,000	18,000	200
Inventory item B1	16,000	17,000	200
Inventory item C1	6,000	7,500	150

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The value of closing inventory in the financial statements:

	Lower of:	N
A1	8,000 or (7,800 – 500)	7,300
A2	14,000 or (18,000 - 200)	14,000
B1	16,000 or (17,800 - 500)	16,000
C1	6,000 or (7,000 – 200)	6,000
Inventory measurement		43,300

Net realisable value might be lower than cost so that the cost of inventories may not be recoverable in the following circumstances:

- inventories are damaged;
- inventories have become wholly or partially obsolete; or,
- □ selling prices have declined.

2.4 Accounting for a write down

When the cost of an item of inventory is less than its net realisable value the cost must be written down to that amount.

Component A1 in the previous example had a carrying value of \$8,000 (being its cost) but its NRV was estimated to be \$7,300. The item must be written down to this amount. How this is achieved depends on circumstance and the type of inventory accounting system.

Perpetual inventory systems

The situation here is similar to that for inventory loss.

The inventory must be written down in the system by the following journal:



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Debit	Credit
Х	
	Х

Period end system / Periodic inventory system

If the necessity for the write down is discovered during an accounting period then no special treatment is needed. The inventory is simply measured at the NRV when it is included in the year-end financial statements. This automatically includes the write down in cost of sales.

If the problem is discovered after the financial statements have been drafted (and before they are finalised) the closing inventory must be adjusted as follows:



tration:	Debit	Credit
Statement of profit or loss closing inventory (cost of sales)	х	
Inventory in the statement of financial position		Х

3 FIFO AND WEIGHTED AVERAGE COST METHODS

Section overview

- Cost formulas
- First-in, first-out method of measurement (FIFO)
- Weighted average cost (AVCO) method
- Profit impact

3.1 Cost formulas

With some inventory items, particularly large and expensive items, it might be possible to recognise the actual cost of each item.

In practice, however, this is unusual because the task of identifying the actual cost for all inventory items is impossible because of the large numbers of such items.

A system is therefore needed for measuring the cost of inventory.

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

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



Illustration

On 1 January a company had an opening inventory of 100 units which cost \$50 each.

During the month it made the following purchases:

5 April: 300 units at ₦60 each

14 July: 500 units at ₦70 each

22 October: 200 units at ₦80 each.

During the period it sold 800 units as follows:

9 May: 200 units

25 July: 200 units

23 November: 200 units

12 December: 200 units

This means that it has 300 units left (100 + 300 + 500 + 200 - (200 + 200 + 200 + 200 + 200)) but what did they cost?

FIFO and AVCO are two techniques that provide an answer to this question.

Note:

- First in, first out (FIFO) tends to be used in periodic inventory systems but may be used in perpetual inventory systems also.
- Weighted average cost (AVCO) is easier to apply when a perpetual inventory system is used.

3.2 First-in, first-out method of measurement (FIFO)

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

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

- □ The date that units of inventory are received into inventory, the number of units received and their purchase price (or manufacturing cost)
- the date that units are issued from inventory and the number of units issued.

With this information, it is possible to put a cost to the inventory that is issued (sold or used) and to identify the cost of the items still remaining in inventory.

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



Example: FIFO (returning to the previous example)

On 1 January a company had an opening inventory of 100 units which cost \$50 each.

During the month it made the following purchases:

- 5 April: 300 units at ₩60 each (= ₩18,000)
- 14 July: 500 units at ₦70 each (= ₦35,000)
- 22 October: 200 units at ₩80 each (= ₩16,000)

During the period it sold 800 units as follows:

- 9 May: 200 units
- 25 July: 200 units
- 23 November: 200 units
- 12 December: 200 units

The cost of each material issue from store in October and the closing inventory using the FIFO measurement method is as follows:

FIFO measures inventory as if the first inventory sold is always the first inventory purchased.

Consider the flow of units:

	Bf	5 April	14 July	22 October
	(units)	(units)	(units)	(units)
Purchased	100	300	500	200
Issues on:				
9 May (200)	(100)	(100)		
25 Jul (200)		(200)		
23 Nov (200)			(200)	
12 Dec (200)			(200)	
Closing inventory	_	_	100	200

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Exa	mple (continued): Measurement		
	Issues on 9 May	Cost per unit	Ħ
	100 units in opening inventory	50	5,000
	100 units purchased on 5 April	60	6,000
	Cost of issue		11,000
	Issues on 25 July	Cost per unit	
	200 units purchased on 5 April	60	12,000
	Cost of issue		12,000
	Issues on 23 November	Cost per unit	
	200 units purchased on 14 July	70	14,000
	Cost of issue		14,000
	Issues on 12 December	Cost per unit	
	200 units purchased on 14 July	70	14,000
	Cost of issue		14,000
	Closing inventory	Cost per unit	
	100 units purchased on 14 July	70	7,000
	200 units purchased on 22 October	80	16,000
			23,000

This looks more complicated than it needs to be. This is because the cost of each individual issue has been calculated. However, usually we would not be interested in the cost of individual issues so much as the overall cost of sale and closing inventory. When this is the case the calculations become much easier.

This is because the total costs of buying the inventory are known so only the closing inventory has to be measured. This is done assuming that it is from the most recent purchases (because FIFO assumes that the inventory bought earlier has been sold).

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	N
	5,000
	69,000
-	74,000
16,000	
7,000	
	(23,000)
	51,000

Inventory ledger card

The purchases and issues can be recorded on an inventory ledger card as follows:

	F	Recei	pts		Issues			Balanc	e
Date	Qty	@	₩	Qty	@	N	Qty	@	
1 Jan									_
b/f	100	50	5,000				100	50	5
5 Apr	300	60	18,000				300	60	18
							400	50/60	23
9 May				100	50	5,000	100	50	5
				100	60	6,000	100	60	6
				200	50/60	11,000	(200)	50/60	(11
							200	60	12
14 Jul	500	70	35,000				500	70	35
							700	60/70	47
25 Jul				200	60	12,000	(200)	60	12
							500	70	35
22 Oct	200	80	16,000				200	80	16
							700	70/80	51
23 Nov				200	70	14,000	(200)	70	(14
							500	70/80	37
12 Dec				200	70	14,000	(200)	70	(14
-	1,100		74,000	800		51,000	300	70/80	23
Note:	1,100		minus	800	eq	uals	300		

3.3 Weighted average cost (AVCO) method

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

A new average cost is calculated whenever more items are purchased and received into store. The weighted average cost is calculated as follows:



Formula: Calculation of new weighted average after each purchase

Cost of inventory currently in store + <u>Cost of new items received</u> Number of units currently in store + Number of new units received

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



Example: FIFO (returning to the previous example)

On 1 January a company had an opening inventory of 100 units which cost \$50 each.

During the month it made the following purchases:

- 5 April: 300 units at ₩60 each (= ₩18,000)
- 14 July: 500 units at ₩70 each (= ₩35,000)
- 22 October: 200 units at ₩80 each (= ₩16,000)

During the period it sold 800 units as follows:

- 9 May: 200 units
- 25 July: 200 units
- 23 November: 200 units
- 12 December: 200 units

Required

- (a) What was the cost of the material issued from store in the year, using the weighted average cost (AVCO) measurement method?
- (b) What was the value of the closing inventory on 31 December?

The weighted average method calculates a new average cost per unit after each purchase. This is then used to measure the cost of all issues up until the next purchase.

This can be shown using an inventory ledger card as follows:

Example	: Inventory	y ledge	er card (weig	hted ave	age meth	od)			
	Receipts			Issues			Balance		
Date	Qty	@	Ħ	Qty	@	₩	Qty	@	₩
1 Jan b/f	100	50	5,000				100	50	5,000
5 Apr	300	60	18,000				300	60	18,000
							400	57.5	23,000
9 May				200	57.5	11,500	(200)	57.5	(11,500)
							200	57.5	11,500
14 Jul	500	70	35,000				500	70	35,000
							700	66.43	46,500
25 Jul				200	66.43	13,286	(200)	66.43	(13,286)
							500	66.43	33,214
22 Oct	200	80	16,000				200	80	16,000
							700	70.31	49,214
23 Nov				200	70.31	14,062	(200)	70.31	(14,062)
							500	70.31	35,152
12 Dec				200	70.31	14,062	(200)	70.31	(14,062)
-	1,100		74,000	800		52,910	300	70/80	21,090
Figures in bold have been calculated as an average cost at the date of a purchase. Note: 1,100 minus 800 equals 300									
			74,000	mi	nus	52,910	equa	als 2	21,090



Summary	
	₩
Value of opening inventory, 1 October	5,000
Purchases in the period	69,000
	74,000
Value of closing inventory, 31 October (see above)	(21,090)
Cost of materials issued in October	
(See figures above: 11,500 + 13,286 + 14,062+ 14,062)	52,910

3.4 Profit impact

Inventory valuation has a direct effect on profit measurement.

Under the periodic inventory system closing inventory is credited to cost of sales. If the value of closing inventory is increased by \$100 then profit would increase by the same amount.

Under the perpetual inventory system cost of sales is comprised of the transfers from the inventory account and the closing inventory is the balance on the account. However, if the closing inventory balance is changed for whatever reason (say because of a difference between the closing inventory on the account and the actual closing inventory measured) the difference impacts cost of sales and hence gross profit. In other words profit is affected by the value assigned to closing inventory.

The figures derived from the cost formula examples above can be used to demonstrate the profit impact of different inventory value.



Example: Profit impact of inventory valuation

The company in the previous examples has sales of \$100,000 in the year.

	N	₩
Sales	100,000	100,000
Cost of sales:		
Opening inventory	5,000	5,000
Purchases	69,000	69,000
	74,000	74,000
Closing inventory:		
FIFO	(23,000)	
AVCO		(21,090)
Cost of sales	(51,000)	(52,910)
Gross profit	49,000	47,810

The profit difference is entirely due to how closing inventory is measured under each system.

4 CHAPTER REVIEW

Chapter review

Before moving on to the next chapter check that you now know how to:

- Define inventory
- Measure inventory at the lower of cost and net realisable value
- Use cost formulas to arrive at an approximation to the cost of inventory
- Explain how inventory valuation impacts profit or loss for the period

Skills level Financial reporting



IAS 16: Property, plant and equipment

Contents

- 1 Initial measurement of property, plant and equipment
- 2 Depreciation and carrying amount
- 3 Revaluation of property, plant and equipment
- 4 Derecognition of property, plant and equipment
- 5 Disclosure requirements of IAS 16
- 6 Question problems
- 7 Chapter review

INTRODUCTION

Purpose

In this element the accounting from the foundation level is taken up a level into financial accounting in the context of more complex events and transactions with a greater emphasis on compliance with regulations including International Accounting Standards and generally accepted accounting practices in the private sectors.

Students will be expected to demonstrate an understanding of and competence in financial statement analysis and basic analysis of choices in accounting treatments.

Competencies

2	Preparing separate financial statements
2(b)	Identify and state the laws, regulations accounting standards and other requirements that govern the production of financial statements by such entities.
2(0)	Draft and compile financial statements, or extracts from them, of an entity i

2(c) Draft and compile financial statements, or extracts from them, of an entity in accordance with its chosen policies and in accordance with IFRS and local law.

IAS 16 is an examinable document

Exam context

This chapter explains rules on accounting for property plant and equipment

By the end of this chapter you will be able to:

- Measure property, plant and equipment on initial recognition
- Measure property, plant and equipment after initial recognition using the cost model and the revaluation model
- Account for disposals of property plant and equipment
- Construct basic notes to the financial statements in respect of property plant and equipment

1 INITIAL MEASUREMENT OF PROPERTY, PLANT AND EQUIPMENT

Section overview

- Introduction
- Initial measurement
- Exchange transactions
- Elements of cost
- Subsequent expenditure
- Measurement after initial recognition

1.1 Introduction

Rules on accounting for property, plant and equipment are contained in *IAS 16: Property, plant and equipment.*

Definition



Definition: Property, plant and equipment

Property, plant and equipment are tangible items that:

- (a) are held for use in the production or supply of goods or services, for rental to others, or for administrative purposes; and
- (b) are expected to be used during more than one period.

Items such as spare parts, stand-by equipment and servicing equipment are recognised as property, plant and equipment when they meet the above definition. If this is not the case they are recognised as inventory.

Initial recognition

The cost of an item of property, plant and equipment must be recognised as an asset if, and only if:

- it is probable that future economic benefits associated with the item will flow to the entity; and
- □ the cost of the item can be measured reliably.

Items of property, plant and equipment may be acquired for safety or environmental reasons. At first sight it looks as if such items would not be recognised as property, plant and equipment according to the recognition criteria because they do not directly increase future economic benefits. However, they may be necessary in order that a company obtain the future economic benefits from its other assets so they do qualify for recognition.



Illustration:

A chemical manufacturer may install new chemical handling processes to comply with environmental requirements for the production and storage of dangerous chemicals.

This would be recognised as an asset because without them the company cannot make and sell chemicals.

1.2 Initial measurement

Property, plant and equipment are initially recorded in the accounts of a business at their cost.



Definition: Property, plant and equipment

Cost is the amount of cash or cash equivalents paid or the fair value of the other consideration given to acquire an asset at the time of its acquisition or construction or, where applicable, the amount attributed to that asset when initially recognised in accordance with the specific requirements of other IFRSs. (For example assets held under finance leases – see chapter 12).

The cost of an item of property, plant and equipment is the cash price equivalent at the recognition date. If payment is deferred beyond normal credit terms, the difference between the cash price equivalent and the total payment is recognised as interest over the period of credit unless it is capitalised in accordance with *IAS 23: Borrowing costs* (covered later).

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Example: Deferred consideration

A company buys a machine on 1 January 2014. The terms of the purchase are that the company will pay \$5 million for the machine on 31 December 2014 (1 year later). An appropriate discount rate is 6% **1 January 2014 – Initial recognition** Initial measurement of the purchase price $\$5m \times \frac{1}{(1+0.06)} = \$4,716,981$

Property, plant and equipment	Debit Credit 4,716,981
Liability	4,716,981
31 December 2014 – Date of paymer	nt
Recognition of interest expense	₩4,716,981@6% = 283,019
	Debit Credit
Statement of profit or loss	283,019
Liability	283,019
Balance on the liability	Ħ
Balance brought forward	4,716,981
Interest expense recognised in the pe	riod 283,019
	5,000,000
Cash/bank	(5,000,000)

1.3 Exchange transactions

An asset may be acquired in exchange for another asset. The cost of such asset is measured at its fair value unless:

- Let the exchange transaction lacks commercial substance; or
- □ the fair value of neither the asset received nor the asset given up is reliably measurable.

If the new asset is measured at fair value, the fair value of the asset given up is used to measure the cost of the asset received unless the fair value of the asset received is more clearly evident.

If the new asset is not measured at fair value, its cost is measured at the carrying amount of the asset given in exchange for it. This would be the case when the exchange lacked commercial substance or when the fair value of either asset cannot be measured.

Lack of commercial substance

The determination of whether an exchange transaction has commercial substance depends on the extent to which future cash flows are expected to change as a result of the transaction. If there is minimal impact on future cash flows then the exchange lacks commercial substance.

1.4 Elements of cost

The definition of 'cost' for property, plant and equipment has close similarities with the cost of inventories, although property, plant and equipment will often include more items of 'other expense' within cost.

The cost of an item of property, plant and machinery consists of:

- its purchase price after any trade discount has been deducted, plus any import taxes or non-refundable sales tax; plus
- the directly attributable costs of bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management. These directly attributable costs may include:
 - employee costs arising directly from the installation or construction of the asset;
 - the cost of site preparation;
 - delivery costs ('carriage inwards');
 - installation and assembly costs;
 - testing costs to assess whether the asset is functioning properly (net of sale proceeds of items produced during the testing phase).
 - professional fees directly attributable to the purchase.
- ❑ When the entity has an obligation to dismantle and remove the asset at the end of its life, its initial cost should also include an estimate of the costs of dismantling and removing the asset and restoring the site where it is located. This will be explained in more detail in chapter 13 which covers IAS 37: Provisions, contingent liabilities and contingent assets.

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company has purchased a large item of plant.	
he following costs were incurred.	
List price of the machine	1,000,000
Trade discount given	50,000
Delivery cost	100,000
Installation cost	125,000
Cost of site preparation	200,000
Architect's fees	15,000
Administration expense	150,000
Test run cost	75,000
had a cale value of M10 000	
had a sale value of ₩10,000. Local government officials have granted the company a operate the asset on condition that the company will rer and return the site to its former condition at the end of t The company has recognised a liability of ₩250,000 in r expected clearance cost. The cost of the asset is as follows:	nove the asset he asset's life.
Local government officials have granted the company a operate the asset on condition that the company will rer and return the site to its former condition at the end of t The company has recognised a liability of №250,000 in r expected clearance cost. The cost of the asset is as follows:	nove the asset he asset's life. respect of the ₩
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Local government officials have granted the company a operate the asset on condition that the company will rer and return the site to its former condition at the end of t The company has recognised a liability of №250,000 in r expected clearance cost. The cost of the asset is as follows:	nove the asset the asset's life. respect of the ¥ 950,000 100,000
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 Local government officials have granted the company a operate the asset on condition that the company will remand return the site to its former condition at the end of the The company has recognised a liability of \$250,000 in the expected clearance cost. The cost of the asset is as follows: Purchase price of the machine (1,000,000 - 50,000) Delivery cost Installation cost Cost of site preparation Architect's fees 	nove the asset the asset's life. respect of the 950,000 100,000 125,000 200,000 15,000

The recognition of costs ceases when the asset is ready for use. This is when it is in the location and condition necessary for it to be capable of operating in the manner intended by management.

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Cost of self-constructed assets

The cost of a self-constructed asset is determined using the same principles as for an acquired asset.

A company might make similar assets for sale in the normal course of business. The cost of an asset for the company to use itself would normally be the same as the cost of an asset for sale as measured according to *IAS 2: Inventories*.

IAS23: Borrowing costs, deals with whether interest costs on borrowing to finance the construction of a non-current asset should be included in the cost of the asset. This is covered in the next chapter.

Not part of cost

Only those costs necessary to bring an asset to a condition and location where it is capable of operating in the manner intended by management are recognised.

IAS 16 provides the following list of costs that are not costs of an item of property, plant and equipment:

- □ costs of opening a new facility;
- costs of introducing a new product or service (including costs of advertising and promotional activities);
- costs of conducting business in a new location or with a new class of customer (including costs of staff training); and
- administration and other general overhead costs.

1.5 Subsequent expenditure

Expenditure relating to non-current assets, after their initial acquisition, should be capitalised if it meets the criteria for recognising an asset.

In practice, this means that expenditure is capitalised if it:

- improves the asset (for example, by enhancing its performance or extending its useful life); or
- □ is for a replacement part (provided that the part that it replaces is treated as an item that has been disposed of).

Repairs and maintenance expenditure is revenue expenditure. It is recognised as an expense as it is incurred, because no additional future economic benefits will arise from the expenditure.

A basic rule is that improvements are capitalised but repairs are expensed. You may have to correct situations when an amount spent has not been treated correctly. This is covered in section 6 of this chapter.

Major inspections

A company might only be allowed to operate some assets if those assets are subject to regular major inspections for faults.

The cost of such major inspections is recognised in the carrying amount of the asset as a replacement if the recognition criteria are satisfied.

When a major inspection is carried out any remaining carrying amount of the cost of the previous inspection is derecognised.



Example: Major overhaul

A shipping company is required to put its ships into dry dock every three years for an overhaul, at a cost of \$3,000,000. The ships have a useful life of 20 years. A ship is purchased from a shipbuilder at a cost of \$200 million.

Initial recognition

3,000,000 of the asset cost should be treated as a separate component and depreciated over three years.

The rest of the cost of the ship (₩297 million) should be depreciated over 20 years.

End of year 3

An overhaul is required.

The cost of the overhaul is capitalised and added to the asset's cost.

The cost (\$3,000,000) and accumulated depreciation of the depreciated component is removed from the accounts.

1.6 Measurement after initial recognition

IAS 16 allows a choice of accounting treatments after initial recognition.

All items of property, plant and equipment in a class can be accounted for using one of two models:

- Cost model Property, plant and equipment is carried at cost less any accumulated depreciation and any accumulated impairment losses.
- Revaluation model Property, plant and equipment is carried at a revalued amount. This is the fair value at the date of the revaluation less any subsequent accumulated depreciation and any accumulated impairment losses.

The above choice must be applied consistently. A business cannot carry one item of property, plant & equipment at cost and revalue a similar item. However, a business can use different models for different classes of property, plant & equipment. For example, companies might use the cost model for plant and equipment but use the revaluation model for property.

Depreciation is an important component of both models.

2 DEPRECIATION AND CARRYING AMOUNT

Section overview

- Depreciation
- Depreciable amount and depreciation period
- Reviews of the remaining useful life and expected residual value
- Depreciation method
- Review of depreciation method
- Impairment

You should be familiar with the measurement and recognition of depreciation from your previous studies. This section provides a reminder of the key concepts.

2.1 Depreciation

Depreciation is an expense that matches the cost of a non-current asset to the benefit earned from its ownership. It is calculated so that a business recognises the full cost associated with a non-current asset over the entire period that the asset is used.



Definitions

Depreciation is the systematic allocation of the depreciable amount of an asset over its useful life.

Depreciable amount is the cost of an asset, or other amount substituted for cost, less its residual value.

The **residual value** of an asset is the estimated amount that an entity would currently obtain from disposal of the asset, after deducting the estimated costs of disposal, if the asset were already of the age and in the condition expected at the end of its useful life.

Useful life is:

- (a) the period over which an asset is expected to be available for use by an entity; or
- (b) the number of production or similar units expected to be obtained from the asset by an entity.

Carrying amount is the amount at which an asset is recognised after deducting any accumulated depreciation and accumulated impairment losses. (Net book value (NBV) is a term that is often used instead of carrying amount).

Parts of an asset

Each part of an asset that has a cost that is significant in relation to the total cost of the item must be depreciated separately. This means that the cost of an asset might be split into several different component assets and each depreciated separately.



Illustration: Cost

A company has purchased a new Gulf Stream jet for ₦5,500 million. The company has identified the following cost components and useful lives in respect of this jet.

	Nmillion	Useful lives
Engines	2,000	3 years
Airframe	1,500	10 years
Fuselage	1,500	20 years
Fittings	500	5 years
	5,500	

Depreciation is charged as an expense in the statement of profit or loss each year over the life of the asset unless it relates to an asset being used to construct another asset. In this case the depreciation is capitalised as part of the cost of that other asset in accordance with the relevant standard (For example: *IAS 2: Inventories; IAS 16 Property, plant and equipment; IAS 38; Intangible assets*).

Accounting for depreciation

The double entry for depreciation should be familiar to you from your earlier studies. This section gives a brief recap.

Illustration: Depreciation double entry		
	Debit	Credit
Depreciation expense	Х	
Accumulated depreciation		Х

The balance on the depreciation expense account is taken to the statement of profit or loss as an expense for the period.

The non-current asset figure in the statement of financial position is made up of two figures, the cost less accumulated depreciation.

Q1	
-	

Illustration: Carrying amount of a non-current asset		
	₩	
Non-current asset at cost	Х	
Less accumulated depreciation	(X)	
Carrying amount (net book value)	X	This figure appears on the face of the statement of financial position

2.2 Depreciable amount and depreciation period

The depreciable amount of an asset must be allocated on a systematic basis over its useful life.

Commencement of depreciation

Depreciation of an asset begins when that asset is available for use. This means when the asset is in the location and condition necessary for it to be capable of operating in the manner intended by management. This might be before the asset is actually used.

Cessation of depreciation

Depreciation ends at the earlier of when an asset is classified as held for sale in accordance with *IFRS 5: Non-current assets held for sale and discontinued operations* and when it is derecognised.

IFRS 5 is outside the scope of your syllabus but is mentioned here for completeness. For questions in this exam you should depreciate to that an asset is derecognised.

Depreciation does not cease when an asset becomes idle or is withdrawn or retired from active use.

Residual value

In practice, the residual value of an asset is often insignificant and therefore immaterial in the calculation of the depreciable amount.

However, in some cases, the residual value may be equal to or greater than the asset's carrying amount. In this case the depreciation charge would be zero.

Land and buildings

Land and buildings are separable assets and are dealt with separately for accounting purposes, even when they are acquired together.

Land normally has an unlimited life and is therefore not depreciated. However, there are exceptions to this. If land has a physical attribute that is used over a period then the land should be depreciated over this period.



Example: Land

Okene Quarries has purchased a site from which they will extract gravel for sale to the construction industry.

The site cost ₩50,000,000.

It is estimated that gravel will be extracted from the site over the next 20 years.

The land must be depreciated over 20 years.

Buildings normally have a limited life and are therefore depreciable assets.

. .

1

2.3 Reviews of the remaining useful life and expected residual value

Review of useful life

IAS 16 requires useful lives and residual values to be reviewed at each year-end. Any change is a change in accounting estimate. The carrying amount (cost minus accumulated depreciation) of the asset at the date of change is written off over the (revised) remaining useful life of the asset.



Example:

Benin City Engineering owns a machine which originally cost \$60,000 on 1 January 2010.

The machine was being depreciated over its useful life of 10 years on a straightline basis and has no residual value.

On 31 December 2013 Benin City Engineering revised the total useful life for the machine to eight years (down from the previous 10).

Required

Calculate the depreciation charge for 2013 and subsequent years.



Answer

The change in accounting estimate is made at the end of 2013 but may be applied to the financial statements from 2013 onwards.

Cost on 1 January 2010 Depreciation for 2010 to 2012 (60,000 × 3/10)	₩ 60,000 (18,000)
Carrying amount at end of 2012	(18,000) (12,000) (12,000)
Remaining useful life at the end of 2012 = 8 – 3 years = 5 years.	

Depreciation for 2013 and subsequent years = $42,000 \div 5$ years = 8,400.

Residual value

The residual value of an item of property, plant and equipment must be reviewed at least at each financial year end and if expectations differ from previous estimates the depreciation rate for the current and future periods is adjusted.

A change in the asset's residual value is accounted for prospectively as an adjustment to future depreciation.



Practice question

A machine was purchased three years ago on 1 January Year 2. It cost \$150,000 and its expected life was 10 years with an expected residual value of \$30,000.

Due to technological changes, the estimated life of the asset was reassessed during Year 5. The total useful life of the asset is now expected to be 7 years and the machine is now considered to have no residual value. The financial year of the entity ends on 31 December.

What is the depreciation charge for the year ending 31 December Year 5?

2.4 Depreciation method

The depreciation method used should reflect the way in which the economic benefits of the asset are consumed by the business over time.

The main choice is between the straight line method and the reducing balance method (also known as the diminishing balance method).

Straight-line method



Definition: Straight line depreciation

The depreciable amount is charged in equal amounts to each reporting period over the expected useful life of the asset.

 Depreciation charge for the year
 =
 Cost of asset less expected residual value

 Expected useful life (years)

The charge in the first and last year is time apportioned.



Example: Straight line depreciation – mid-year acquisition

A machine cost ₩250,000. It has an expected economic life of five years.

It is expected that the machine will have a zero scrap value at the end of its useful life.

The machine was bought on the $\mathbf{1}^{st}$ September and the company has a $\mathbf{31}^{st}$ December year end.

The depreciation charge in the first year of ownership is:

Depreciation charge =
$$\frac{250,000}{5 \text{ years}} \times \frac{4}{12} = 16,667$$

Reducing balance method



Definition: Reducing balance method

The annual depreciation charge is a fixed percentage of the carrying amount of the asset at the start of the period.



Formula: Reducing balance depreciation

Depreciation charge _ Carry for the year the s

Carrying amount at the start of the year

Fixed percentage

X



Example: Reducing balance method

A machine cost ₩100,000 on 30 September.

The company has a 31 December year end.

It has an expected life of five years, and it is to be depreciated by the reducing balance method at the rate of 30% each year.

Annual depreciation and carrying amount over the life of the asset will be as follows.

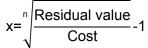
Year	Carrying amount at start		Annual depreciation charge	Carrying amount at end
	Ħ		Ħ	Ħ
1	100,000	$ imes$ 30% $ imes$ $^{3/12}$	7,500	92,500
2	92,500	× 30%	27,750	64,750
3	64,750	× 30%	19,425	45,325
4	45,325	× 30%	13,598	31,727

Note that the depreciation in the year after the first full year's depreciation (year 2) can be calculated by multiplying the previous year's charge by (1 – the reducing balance percentage).

3	27,750 × 70%	19,425
4	19,425 × 70%	13,598



Formula: Calculation of reducing balance percentage



Where:

- x = The reducing balance percentage
- n = Expected useful life.



Example: Reducing balance

An asset cost №10,000 and has an expected residual value of №2,000 at the end of its expected useful life which is 5 years.

The reducing balance percentage is calculated as follows.

$$x = \sqrt[n]{\frac{\text{Residual value}}{\text{Cost}}} - 1 = \sqrt[5]{\frac{2,000}{10,000}} - 1 = 0.275 \text{ or } 27.5\%$$

This percentage reduces ₩10,000 to ₩2,000 over 5 years.

Year	Carrying amount at start of year	Annual depreciation charge (at (27.5% reducing balance)	Carrying amount at end of year
	Ħ	Ħ	Ħ
1	10,000	2,750	7,250
2	7,250	1,994	5,256
3	5,256	1,445	3,811
4	3,811	1,048	2,763
5	2,763	763	2,000

Note that the depreciation charge in year 5 contains a rounding difference of 3.

Depreciation by number of units produced



Definition

Depreciation is calculated by expressing the useful life of an asset in terms of its expected total output and allocating the annual charge to depreciation based on actual output.



Formula: Depreciation by number of units produced

Depreciation	_	Cost – residual value		Number of units
charge	_	Total expected production over the life of the asset	- ×	produced in period

2.5 Review of depreciation method

The depreciation method applied to property, plant and equipment must be reviewed periodically and, if there has been a significant change in the expected pattern of economic benefits from those assets, the method is changed to reflect the changed pattern.

Where there is a change in the depreciation method used, this is a change in accounting estimate. A change of accounting estimate is applied from the time of the change, and is not applied retrospectively. The carrying amount (cost minus accumulated depreciation) of the asset at the date of the change is written off over the remaining useful life of the asset.



Example:

Oyo Fabrics owns a machine which originally cost \$30,000 on 1 January 2010. It has no residual value.

It was being depreciated over its useful life of 10 years on a straight-line basis.

At the end of 2013, when preparing the financial statements for 2013, Oyo Fabrics decided to change the method of depreciation, from straight-line to the reducing balance method, using a rate of 25%.

Required

Calculate the depreciation charge for 2013.



Answer

The change in accounting estimate is made at the end of 2013, but is applied to the financial statements from 1 January 2013.

The reducing balance method of depreciation is applied to the 2013 statements.

	N N
Cost on 1 January 2010	30,000
Depreciation for 2010 to 2012 (30,000 \times 3/10)	(9,000)
Carrying amount at end of 2012	21,000

Depreciation for 2013 will therefore be ₩21,000 × 25% = ₩5,250.

2.6 Impairment

Both the cost model and the revaluation model refer to impairment losses.

IAS 36 Impairment of assets contains detailed guidance on impairment.



Definition

Impairment loss: The amount by which the carrying amount of an asset (or a cashgenerating unit) exceeds its recoverable amount.

An impairment loss is a write down in the value of an asset to its recoverable amount. IAS 36 operates to ensure that assets are carried in the financial statements at no more than their recoverable amount. (This is very similar to the rule that requires inventory to be measured at the lower of cost and net realisable value).

The recoverable amount of an asset is defined as the higher of its:

- Fair value less costs to sell (the amount that would be received for the asset in an orderly transaction between market participants less costs of selling it); and
- □ Value in use (the present value of future cash flows from using an asset, including its eventual disposal).

You will not be asked to compute these figures in the exam but you might be given the two amounts and be expected to identify the recoverable amount and account for any impairment loss.



Example: Impairment

The following information relates to 3 assets.

	Asset 1	Asset 2	Asset 3
Carrying amount	80,000	120,000	140,000
Value in use	150,000	105,000	107,000
Fair value less cost to sell	60,000	90,000	110,000
Recoverable amount	150,000	105,000	110,000
Impairment loss	nil	15,000	30,000
	-		

Approach

Impairment of an asset should be identified and accounted for as follows:

- At the end of each reporting period, a business should assess whether there are any indications that an asset may be impaired.
- □ If there are such indications, the business should estimate the asset's recoverable amount.
- ❑ When the recoverable amount is less than the carrying amount of the asset, the carrying amount should be written down to this amount. The amount by which the value of the asset is written down is an impairment loss.
- This impairment loss is recognised as a loss for the period.
- Depreciation charges for the impaired asset in future periods should be adjusted to allocate the asset's revised carrying amount, minus any residual value, over its remaining useful life (revised if necessary).

There is no specific guidance on the double entry needed to record impairment. One way of accounting for it is to set up an accumulated impairment loss account and account for it just like depreciation.

3 REVALUATION OF PROPERTY, PLANT AND EQUIPMENT

Section overview

- Revaluation and the entity's accounting policy
- Accounting for revaluation
- Changing the carrying amount of a revalued asset
- Depreciation of a re-valued asset
- Realisation of the revaluation surplus
- Revaluation model: the frequency of revaluations

3.1 Revaluation and the entity's accounting policy

An item of property, plant and equipment is recognised at cost when it is first acquired.

IAS 16 allows a business to choose one of two measurement models as its accounting policy for property, plant and equipment after acquisition. The same model should be applied to all assets in the same class.

The two measurement models for property, plant and equipment after acquisition are:

- cost model (i.e. cost less accumulated depreciation); and
- revaluation model (i.e. revalued amount less accumulated depreciation since the most recent revaluation).

For example, a company's policy might be to value all its motor vehicles at cost, but to apply the revaluation model to all its land and buildings.

Revaluation model – Issues

The following accounting issues have to be addressed when using the revaluation model:

	Issue
1	What happens to the other side of the entry when the carrying amount of an asset is changed as a result of a revaluation adjustment?
	An asset value may increase or decrease.
	What happens in each case?
2	How is the carrying amount of the asset being revalued changed?. The carrying amount is located in two accounts (cost and accumulated depreciation) and it is the net amount that must be changed so how is this done?
3	How often should the revaluation take place?

3.2 Accounting for revaluation

When a non-current asset is revalued, its 'carrying amount' in the statement of financial position is adjusted from carrying amount to its fair value (normally current market value) at the date of the revaluation.

How the carrying amount is changed will be addressed later. This section concentrates on the other side of the entry.

Asset carried at cost revalued upwards

An increase in value is credited to other comprehensive income and accumulated in equity under the heading of revaluation surplus.



Example: Upward revaluation

Land was purchased for 100 on the first day of the 2013 accounting period. The business revalues land as permitted by the IAS 16.

The land was revalued to ${\bf 130}$ at the end of the first year of ownership.

Double entry: IAS 16	Debit	Credit			
Land	30				
Other comprehensive income (an accumulated in a revaluation surplus).		30			
Extract from the statement of financial position as at $31/12/13$					
		IFRS			
Property, plant and equipment		130			
Equity (revaluation surplus)		30			

Asset carried at cost revalued downwards

A decrease in value is debited as an expense to the statement of profit or loss.



Example: Downward revaluation

Land was purchased for 100 on the first day of the 2013 accounting period. The business revalues land as permitted by the IAS 16. The land was revalued to 90 at the end of the first year of ownership.

	Debit	Credit
Statement of profit or loss	10	
Land		10

Asset carried at a revaluation deficit is revalued upwards

An asset might be carried at an amount lower than its original cost as a result of being revalued downwards.

If the asset is later revalued upwards, the revaluation increase is recognised in the statement of profit or loss to the extent of the previously recognised expense. That part of any increase above the previously recognised expense is recognised in the usual way, in other comprehensive income (IAS 16).

Asset carried at a revaluation surplus revalued downwards

An asset might be carried at an amount higher than its original cost as a result of being revalued upwards.

If the asset is later revalued downwards, the revaluation decrease is recognised in other comprehensive income to the extent of the previously recognised surplus. That part of any decrease above the previously recognised surplus is recognised in the statement of profit or loss the usual way.



Example: Downward revaluation – Accounted for under IAS 16

A business purchased a plot of land on the first day of the 2013 accounting period. The business applies the IAS 16 revaluation model to the measurement of land after initial recognition. The business has a policy of revaluing land annually. The initial amount recognised and the year end values are shown below:

Measurement on initial recognition	₩ 100		
Valuation as at:			
31 December 2013	130		
31 December 2014	110		
31 December 2015	95		
31 December 2016	116		
The double entries are as follows:			
31 December 2013		Debit	Credit
Land (130 – 100)		30	
Other comprehensive income			30
31 December 2014		Debit	Credit
Other comprehensive income		20	
Land (110 – 130)			20
The fall in value reverses a previously recognised OCI to the extent that it is covered by the surplus	•	. It is reco	ognised in
31 December 2015		Debit	Credit
Other comprehensive income		10	
Statement of profit or loss		5	
Land (95 – 110)			15
The fall in value in part reverses a previously recorrecognised in OCI to the extent that it is covered reduces the revaluation surplus to zero. Any amount not covered by the surplus is recogn statement of profit or loss.	by the s	urplus. Th	nis
31 December 2016		Debit	Credit
Land (116 – 95)		21	
Statement of profit or loss			5
Other comprehensive income			16
A rise in value that reverses a previously recognis in the statement of profit or loss to the extent tha Any amount above this is recognised in other cor	at it reve	erses the	expense.

		Other comprehensive	Statement of
	Land	income	profit or loss
At start	100	_	_
Double entry	30	30 ^{Cr}	
31/12/13	130		
b/f	130		
Adjustment	(20)	20 ^{Dr}	_
31/12/14	110		
b/f	110		
Adjustment	(15)	10 ^{Dr}	5 ^{Dr}
31/12/15	95		
b/f	95		
Adjustment	21	16 ^{Cr}	5 ^{cr}
31/12/16	116	_	

3.3 Changing the carrying amount of a revalued asset.

In the previous example land was revalued. Land is not depreciated so the carrying amount of land is represented in a single account. This made it easy to change:

The carrying amount of depreciable assets is the net of balances on two separate accounts. The double entry to revalue the asset must take this into account.

IAS 16 allows a choice of two approaches which differ in the treatment of the accumulated depreciation account.

When an item of property, plant and equipment is revalued, any accumulated depreciation at the date of the revaluation is treated in one of the following ways:

Method 1

Restate accumulated depreciation proportionately with the change in the gross carrying amount of the asset so that the carrying amount of the asset after revaluation equals its revalued amount.

Method 2

Step 1: Transfer the accumulated depreciation to the asset account. The result of this is that the balance on the asset account is now the carrying amount of the asset and the accumulated depreciation account in respect of this asset is zero.

Step 2: Change the balance on the asset account to the revalued amount.



Example: Method 1

A building owned by a company is carried at \$20 million (Cost of \$25 million less accumulated depreciation of \$5 million. The company's policy is to apply the revaluation model to all of its land and buildings.

A current valuation of this building is now ₩26 million.

	Before		After
Cost	25	× ²⁶ / ₂₀	32.5
Accumulated depreciation	(5)	$\times \frac{26}{20}$	(6.5)
Carrying amount	20	× ²⁶ / ₂₀	26
Journals		₩m	Ħm
Asset		7.5	
Accumulated depreciation			1.5
			6



Example: Method 2

A building owned by a company is carried at 420 million (Cost of 425 million less accumulated depreciation of 45 million. The company's policy is to apply the revaluation model to all of its land and buildings.

A current valuation of this building is now ₩26 million.

Step 1		:	¥m	₩m
Accumulated depreciation			5	
Asset				5
Step 2				
Asset (₦26 – ₦20m)			6	
Revaluation surplus				6
Alternatively this could be done	with a single jo	urnal:		
Asset (₦26 – ₦25m)			1	
Accumulated depreciation			5	
Revaluation surplus				6
	Before	1	2	After
Cost	25	(5)	6	26
Accumulated depreciation	(5)	5		_
Carrying amount	20	_	-	26



Example:

An office building was purchased four years ago for ₩3 million.

The building has been depreciated by ₩100,000.

It is now re-valued to $\mathbf{N4}$ million.

Show the book-keeping entries to record the revaluation.



Answer							
	Building	account					
	N		₩				
Opening balance b/f	3,000,000	Accumulated					
		depreciation	100,000				
Other comprehensive							
income	1,100,000	Closing balance c/f	4,000,000				
	4,100,000		4,100,000				
Opening balance b/f	4,000,000						
Accum	lated depreciat	ion of building account					
	₩		₩				
Building account	100,000	Opening balance b/f	100,000				
Other comprehensive income							
	₩		Ħ				
		Building account	1,100,000				
Tutorial note: The balance on this account is transferred into a revaluation surplus account as follows:							
	Other compreh	ensive income					
	₩		Ħ				
Revaluation surplus		Building account	1,100,000				
	Revaluatio	on surplus					
	Ħ		Ħ				
		Other comprehensive					
		income	1,100,000				



Practice question

A company owns a building which was purchased three years ago for 1 million. The building has been depreciated by 60,000.

It is now to be revalued to $\ensuremath{\$2}$ million. Show the book-keeping entries to record the revaluation.

2

3.4 Depreciation of a revalued asset

After a non-current asset has been revalued, depreciation charges are based on the new valuation.



Example:

An asset was purchased three years ago, at the beginning of Year 1, for ₦100,000.

Its expected useful life was six years and its expected residual value was ₩10,000.

It has now been re-valued to 120,000. Its remaining useful life is now estimated to be three years and its estimated residual value is now 15,000.

The straight-line method of depreciation is used.

Required

- (a) What amount is recognised in other comprehensive income at the end of Year 3?
- (b) What is the annual depreciation charge in Year 4?
- (c) What is the carrying amount of the asset at the end of Year 4?



Answer

Original annual depreciation (for Years 1 - 3) = $\frac{100,000 - 10,000}{6 \text{ years}} = \frac{15,000}{6}$.

	₩
Cost	100,000
Less: Accumulated depreciation at the time of revaluation (= 3 years x ₦15,000)	(45,000)
Carrying amount at the time of the revaluation	55,000
Revalued amount of the asset	120,000
Recognised in other comprehensive income (and accumulated in a revaluation surplus in equity)	65,000
Revised annual depreciation = $\frac{1}{(120,000 - 15,000)}/3$ years = $\frac{1}{3}$	35,000.
The annual depreciation charge in Year 4 will therefore	be № 35,000.
	N

Revalued amount	120,000
Less: depreciation charge in Year 4	(35,000)
Carrying amount at the end of Year 4	85,000

3.5 Realisation of the revaluation surplus

All assets eventually disappear from the statement of financial position either by becoming fully depreciated or because the company sells them.

If nothing were done this would mean that there was a revaluation surplus on the face of the statement of financial position that related to an asset that was no longer owned.

IAS 16 allows (but does not require) the transfer of a revaluation surplus to retained earnings when the asset to which it relates is derecognised (or realised).

This might happen over several years as the asset is depreciated or at a point in time when the asset is sold.

Revalued assets being depreciated

Revaluation of an asset causes an increase in the annual depreciation charge. The difference is known as excess depreciation (or incremental depreciation):

Excess depreciation is the difference between:

- □ the depreciation charge on the re-valued amount of the asset, and
- □ the depreciation that would have been charged on historical cost.

Each year a business might make a transfer from the revaluation surplus to the retained profits equal to the amount of the excess depreciation.



Illustration:

ustration:			
	Debit	Credit	
Revaluation surplus	Х		
Retained earnings		Х	

Revalued assets being sold

When a revalued asset is sold the business might transfer the balance on the revaluation surplus in respect of the asset into retained earnings. The journal entry would be the same as above.



Example:

An asset was purchased two years ago at the beginning of Year 1 for \$600,000. It had an expected life of 10 years and nil residual value.

Annual depreciation is $\#60,000 (^{\#600,000}/10 \text{ years})$ in the first two years.

At the end of Year 2 the carrying value of the asset -\\480,000.

After two years it is re-valued to \$640,000.

Double entry: Revaluation

	Debit	Credit
Asset (₦640,000 – ₦600,000)	40	
Accumulated depreciation	120	
Revaluation surplus		160

Each year the business is allowed to make a transfer between the revaluation surplus and retained profits:

Double entry: Transfer		
	Debit	Credit
Revaluation surplus (160/8)	20	
Retained profits		20

3.6 Revaluation model: the frequency of revaluations

When the revaluation model is applied to the measurement of property, plant and equipment, revaluations must be made with sufficient regularity to ensure that the carrying amount does not differ materially from that which would be determined using fair value at the end of the reporting period.

The frequency of revaluations should depend on the volatility in the value of the assets concerned. When the value of assets is subject to significant changes (high volatility), annual revaluations may be necessary.

However, such frequent revaluations are unnecessary for items subject to only insignificant changes in fair value. In such cases it may be necessary to revalue the item only every three or five years.

4 DERECOGNITION OF PROPERTY, PLANT AND EQUIPMENT

Section overview

- Gain or loss on disposal of a non-current asset
- Accounting for the disposal of property, plant and equipment
- Disposal of property, plant and equipment: part-exchange of an old asset

4.1 Gain or loss on disposal of a non-current asset

Property, plant and equipment are eventually disposed of:

- by sale, or
- if they have no sale value, through disposal as scrap.

Disposal can occur at any time, and need not be at the end of the asset's expected useful life.

There is a gain or loss on disposal of the asset, as follows:



Illustration: Gain or loss on disposal Sale proceeds on disposal Less disposal costs Net disposal value Asset at cost X

Less: Accumulated depreciation	(X)	
Carrying amount at date of disposal		(X)
Gain /loss on disposal		Х

₩

Х

(X)

Х

3

4

Example:

A non-current asset originally cost ₩75,000. Accumulated depreciation is ₩51,000.

The asset is now sold for ₩18,000. Disposal costs are ₩500.

What is the gain or loss on disposal?



Answer	
Gain or loss on disposal	N
	,000
Less: Accumulated depreciation (51 Carrying amount at date of disposal Loss on disposal	,000)(24,00 (6,50



Practice question

A non-current asset cost ₩96,000 and was purchased on 1 June Year 1. Its expected useful life was five years and its expected residual value was ₩16,000. The asset is depreciated by the straight-line method.

The asset was sold on 1 September Year 3 for \$68,000. There were no disposal costs.

It is the company policy to charge depreciation on a monthly basis. The financial year runs from 1 January to 31 December.

What was the gain or loss on disposal?



Practice question

A non-current asset was purchased on 1 June Year 1 for \$216,000. Its expected life was 8 years and its expected residual value was \$24,000. The asset is depreciated by the straight-line method. The financial year is from 1 January to 31 December.

The asset was sold on 1 September Year 4 for 163,000. Disposal costs were 1,000.

It is the company policy to charge a proportionate amount of depreciation in the year of acquisition and in the year of disposal, in accordance with the number of months for which the asset was held.

What was the gain or loss on disposal?

4.2 Accounting for the disposal of property, plant and equipment

In the general ledger the gain or loss on disposal of a non-current asset is recorded in a **disposal of asset account**. The double entry transactions required are as follows – for an asset recorded at cost rather than at a re-valued amount.

Step 1: Transfer the cost of the non-current asset from the asset account to the disposal account:

Step 2: Transfer the accumulated depreciation on the asset from the accumulated depreciation account to the disposal account:



Illustration:

lustration:		
	Debit	Credit
Disposal account	х	
Non-current asset account (cost of the asset)		х
Accumulated depreciation account (or Allowance for depreciation account)	x	
Disposal account		X

The carrying amount of the asset is now in the disposal account.

Step 3: Record the disposal costs in the disposal account.



Illustration:

	Debit	Credit
Disposal account (disposal expenses)	х	
Bank or Payables account		X

Step 4: Record the sale proceeds in the disposal account:



Illustration: Debit Credit Bank or Receivables account X X Disposal account (sale proceeds) X

Step 5: The balance on the disposal account is the gain or loss on disposal. This is transferred to the statement of profit or loss.



Example:

A non-current asset cost ₩82,000 when purchased. It was sold for ₦53,000 when the accumulated depreciation was ₦42,000. Disposal costs were ₦2,000.

Required

Show the book-keeping entries to record the disposal.



Answer			
D	isposal of a	asset account	
Non-current asset account	N 82,000	Accumulated depreciation	N 42,000
Disposal expenses (Bank) Gain on disposal (statement of profit or loss)	2,000 11,000	Sales value (Receivables)	53,000
(statement of pront of loss)	95,000		95,000
N	on-current	asset account	
Opening balance	\ 82,000	Disposal account	N 82,000
Accum	ulated depi	reciation account	
Disposal account	N 42,000	Opening balance	№ 42,000
	Receivable	s account	
Disposal account (sale value of disposal)	N 53,000		N
	Bank a	ccount	
	<u>−</u>	Disposal account	₩
		(disposal expenses)	2,000
Sta	itement of	profit or loss	
	₩	Disposal account	₩
		(gain on disposal)	11,000

Non-current asset accounts in the general ledger are usually maintained for a category of assets rather than for individual assets. This means that when a non-current asset is disposed of, there will be a closing balance to carry forward on the asset account and the accumulated depreciation account.



Example:

In the previous example, suppose that the balance on the non-current asset account before the disposal was \$500,000 and the balance of the accumulated depreciation account was \$180,000.

The accounting entries would be as follows:

Property, plant and equipment account				
	Ħ		N	
Opening balance b/f	500,000	Disposal account	82,000	
		Closing balance c/f	418,000	
	500,000		500,000	
Opening balance b/f	418,000			
		•		
Acc	umulated dep	reciation account		
	₩		₩	
Disposal account	42,000	Opening balance b/f	180,000	
Closing balance c/f	138,000			
	180,000		180,000	
		Opening balance b/f	138,000	
		•		



Practice question

A motor vehicle cost \$80,000 two years ago. It has been depreciated by the reducing balance method at 25% each year. It has now been disposed of for \$41,000. Disposal costs were \$200.

The balance on the motor vehicles account before the disposal was \$720,000 and the balance on the accumulated depreciation of motor vehicles account was \$250,000.

Show the book-keeping entries to record the disposal.

5

4.3 Disposal of property, plant and equipment: part-exchange of an old asset

Sometimes, a supplier will agree to take an old asset in part-exchange for the sale of a new asset. This practice is quite common, for example, with motor vehicles. A business entity may buy a new motor vehicle from a car dealer, and the car dealer will take an old motor vehicle in part-exchange for the new one.

Disposals of assets in part-exchange for a new asset are accounted for in much the same way as disposals of property, plant and equipment for cash. The only difference is that:

- □ The disposal value of the old asset is the amount that the seller of the new asset allows in part-exchange for the new asset.
- The cost of the new asset is the full purchase price, but the double entry is partly to bank/payables (for the cash payment) and partly to the disposal account for the old asset (for the part-exchange value).



Example:

Entity X has several motor cars that are accounted for as property, plant and equipment.

As at 1 January Year 5, the cost of the entity's cars was 1200,000 and the accumulated depreciation was 180,000.

On 2 January Year 5, Entity X bought a new car costing ₩50,000.

The car dealer accepted a car owned by Entity X in part-exchange, and the part-exchange value of this old car was $\frac{1}{4}$,000.

This car originally cost ₦30,000 and its accumulated depreciation is ₦25,000.

Required

- (a) Calculate the gain or loss on disposal of the old car.
- (b) Show how the purchase of the new car and the disposal of the old car will be recorded in the ledger accounts of Entity X.



Answer

(a)

	N	N
Sale proceeds on disposal (part-exchange value)		4,000
Less disposal costs		0
Net disposal value		4,000
Asset at cost	30,000	
Less: Accumulated depreciation	(25,000)	
Carrying amount at date of disposal		(5,000)
Loss on disposal		(1,000)



I	Disposal of as	sset account	
	₩		
Motor vehicles account	30,000	Accumulated depreciation account Motor vehicles account	25,00
		(Trade-in value)	4,00
		Loss on disposal	1,00 1,00
		(statement of profit or loss)	
	30,000		30,00
	Motor vehicl	es account	
1 January	Ħ		
Opening balance	200,000	Disposal account	30,00
Bank (50,000 - 4,000)	46,000		
Disposal of asset	4,000	Closing balance	220,00
account			
• •	250,000		250,00
2 January Opening balance	220,000		
Accu	mulated depr	reciation account	
1 January	₩		
Disposal account	25,000	Opening balance	80,00
Closing balance	55,000		
	80,000		80,00
2 January			
		Opening balance	55,00
	Bank ad	ccount	
	Ħ		
		Motor vehicles	46,00
		account	
		(Cash paid for new car)	
		,	
s	Statement of	, , ,	
5	Statement of	, , ,	
S Disposal account		, , ,	

6

Practice question

A company has several motor cars that are accounted for as non-current assets. As at 1 January Year 2, the cost of the cars was 120,000 and the accumulated depreciation was 464,000.

During January the company bought a new car costing 31,000 and was given a part-exchange allowance against an old car of 8,000. The car being part exchanged originally cost 28,000 and its accumulated depreciation is 18,000.

Required

- (a) Calculate the gain or loss on disposal of the old car.
- (b) Show how the purchase of the new car and the disposal of the old car will be recorded in the ledger accounts.

5 DISCLOSURE REQUIREMENTS OF IAS 16

Section overview

- Disclosure requirements of IAS 16
- Accounting policies

5.1 Disclosure requirements of IAS 16

IAS 16 requires the following disclosures in the notes to the financial statements, for each major class of property, plant and equipment.

- The measurement bases used (cost or revaluation model);
- □ The depreciation methods used;
- The useful lives or depreciation rates used;
- Gross carrying amounts and the accumulated depreciation at the beginning and at the end of the period;
- A reconciliation between the opening and closing values for gross carrying amounts and accumulated depreciation, showing:
 - Additions during the year;
 - Disposals during the year;
 - Depreciation charge for the year;
 - Assets classified as held for sale in accordance with IFRS 5;
 - Acquisitions of assets through business combinations;
 - Impairment losses;
 - The effect of revaluations.

The following is an example of how a simple table for tangible non-current assets may be presented in a note to the financial statements.



lustration:			
	Property	Plant and equipment	Total
Cost	₩m	₩m	₩m
At the start of the year	7,200	2,100	9,300
Additions	920	340	1,260
Disposals	(260)	(170)	(430)
At the end of the year	7,860	2,270	10,130
Accumulated depreciation			
At the start of the year	800	1,100	1,900
Depreciation expense	120	250	370
Accumulated depreciation on disposals	(55)	(130)	(185)
At the end of the year	865	1,220	2,085
Carrying amount			
At the start of the year	6,400	1,000	7,400
At the end of the year	6,995	1,050	8,045

5.2 Accounting policies

IAS 1 requires the disclosure of accounting policies used that are relevant to an understanding of the financial statements. Property, plant and equipment often includes the largest numbers in the statement of financial position and results in significant expense in the statement of profit or loss.

One of the learning outcomes in this area is that you should be able to formulate accounting policies for property, plant and equipment.

There are many aspects of accounting policy for property plant and equipment. Below is a typical note which covers many of the possible areas.

Illustration: Accounting policy – Property, plant and equipment

Property, plant and equipment comprises freehold and lease hold land and buildings, plant and machinery, fixtures and fittings, vehicles, office equipment and capital work in progress.

Land and buildings

Land and buildings comprise mainly factories, warehousing and offices.

Freehold land and buildings are shown at their fair value less accumulated depreciation. Valuations are performed with sufficient regularity to ensure that the fair value of a revalued asset does not differ materially from its carrying amount.

Increases in the carrying amount arising on revaluation of land and buildings are recognised in other comprehensive income and accumulated as a revaluation surplus in equity.

Decreases that offset previous increases of the same asset are charged directly to the revaluation surplus. Any amounts not so covered are recognised in profit or loss for the period.

Depreciation is based on the carrying amount of the asset after the revaluation. The incremental depreciation is the difference between the depreciation based on historical cost and depreciation based on fair value. Each year this amount is transferred from the revaluation surplus to accumulated profits.

Any accumulated depreciation at the date of revaluation is eliminated against the gross carrying amount of the asset, and the net amount is restated to the revalued amount of the asset.

When revalued assets are sold, the amounts included revaluation surplus in respect of that asset is transferred to accumulated profits.

Freehold land has an indefinite useful life and is not depreciated. Freehold buildings are depreciated on a straight-line basis over their useful economic lives over as shown below.

Leasehold land and buildings are all depreciated on a straight-line basis over the lease term.

Other tangible non-current assets

All other property, plant and equipment is carried at historical cost less accumulated depreciation and accumulated impairment losses.

Historical cost includes expenditure that is directly attributable to the acquisition of the items, the cost of replacing parts of the plant and equipment and borrowing costs capitalised in accordance with IAS 23; Borrowing costs.

Q

Illustration (continued): Accounting policy – Property, plant and equipment

Depreciation is calculated using the straight-line method to allocate their cost or revalued amounts to their residual values over their estimated useful lives, as follows:

Buildings 35-50 years Machinery 5 to15 years Vehicles 3 years Furniture, fittings and equipment 5 to 10 years The residual values and useful lives of assets are reviewed on an annual basis and adjusted as appropriate.

Note from the above that there are two important areas where policies should be explained to users of financial statements. These are:

- □ the depreciation policy; and
- the policy for subsequent measurement of property, plant and equipment.

Depreciation policy

The depreciable amount of an asset must be written off over its useful life. Formulating a policy in this area involves:

- estimating the useful lives of different categories of assets;
- estimating residual values; and
- choosing a method.

Policy for subsequent measurement

Formulating a policy in this area involves:

- deciding whether to fair value any assets
- identifying classes of assets so that the policy can be applied to all assets in that class;
- deciding on how to apply the IAS 16 guidance on frequency of revaluation; and
- deciding how to change the carrying amount of the asset.



Illustration: Accounting policy

Property, plant and equipment, except freehold land, are stated at cost less accumulated depreciation and any identified impairment loss.

Freehold land is stated at cost less any identified impairment loss.

Cost in relation to self-constructed assets includes direct cost of material, labour and applicable manufacturing overheads and borrowing costs on qualifying asset.

Depreciation is charged to income, unless it is included in the carrying amount of another asset, on straight line method whereby cost of an asset is written off over its estimated useful life at the rates given in note XX.

Residual value and the useful life of an asset are reviewed at least at each financial year-end.

Depreciation on additions is charged from the month in which an asset is acquired, while no depreciation is charged for the month in which the asset is disposed of.

6 **QUESTION PROBLEMS**

Section overview

- Multiple assets
- Correcting errors

6.1 Multiple assets

Exam questions on property, plant and equipment usually involve multiple assets with the need to keep track of additions and disposals in a period.

In any one year the charge for depreciation will be made up as follows:

IJ	Illustration: Make-up of depreciation charge	
		Ħ
	Depreciation of assets held for the whole year (these are assets held at the start less disposals)	х
	Depreciation of assets sold in the year (up to the date of sale)	Х
	Depreciation of assets bought in year (from the date of purchase) Depreciation charge for the year	X X

It is often useful to construct a working to calculate the depreciation charge for different components of the asset base.



Example: Depreciation of several assets (straight line)

A business has entered into the following transactions involving plant and equipment over the last three years.

1 January 2011	Bought several ₦800,000.	items of plar	nt and equip	ment for	
30 June 2012	Bought several ₦500,000.	items of plar	nt and equip	ment for	
28 February 2013	Bought several ₦240,000.	Bought several items of plant and equipment for ₩240,000.			
31 March 2013	Sold some of th 1 January 2011		-		
The company deprec	iates assets on a	straight line	basis at 10º	% per	
The depreciation in 2	2011, 2012 and 2	013 can be o	calculated a	s follows:	
		D	epreciation	:	
		2011	2012	2013	
2011 purchase (₦80	0,000)				
800,000 × 10% (2	011 and 2012)	80,000	80,000		
In 2013 this must	be split:				
Assets retained: 500,000 $ imes$ 10%				50,000	
Assets sold: 300,000 \times 10% \times	³ /12			7,500	
				57,500	
2012 purchase (₦50	0.000)				
500,000 × 10% × 6	-		25,000		
500,000 × 10%	,			50,000	
2013 purchase (₦20	0,000)				
240,000 $ imes$ 10% $ imes$ 1	-0/12			20,000	
Depreciation charge		80,000	105,000	127,500	
Depreciation on the a	assets sold:				
300,000 × 10% × 2					

Examples are more complicated when depreciation is calculated using the reducing balance method.



Example: Depreciation of several assets (reducing balance)

A business has entered into the following transactions involving plant and equipment over the last three years.

quipment over the last th	nree years.					
1 January 2011 Bought several items of plant and equipment for N800,000.					nent for	
30 June 2012 Bought several items of plant and equipment for \#500,000.						
28 February 2013						
31 March 2013	Sold some of the ite 1 January 2011. Th			-		
The company depreci	ates assets using 20	% reduc	ing	balance.		
The depreciation in 2	011, 2012 and 2013	8 can be	cal	culated as	follows:	
			D	epreciation	:	
		2011		2012	2013	
2011 purchase (₦800	0,000)					
800,000 × 20%		160,00	00			
(800,000 - 160,00	0) × 20%			128,000		
In 2013 the carrying asset (800,000 – 1 = 512,000) must be	60,000 -128,000			_		
Assets retained (5 $320,000 \times 20\%$	12,000 × ⁵⁰⁰ / ₈₀₀):				64,000	
Assets sold: (512,						
192,000 \times 20% \times	3/12				9,600	
					73,600	
2012 purchase (₦500	0,000)					
500,000 × 20% × ⁶ /	/12			50,000		
(500,000 - 50,000) × 20%				90,000	
2013 purchase (₦200	0,000)					
240,000 \times 20% \times 10	0/12				40,000	
Depreciation charge	-	160,00	00	178,000	203.600	
Depreciation on the a	ssets sold:			₩		
$\textbf{300,000} \times \textbf{20\%}$			60	,000		
(300,000 - 60,000) × 20%		48	,000		
(300,000 - 60,000	- 48,000) × 20% × 3	3/12	9	,600		
		1	17	,600		

200,000

12,500

200,000

12,500

6.2 Correcting errors

Questions might feature mistakes made in terms of a transaction incorrectly classified as capital or as repair.



Example: Error: Repair incorrectly capitalised

The balance on a business's plant account as at 31 December is as follows.

	Ħ
Cost	1,200,000
Accumulated depreciation	(500,000)
Carrying amount	700,000

The company has discovered that a repair which cost $\$200,\!000$ was incorrectly capitalised on 31 July.

Depreciation is charged at 15% reducing balance.

Correction of the error:

The amount capitalised would have been depreciated so the amount must be removed from cost and the depreciation incorrectly charged must be removed. The correcting journals are: Dr Cr

The correcting journals are:	Dr	Cr
Statement of profit or loss:		

line item to which repairs are charged Plant – cost **and** Accumulated depreciation

 $(200,000 \times 15\% \times 5/12)$ Statement of profit or loss: Depreciation expense

The impact on the carrying amount of the plant is as follows:

Before (₦)		After (₦)	
1,200,000	(200,000)	1,000,000	
(500,000)	12,500	(487,500)	
700,000		512,500	
	1,200,000 (500,000)	1,200,000 (200,000) (500,000) 12,500	1,200,000(200,000)1,000,000(500,000)12,500(487,500)

Example: Errors: Asset incorrectly	y expensed		
The balance on a business's plan	t account as at	31 December i	s as follows.
	N		
Cost	1,200,00	0	
Accumulated depreciation	(500,00	0)	
Carrying amount	700,00	0	
The company has discovered was charged to the statemer capitalised. Depreciation is charged at 14	nt of profit or los	s but it should	
Correction of the error: The amount must be capitali	icod and donroo	iatad	
The correcting journals are:		Dr	Cr
Plant – cost		200,000	-
Statement of profit or loss: line item to which repairs are	e charged		200,000
and			
Statement of profit or loss: Depreciation expense		12,500)
Accumulated depreciation (200,000 \times 15% \times $^{5}/_{12})$			12,500
The impact on the carrying a	mount of the pla	ant is as follow	S:
	Before (₦)		After (₦)
Cost	1,200,000	200,000	1,400,000
Accumulated depreciation	(500,000)	(12,500)	(512,500)
Carrying amount	700,000		887,500

7 CHAPTER REVIEW

Chapter review

Before moving on to the next chapter check that you now know how to:

- Measure property, plant and equipment on initial recognition
- Measure property, plant and equipment on initial recognition using the cost model and the revaluation model
- Account for disposals of property plant and equipment
- Construct basic notes to the financial statements in respect of property plant and equipment

SOLUTIONS TO PRACTICE QUESTIONS

Solution	1
Original depreciation=(150,000 - 30,000)/10 = ₩12,000 per annum	
Carrying amount at start of year 5 = 150,000 – (12,000 × 3) = ₩114,000	
If the total useful life is anticipated to be 7 years then there are four years remaining.	
Depreciation charge for year $5 = \frac{114,000}{4} = \frac{128,500}{4}$	

S	olution			
а		Building	account	
•		₦(000)		₦(000)
	Balance b/d Other comprehensive	1,000		
	income (₦2m – ₦1m)	1,000	Balance c/d	2,000
		2,000		2,000
	Balance b/d	2,000		
b	Å	Accumulated	depreciation	
		₦(000)		₩(000)
	Other comprehensive			C 0
	income	60	Balance b/d	60
		60		60
С	Ot	her compreh	ensive income	
	YEAR 1	N (000)		₦(000)
			Building account	1.000
	Balance c/d	1,060	Accumulated depreciation	60
		1,060		1,060
			Balance b/d	1,060

Solution			3
Annual depreciation = $\frac{10000 - 16000}{5 \text{ years}} = 16000$.			
Monthly depreciation = $\frac{1}{16,000}/12 = 1333.33$.			
	N	₩	
Disposal value less disposal costs		68,000	
Cost of the asset	96,000		
Accumulated depreciation at the time of			
disposal (27 months ×₦1,333.33)	(36,000)		
Carrying amount at the date of disposal		60,000	
Gain on disposal	-	8,000	_
	-		-

Solutions		
Annual depreciation = [₩] (216,000 - 24,000)/ _{8 years} = ₩24,000).	
	N	₩
Disposal value		163,000
Less disposal costs		(1,000)
		162,000
Accumulated depreciation at the time of disposal		
Year to 31 December Year 1: (₩24,000 × ⁷ /12)	14,000	
Years 2 and 3: (₩24,000 × 2 years)	48,000	
Year to 31 December Year 4: (₩24,000 × ⁸ /12)	16,000	
	78,000	
Cost of the asset	216,000	
Carrying amount at the date of disposal		138,000
Gain on disposal		24,000

Solution			5
		Ħ	N
Cost of the asset		80,000	
Year 1 depreciation	n (× 25%)	(20,000)	20,000
Carrying amount a	t end of Year 1	60,000	
Year 2 depreciation	n (× 25%)	(15,000)	15,000
Accumulated dep	eciation at date of	disposal	35,000
	Disposal	account	
	Ħ		₩
Motor vehicles acco	unt 80,000	Accumulated depreciation	35,000
Bank (disposal cost	s) 200	Receivables	41,000
		Statement of profit or loss	
	80,200	(loss on disposal)	4,200 80,200
	80,200		80,200
b	Motor v	ehicles	
	Ħ		Ħ
Opening balance b	d 720,000	Disposal of asset account	80,000
		Closing balance c/d	640,000
	720,000		720,000
Opening balance b/	d 640,000		
c Acci	mulated deprecia	tion on motor vehicles	
	Ħ		₩
Disposal of asset		Opening holes as h /f	
account	35,000	Opening balance b/f	250,000
Closing balance c/o			250.000
	250,000	Opening belonge h /d	250,000
		Opening balance b/d	215,000

S	olution			6
			N	₩
	Sale proceeds on dispos	al (part-exch	ange value)	8,000
	Asset at cost		28,000	
	Less: Accumulated depre	eciation	(18,000)	
	Carrying amount at date			(10,000)
	Loss on disposal	•		(2,000)
			_	
.		Disposal	account	
		₩	Accumulated depreciation	Ħ
	Motor vehicles account	28,000	account	18,000
		,	Motor vehicles account	,
			(Trade-in value)	8,000
			Loss on disposal	2,000
		28,000		28,000
b		Motor v	ehicles	
		₩		Ħ
	Opening balance	120,000	Disposal account	28,000
	Bank (31,000 - 8,000)	23,000		
	Disposal of asset account	8,000	Closing balance	123,000
	autount	151,000		151,000
	Opening balance	151,000		
C	Accumulat		tion on motor vehicles	
		₩		Ħ
	Disposal account	18,000	Opening balance	64,000
	Closing balance	46,000		
		64,000		64,000
			Opening balance	46,000

Skills level Financial reporting



Non-current assets: sundry standards

Contents

- 1 IAS 23: Borrowing costs
- 2 IAS 20: Accounting for government grants and disclosure of government assistance
- 3 IAS 40: Investment property
- 4 Chapter review

INTRODUCTION

Purpose

In this element the accounting from the foundation level is taken up a level into financial accounting in the context of more complex events and transactions with a greater emphasis on compliance with regulations including International Accounting Standards and generally accepted accounting practices in the private sectors.

Students will be expected to demonstrate an understanding of and competence in financial statement analysis and basic analysis of choices in accounting treatments.

Competencies

2	Preparing separate financial statements
2(b)	Identify and state the laws, regulations accounting standards and other requirements that govern the production of financial statements by such entities.
2(c)	Draft and compile financial statements, or extracts from them, of an entity in accordance with its chosen policies and in accordance with IFRS and local law.

IAS 23, IAS 20 and IAS 40 are examinable documents

Exam context

This chapter explains further accounting rules on non-current assets.

By the end of this chapter you will be able to:

- Identify borrowing costs
- Measure borrowing costs
- Capitalise borrowing costs that relate to the production of qualifying assets
- Account for government grants related to income
- Account for government grants related to assets
- Define investment property
- Account for investment property using one of the two permitted methods

1 IAS 23: BORROWING COSTS

Section overview

- Introduction
- Borrowing costs eligible for capitalisation
- Period of capitalisation

1.1 Introduction

A company might incur significant interest costs if it has to raise a loan to finance the purchase or construction of an asset. *IAS 23: Borrowing costs* defines borrowing costs and sets guidance on the circumstances under which are to be capitalised as part of the cost of qualifying assets.



Definition: Borrowing costs

Borrowing costs are interest and other costs that an entity incurs in connection with the borrowing of funds.



Definition: Qualifying asset

A qualifying asset is an asset that necessarily takes a substantial period of time to get ready for its intended use or sale.

Any of the following may be qualifying assets depending on circumstances:

- inventories;
- items of property, plant and equipment;
- intangible assets.

The following are not qualifying assets:

- inventories that are manufactured, or otherwise produced, over a short period of time, are not qualifying assets
- assets that are ready for their intended use or sale when acquired.

Qualifying assets are usually self-constructed non-current assets.

1.2 Borrowing costs eligible for capitalisation

Borrowing costs that are directly attributable to the acquisition, construction or production of a qualifying asset must be capitalised as part of the cost of that asset. All other borrowing costs are recognised as an expense in the period in which they are incurred.

Borrowing costs that are directly attributable to the acquisition, construction or production of a qualifying asset are those that would have been avoided if the expenditure on the qualifying asset had not been made.

This includes the costs associated with specific loans taken to fund the production or purchase of an asset and general borrowings. General borrowings are included because if an asset were not being constructed it stands to reason that there would have been a lower need for cash.

Funds specifically borrowed to obtain a qualifying asset

When a specific loan is taken in order to obtain a qualifying asset the borrowing costs eligible for capitalisation are the actual borrowing costs incurred on that borrowing during the period less any investment income on the temporary investment of those borrowings.



Example: Specific borrowings

On 1 January 2014 Owerri Engineering issued a bond to raise ₩25,000,000 to fund a capital project which will take three years to complete.

Amounts not yet needed for the project are invested on a temporary basis.

During the year to 31 December 2014, Owerri Engineering spent \$9,000,000 on the project.

The cost of servicing the bond was \$1,250,000 during this period and the company was able to earn \$780,000 through the temporary reinvestment of the amount borrowed.

The amounts recognised as capital work in progress in the period was:

	Ħ
Costs incurred (labour, material, overhead etc.)	9,000,000
Interest capitalised:	
Actual interest cost	1,250,000
Less: return on temporary investment	(780,000)
	470,000
Additions to capital work in progress	9,470,000

General funds used for the purpose of obtaining a qualifying asset.

When general borrowings are used the amount of borrowing costs eligible for capitalisation is obtained by applying a capitalisation rate to the expenditures on that asset.

The capitalisation rate is the weighted average of the borrowing costs applicable to the borrowings that are outstanding during the period except for borrowings made specifically for the purpose of obtaining a qualifying asset.

The amount of borrowing costs capitalised cannot exceed the amount of borrowing costs it incurred during a period.



Example: General borrowings: Capitalisation rate

Shaki Construction has three sources of borrowing:

	Average loan in the year (₦)	Interest expense incurred in the year (₦)
7 year loan	8,000,000	800,000
10 year Ioan	10,000,000	900,000
Bank overdraft	5,000,000	900,000

The 7 year loan has been specifically raised to fund the building of a qualifying asset.

A suitable capitalisation rate for other projects is found as follows:

	Average loan in the year (₦)	Interest expense incurred in the year (₦)
10 year loan	10,000,000	900,000
Bank overdraft	5,000,000	900,000
	15,000,000	1,800,000

Capitalisation rate = $1,800,000/15,000,000 \times 100 = 12\%$

Alternatively:

Rate on 10 year loan = $\frac{900,000}{10,000,000} \times 100 = 9\%$ Rate on bank overdraft = $\frac{900,000}{5,000,000} \times 100 = 18\%$ Weighted average: $9\% \times \frac{10,000,000}{15,000,000} + 18\% \times \frac{5,000,000}{15,000,000}$

6% + 6% = 12%

The capitalisation rate is applied from the time expenditure on the asset is incurred.



Example: General borrowings: Capitalisation rate

Continuing the example above, Shaki Construction has incurred the following expenditure on a project funded from general borrowings for year ended 31 December 2014.

Date incurred:	Amount (₩)
31 st March	1,000,000
31 st July	1,200,000
30 th October	800,000

The amount capitalised in respect of capital work in progress during 2014 is as follows:

	Ħ
31 st March – Expenditure	1,000,000
Interest (1,000,000 \times 10% \times $^{9/_{12}}$	75,000
	1 000 000
31 st July – Expenditure	1,200,000
Interest (1,200,000 \times 10% \times $^{5/12})$	50,000
30 th October – Expenditure	800,000
Interest (800,000 \times 10% \times $^{2}/_{12})$	13,333
	3,138,333

1.3 Period of capitalisation

Commencement of capitalisation

Capitalisation of borrowing costs should start only when:

- expenditures for the asset are being incurred; and
- borrowing costs are being incurred, and
- activities necessary to prepare the asset have started.

Suspension of capitalisation

Capitalisation of borrowing costs should be suspended if development of the asset is suspended for an extended period of time.

Cessation of capitalisation

Capitalisation of borrowing costs should cease when the asset is substantially complete. The costs that have already been capitalised remain as a part of the asset's cost, but no additional borrowing costs may be capitalised.

2 IAS 20: GOVERNMENT GRANTS

Section overview

- Introduction and definitions
- Accounting treatment of government grants
- Disclosure requirements

2.1 Introduction and definitions

In many countries the government provides financial assistance to industry. The most common form of such assistance is a grant of cash from local or national government. Such grants are defined by IAS 20 *Accounting for Government Grants and Disclosure of Government Assistance* as

- grants related to assets, or
- **grants related to income.**

Grants related to assets are for the purchase or construction of long-term assets. Conditions may be attached to a grant, specifying the type of assets that should be purchased with the grant, or the location of the assets, or the period in which they are to be acquired or held.

Grants related to income are any other government grants.

2.2 Accounting treatment of government grants

IAS 20 states that grants should not be recognised until there is reasonable assurance that:

- □ the entity will comply with any conditions attaching to the grant, and
- □ the grant will be received.

Once these recognition criteria are met, the grants should be recognised in profit or loss over the periods necessary to match them with their related costs.

Neither type of grant should be credited directly to shareholders' interests in the statement of financial position. They must be reported on a systematic basis through the statement of profit or loss (profit or loss).

Grants related to income

For grants related to income, IAS 20 states that an 'income approach' should be used, and the grant should be taken to income over the periods necessary to match the grant with the costs that the grant is intended to compensate.

IAS 20 allows two methods of doing this:

- Method 1. Include the grant for the period as 'other income' for inclusion on profit or loss for the period
- **Method 2**. Deduct the grant for the period from the related expense.



Example: Grant related to income

A company receives a cash grant of ₩30,000 on 31 December Year 0.

The grant is towards the cost of training young apprentices, and the training programme is expected to last for 18 months from 1 January Year 1.

Actual costs of the training were ₩50,000 in Year 1 and ₩25,000 in Year 2.

The grant would be accounted for as follows:

At 31 December Year 0 the grant would be recognised as a liability and presented in the statement of financial position split between current and non-current amounts. \$20,000 (12 months/18 months \times \$30,000) is current and would be recognised in profit for Year 1.The balance is non-current.

At the end of year 1 there would be a current balance of ₦10,000 (being the noncurrent balance at the end of Year 0 reclassified as current) in the statement of financial position. This would be recognised in profit in Year 2.

Extracts from the financial statements are as follows:

Statement of financial position (extracts)

	31	31	31	
	December	December	December	
	Year 0	Year 1	Year 2	
Current liabilities				
Deferred income	20,000	10,000	_	
Non-current liabilities				
Deferred income	10,000	_	_	
Statement of profit or loss (extracts)				
		31 December	31 December	
		December Year 1	December Year 2	
		Tear I	Teal 2	
Method 1				
Training costs		(50,000)	(25,000)	
Government grant received		20,000	10,000	
Method 2				
Training costs (50,000 – 20,000)		30,000		
Training costs (25,000 – 10,000)			15,000	

Grants related to assets

For grants related to assets, IAS 20 allows two methods of doing this:

- Method 1. Deduct the grant from the cost of the related asset. The asset is included in the statement of financial position at cost minus the grant. Depreciate the net amount over the useful life of the asset.
- **Method 2**. Treat the grant as deferred income and recognise it as income on a systematic basis over the useful life of the asset.

These two methods achieve the same effective result.



Example: Grant related to an asset

A company receives a government grant of 4400,000 towards the cost of an asset with a cost of 1,000,000.

The asset has an estimated useful life of 10 years and no residual value.

The amounts could be reflected in the financial statements prepared at the end of Year 1 in accordance with IAS 20 in the following ways:

Method 1:

Nethod I:	
Statement of financial position (extract)	
Property, plant and equipment	Ħ
Cost (1,000,000 - 400,000)	600,000
Accumulated depreciation	(60,000)
Carrying amount	540,000
Included in statement of profit or loss (extract)	N
Depreciation charge (\8600,000/10 years)	60,000
Method 2:	
Statement of financial position (extract)	
Property, plant and equipment	Ħ
Cost	1,000,000
Accumulated depreciation	(100,000)
Carrying amount	900,000
Current liabilities	
Deferred income	40,000
Non-current liabilities	
Deferred income	320,000
At the end of year 1 there would be ₩360,000 of the gra recognise in profit in the future at ₩40,000 per annum. be recognised in the next year and is therefore current. current	₦40,000 would
Included in statement of profit or loss (extract)	₩
Expense: Depreciation charge (₦1,000,000/10 years)	(100,000)
Income: Government grant (^N 400,000/10 years)	40,000



Practice questions

On January Year 1 Entity 0 purchased a non-current asset with a cost of \$500,000 and received a grant of \$100,000 in relation to that asset.

1

The asset is being depreciated on a straight-line basis over five years.

Show how the asset and the grant would be reflected in the financial statements at the end of the first year under both methods of accounting for the grant allowed by IAS 20.

2.3 Disclosure requirements

IAS 20 requires the following disclosures in the notes to the financial statements:

- the accounting policy adopted for government grants, including the method of presentation in the financial statements
- the nature and extent of government grants recognised in the financial statements and an indication of other forms of government assistance from which the entity has directly benefitted
- unfulfilled conditions and other contingencies attaching to government assistance (if this assistance has been recognised in the financial statements).

3 IAS 40: INVESTMENT PROPERTY

Section overview

- Definitions
- Accounting treatment of investment property
- Why investment properties are treated differently from other properties
- Transfers and disposals of investment property
- Disclosure requirements

3.1 Definitions

IAS 40: Investment Property, defines and sets out the rules on accounting for investment properties.

an investment property as a property held to earn rentals or for capital appreciation or both.



Definition

An investment property is property (land or a building, part of a building or both) held to earn rentals or for capital appreciation or both.

Investment property differs from other property, which is:

- used in the production or supply of goods, or for administrative purposes, or
- □ held for sale in the ordinary course of business.

Investment property includes the building whilst it is under construction for eventual use as an investment property.

The property could be held by:

- □ the owner, or
- the lessee under a finance lease or an operating lease.

The following are **not** investment property:

- property intended for sale in the ordinary course of business
- property being constructed or developed on behalf of third parties
- owner-occupied property
- property being leased to another entity under a finance lease.

3.2 Accounting treatment of investment property

The **recognition criteria** for investment property are the same as for property, plant and equipment under IAS 16. An investment property should be recognised as an asset only when:

- it is probable that future economic benefits associated with the property will flow to the entity, and
- □ the cost of the property can be measured reliably.

Measurement at recognition

Investment property should be measured initially at cost plus the transaction costs incurred to acquire the property.

Measurement after recognition

After initial recognition an entity may choose as its accounting policy:

- Let the fair value model, or
- □ the cost model.

The chosen policy must be applied to all the investment property of the entity.

Once a policy has been chosen it cannot be changed unless the change will result in a more appropriate presentation. IAS 40 states that a change from the fair value model to the cost model is unlikely to result in a more appropriate presentation.

Fair value model for investment property

Under the fair value model the entity should:

- revalue all its investment property to 'fair value' (open market value) at the end of each financial year, and
- recognise any resulting gain or loss in profit or loss for the period.

The property would not be depreciated.

This is different to the revaluation model of IAS 16, where gains are reported as other comprehensive income and accumulated as a revaluation surplus.

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".

If it is not possible to arrive at a reliable fair value figure then the cost model should be adopted. This is an exception to the rule that **all** investment property must be valued under either one model or the other.

Cost model for investment property

The **cost model** follows the provisions of IAS 16. The property is valued at cost and the non-land element is depreciated.



Example: Accounting for investment property

On 1 January Year 1 Entity P purchased a building for its investment potential. The building cost 1 million with transaction costs of 10,000.

The depreciable amount of the building component of the property at this date was \$300,000.

The property has a useful life of 50 years.

At the end of Year 1 the property's fair value had risen to ₩1.3 million.

The amounts which would be included in the financial statements of Entity P at 31 December Year 1, under the cost model are as follows:

The amounts which would be included in the financial statements of Entity P at 31 December Year 1, under the fair value model are as follows:

Cost model

The property will be included in the statement of financial position as follows:

	Ħ
Cost (1,000,000 + 10,000)	1,010,000
Accumulated depreciation (300,000 ÷ 50 years)	(6,000)
Carrying amount	1,004,000

The statement of profit or loss will include depreciation of ₩6,000.

The amounts which would be included in the financial statements of Entity P at 31 December Year 1, under the fair value model are as follows:

Fair value model

The property will be included in the statement of financial position at its fair value of \$1,300,000.

The statement of profit or loss will include a gain of \$290,000 (\$1,300,000 - \$1,010,000) in respect of the fair value adjustment.

3.3 Why investment properties are treated differently from other properties

Most properties are held to be used directly or indirectly in the entity's business. For example, a factory houses plant and equipment which is used to produce goods for sale. The property is being consumed and it is appropriate to depreciate it over its useful life.

An investment property also differs from other properties because it generates revenue and cash flows largely independently of other assets held by an entity.

Furthermore, an investment property is held because it is expected to generate wealth through rental income and capital appreciation. The fair value model is based on the idea that that rental income and changes in fair value are inextricably linked as integral components of the financial performance of an investment property and measurement at fair value is necessary if that financial performance is to be reported in a meaningful way.

The most relevant information about an investment property is its fair value (the amount for which it could be sold). Depreciation is largely irrelevant. Therefore it is appropriate to re-measure an investment property to fair value each year and to recognise gains and losses in profit or loss for the period.

IAS 40 allows a choice of accounting treatment for two reasons. Firstly, in order to give preparers and users time to gain experience in using a fair value model and secondly, to allow time for countries with less developed property market and valuation professions to mature.

3.4 Transfers and disposals of investment property

If a property is transferred into or out of this category it must be reclassified as an investment property or as no longer being an investment property. A transfer of investment property can only be made where there is a change of use as illustrated below.

Circumstance	Transfer to/from	Deemed transfer value
Commencement of owner- occupation	Transfer from investment property to owner-occupied property	Fair value at the date of change of use becomes the deemed cost for future accounting purposes
End of owner- occupation	Transfer from owner-occupied property to investment property	Where investment properties are measured at fair value, revalue in accordance with IAS 16 prior to the transfer
Commencement of development with a view to sale	Transfer from investment property to inventories	Fair value at the date of change of use becomes the deemed cost for future accounting purposes
Commencement of an operating lease to another party	Transfer from inventories to investment property	Fair value at the date of the transfer, and any difference compared to previous carrying amount is recognised in profit or loss

Gain or loss on disposal

Gains or losses on disposals of investment properties are included in profit or loss in the period in which the disposal occurs.



Example: Disposal of investment property

The investment property in the previous example was sold early in Year 2 for \$1,550,000,

Selling costs were ₩50,000.

Required

The amount that would be included in the statement of profit or loss for Year 2 in respect of this disposal under the cost model is as follows:

Cost model	Ħ
Sale value	1,550,000
Selling costs	(50,000)
Net disposal proceeds	1,500,000
Minus: Carrying amount	(1,004,000)
Gain on disposal	496,000

The amount that would be included in the statement of profit or loss for Year 2 in respect of this disposal under the fair value model is as follows:

(Fair value model	H
Sale value	1,550,000
Selling costs	(50,000)
Net disposal proceeds	1,500,000
Minus: Carrying amount	(1,300,000)
Gain on disposal	200,000

3.5 Disclosure requirements

The following disclosures are required by IAS 40 in the notes to the accounts.

Disclosure requirements applicable to both the fair value model and the cost model

- whether the fair value model or the cost model is used
- Let the methods and assumptions applied in arriving at fair values
- the extent to which the fair value of investment property was based on a valuation by a qualified, independent valuer with relevant, recent experience
- amounts recognised in income or expense in the statement of profit or loss for:
 - rental income from investment property
 - operating expenses in relation to investment property
- details of any restrictions on the ability to realise investment property or any restrictions on the remittance of income or disposal proceeds
- the existence of any contractual obligation to purchase, construct or develop investment property or for repairs, maintenance or enhancements.

Disclosure requirements applicable to the fair value model only

There must be a reconciliation, in a note to the financial statements, between opening and closing values for investment property, showing:

- additions during the year
- assets classified as held for sale in accordance with IFRS 5
- net gains or losses from fair value adjustments
- acquisitions through business combinations

This reconciliation should show separately any amounts in respect of investment properties included at cost because their fair values cannot be estimated reliably.

For investment properties included at cost because fair values cannot be estimated reliably, the following should also be disclosed:

- a description of the property
- an explanation as to why fair values cannot be determined reliably
- if possible, the range within which the property's fair value is likely to lie.

Disclosure requirements applicable to the cost model only

- the depreciation methods used
- the useful lives or depreciation rates used
- gross carrying amounts and accumulated depreciation at the beginning and at the end of the period

- A reconciliation between opening and closing values showing:
 - additions
 - depreciation
 - assets classified as held for sale in accordance with IFRS 5
 - acquisitions through business combinations
 - impairment losses
 - transfers.

When the cost model is used, the fair value of investment property should also be disclosed. If the fair value cannot be estimated reliably, the same additional disclosures should be made as under the fair value model.

4 CHAPTER REVIEW

Chapter review

Before moving on to the next chapter check that you now know how to:

- Identify borrowing costs
- Measure borrowing costs
- Capitalise borrowing costs that relate to the production of qualifying assets
- Account for government grants related to income
- Account for government grants related to assets
- Define investment property
- Account for investment property using one of the two permitted methods

SOLUTIONS TO PRACTICE QUESTIONS

Solution	1
The amounts could be reflected in the financial statements prepared at the end of Year 1 in accordance with IAS 20 in the following ways:	
Method 1:	
Statement of financial position	
Property, plant and equipment Cost (500,000 – 100,000) Accumulated depreciation	₩ 400,000 (80,000)
Carrying amount	320,000
Included in statement of profit or loss Depreciation charge (₦400,000/5 years)	₩ 80,000
Method 2:	
Statement of financial position Property, plant and equipment Cost Accumulated depreciation	N 500,000 (100,000)
Carrying amount	400,000
Current liabilities Deferred income Non-current liabilities	20,000
Deferred income	60,000
At the end of year 1 there would be №80,000 of the grant left to recognise in profit in the future at №20,000 per annum. №20,000 would be recognised in the next year and is therefore current. The balance is no-current	
Included in statement of profit or loss Expense: Depreciation charge (\\$500,000/5 years)	₩ (100,000)
Income: Government grant (^N 100,000/5 years)	20,000

Skills level Financial reporting



IAS 38: Intangible assets

Contents

- 1 IAS 38: Intangible assets Introduction
- 2 Internally-generated intangible assets
- 3 Intangible assets acquired in a business combination
- 4 Measurement after initial recognition
- 5 Disclosure requirements
- 6 Chapter review

INTRODUCTION

Purpose

In this element the accounting from the foundation level is taken up a level into financial accounting in the context of more complex events and transactions with a greater emphasis on compliance with regulations including International Accounting Standards and generally accepted accounting practices in the private sectors.

Students will be expected to demonstrate an understanding of and competence in financial statement analysis and basic analysis of choices in accounting treatments.

Competencies

2	Preparing separate financial statements
2(b)	Identify and state the laws, regulations accounting standards and other requirements that govern the production of financial statements by such entities.
2(c)	Draft and compile financial statements, or extracts from them, of an entity in accordance with its chosen policies and in accordance with IFRS and local law.

IAS 38 is an examinable document

Exam context

This chapter explains the rules on accounting for intangible assets

By the end of this chapter you will be able to:

- Explain and apply the recognition rules to intangible assets acquired in different ways
- Measure intangible assets on initial recognition
- Measure intangible assets after initial recognition using the cost model and the revaluation model

1 IAS 38: INTANGIBLE ASSETS - INTRODUCTION

Section overview

- Introduction
- Definition of an intangible asset
- Recognition criteria for intangible assets
- Separate acquisition
- Exchange transactions
- Granted by government
- Subsequent expenditure on intangible assets

1.1 Introduction

IAS 38: Intangible assets sets out rules on the recognition, measurement and disclosure of intangible assets.

IAS 38 establishes similar rules for intangible assets to those set out elsewhere (mainly in IAS 16) for tangible assets. It was developed from the viewpoint that an asset is an asset so there should be no real difference in how tangible and intangible assets are accounted for. However, there is an acknowledgement that it can be more difficult to identify the existence of an intangible asset so IAS 38 gives broader guidance on how to do this when an intangible asset is acquired through a variety of means.

IAS 38:

- requires intangible assets to be recognised in the financial statements if, and only if, specified criteria are met and explains how these are applied however an intangible asset is acquired.
 - A key issue with expenditure on 'intangible items' is whether it should be treated as an expense and included in full in profit or loss for the period in which incurred, or whether it should be capitalised and treated as a long-term asset.
 - IAS 38 sets out criteria to determine which of these treatments is appropriate in given circumstances.
- explains how to measure the carrying amount of intangibles assets when they are first recognised and how to measure them at subsequent reporting dates;
 - Most types of long-term intangible asset are 'amortised' over their expected useful life. (Amortisation of intangible assets is the equivalent of depreciation of tangible non-current assets.)
- sets out disclosure requirements for intangible assets in the financial statements.

1.2 Definition of an intangible asset



Definitions

An asset: A resource controlled by the company as a result of past events and from which future economic benefits are expected to flow.

Intangible asset: An identifiable, non-monetary asset without physical substance'

An intangible asset is a type of asset. Therefore expenditure on an intangible item must satisfy both definitions before it can be considered to be an asset.

Commentary on the definitions

Control

The existence of control is useful in deciding whether an intangible item meets the criteria for treatment as an asset.

Control means that a company has the power to obtain the future economic benefits flowing from the underlying resource and also can restrict the access of others to those benefits.

Control would usually arise where there are legal rights, for example legal rights over the use of patents or copyrights. Ownership of legal rights would indicate control over them. However, legal enforceability is not a necessary condition for control.

For tangible assets such as property, plant and equipment the asset physically exists and the company controls it. However, in the case of an intangible asset, control may be harder to achieve or prove.

Some companies have tried to capitalise intangibles such as the costs of staff training or customer lists on the basis that they provide access to future economic benefits. However, these would not be assets as they are not controlled.

- Staff training: Staff training creates skills that could be seen as an asset for the employer. However, staff could leave their employment at any time, taking with them the skills they have acquired through training.
- Customer lists: Similarly, control is not achieved by the acquisition of a customer list, since most customers have no obligation to make future purchases. They could take their business elsewhere.

Future economic benefits

These may include revenues and/or cost savings.

Evidence of the probability that economic benefits will flow to the company may come from:

- □ market research;
- □ feasibility studies; and,
- a business plan showing the technical, financial and other resources needed and how the company will obtain them.

Need to be identifiable

An intangible asset must also be 'identifiable'. Intangibles, by their very nature, do not physically exist. It is therefore important that this 'identifiability test' is satisfied.

IAS 38 states that to be identifiable an intangible asset:

- must be separable; or
- □ must arise from contractual or other legal rights.

To be separable, the intangible must be capable of being separated or divided from the company, and sold, transferred, licensed, rented or exchanged.

Many typical intangibles such as patent rights, copyrights and purchased brands would meet this test, (although they might fail other recognition criteria for an intangible asset).

Without physical substance

Non-physical form increases the difficulty of identifying the asset.

Certain intangible assets may be contained in or upon an article which has physical substance (e.g. floppy disc). Whether such assets are treated as tangible or intangible requires. This judgement is based on which element is the most significant.

- □ Computer software for a computer controlled machine tool that cannot operate without that specific software is an integral part of the related hardware and it is treated as property, plant and equipment. The same applies to the operating system of a computer.
- Computer software, other than the operating system, is an intangible asset. The same applies to licences, patents or motion picture films acquired or internally generated by the reporting company.

Identifiable assets that result from research and development activities are intangible assets because any physical element of those assets (for example, a prototype) is secondary to the knowledge that is the primary outcome of those activities.

1.3 Recognition criteria for intangible assets

Introduction

If an intangible item satisfies the definitions it is not necessarily recognised in the financial statements. In order to be recognised it must satisfy the recognition criteria for intangible assets.

If an item meets the definitions of being an asset, and being intangible, certain recognition criteria must be applied to decide whether the item should be recognised as an intangible asset.

Recognition

An intangible asset is recognised when it:

- complies with the definition of an intangible asset; and,
- meets the recognition criteria set out in the standard.

Recognition criteria

An intangible asset must be recognised if (and only if):

- it is probable that future economic benefits specifically attributable to the asset will flow to the company; and,
- □ the cost of the asset can be measured reliably.

The probability of future economic benefits must be assessed using reasonable and supportable assumptions that represent management's best estimate of the set of economic conditions that will exist over the useful life of the asset.

These recognition criteria are broadly the same as those specified in IAS 16 for tangible non-current assets.

Measurement

An intangible asset must be measure at cost when first recognised.

Means of acquiring intangible assets

A company might obtain control over an intangible resource in a number of ways. Intangible assets might be:

- purchased separately;
- acquired in exchange for another asset;
- given to a company by way of a government grant.
- internally generated; or
- acquired in a business combination;

IAS 38 provides extra guidance on how the recognition criteria are to be applied and/or how the asset is to be measured in each circumstance.

1.4 Separate acquisition

Recognition guidance

The probability recognition criterion is always satisfied for separately acquired intangible assets.

The price paid to acquire separately an intangible asset normally reflects expectations about the probability that the future economic benefits embodied in the asset will flow to the company. The effect of the probability is reflected in the cost of the asset.

Also the cost of a separately acquired intangible asset can usually be measured reliably especially when the purchase consideration is in the form of cash or other monetary assets.

Cost guidance

Cost is determined according to the same principles applied in accounting for other assets.

The cost of a separately acquired intangible asset comprises:

- its purchase price, including any import duties and non-refundable purchase taxes, after deducting any trade discounts and rebates; and
- any directly attributable expenditure on preparing the asset for its intended use. For example:
 - costs of employee benefits (as defined in IAS 19, Employee Benefits) arising directly from bringing the asset to its working condition;
 - professional fees for legal services; and
 - costs of testing whether the asset is functioning properly.

The recognition of costs ceases when the intangible asset is in the condition necessary for it to be capable of operating in the manner intended by management.

Deferred payments are included at the cash price equivalent and the difference between this amount and the payments made are treated as interest.

1.5 Exchange transactions

An intangible asset may be acquired in exchange or part exchange for another intangible asset or another asset.

The cost of such items is measured at fair value unless:

- □ the exchange transaction lacks commercial substance; or,
- the fair value of neither the asset received nor the asset given up is reliably measurable.

If the acquired item is not measured at fair value it is measured at the carrying amount of the asset given up.

Note, that these rules are the same as those described for tangible assets in an earlier chapter.

1.6 Granted by government

A government transfers or allocates intangible assets such as airport landing rights, licences to operate radio or television stations, import licences or quotas or rights to access other restricted resources.

An intangible asset may be acquired free of charge, or for nominal consideration, by way of a government grant.

IAS 20: Accounting for Government Grants and Disclosure of Government Assistance, allows the intangible asset and the grant to be recorded at fair value initially or at a nominal amount plus any expenditure that is directly attributable to preparing the asset for its intended use.

1.7 Subsequent expenditure on intangible assets

Subsequent expenditure is only capitalised if it can be measured and attributed to an asset and enhances the value of the asset. This would rarely be the case:

- □ The nature of intangible assets is such that, in many cases, there are no additions to such an asset or replacements of part of it.
- Most subsequent expenditure is likely to maintain the expected future economic benefits embodied in an existing intangible asset rather than meet the definition of an intangible asset and the recognition criteria.
- Also it is often difficult to attribute subsequent expenditure directly to a particular intangible asset rather than to the business as a whole.

Maintenance expenditure is expensed.

2 INTERNALLY GENERATED INTANGIBLE ASSETS

Section overview

- Internally-generated intangible items
- Research and development
- Accounting treatment of development costs

2.1 Internally-generated intangible items

An internally-generated intangible asset is an asset created by a company through its own efforts. (An internally-generated asset differs from an acquired asset that has been purchased from an external seller.) For example, a publishing company may build up legal copyrights by publishing books.

It can sometimes be difficult for a company to assess whether an internallygenerated asset qualifies for recognition as an asset in the financial statements because:

- it is not identifiable; or
- its cost cannot be determined reliably.

Recognition prohibited

IAS 38 prohibits the recognition of the following internally-generated intangible items:

- **goodwill**;
- brands;
- mastheads (Note: a masthead is a recognisable title, usually in a distinctive typographical form, appearing at the top of an item. An example is a newspaper masthead on the front page of a daily newspaper);
- publishing titles;
- customer lists.

Recognition of these items as intangible assets when they are generated internally is prohibited because the internal costs of producing these items cannot be distinguished separately from the costs of developing and operating the business as a whole.

Note that any of these items would be recognised if they were purchased separately.

Goodwill

Most businesses have a value which is greater than the value of their net assets. This is because there are other factors that contribute to the total value, for example, the trading potential of a business.



Definition: Goodwill

Goodwill: An asset representing the future economic benefits arising from other assets acquired in a business combination that are not individually identified and separately recognised.

In other words, the goodwill is an asset (insofar as it will generate future benefits) that is unrecognised. It is measured as the difference of the value of a business as a whole over the value of its net assets. As stated above, this is the case for most businesses and it is described as internally generated goodwill. Internally generated goodwill is not recognised as an asset.

When a company buys a controlling interest in another company, part of the purchase consideration is to pay for the other company's goodwill. This is recognised as an asset in the group accounts of the company that has made the purchase. This is not covered by this standard and is explained in more detail later in chapters 19 and 20)

The value of a business as a whole might be less than the value of its net assets but this is not discussed further at this point.

Other internally generated intangibles

IAS 38 provides further guidance on how to assess whether other internally generated intangibles assets meet the criteria for recognition.

2.2 Research and development

The term 'research and development' is commonly used to describe work on the innovation, design, development and testing of new products, processes and systems.

Assessment of whether an internally generated intangible asset meets the criteria for recognition requires a company to classify the generation of the asset into:

- a research phase; and
- a development phase.

If the research phase cannot be distinguished from the development phase the expenditure on the project is all treated as that incurred on the research phase.

Research phase



Definition: Research

Research is original and planned investigation undertaken with the prospect of gaining new scientific or technical knowledge and understanding.

Examples of research activities include:

- Activities aimed at obtaining new knowledge.
- □ The search for and evaluation of applications of knowledge obtained from research.
- The search for alternative materials, products or processes.
- □ The formulation and testing of possible alternatives for new materials, products or processes.

Research costs cannot be an intangible asset. Expenditure on research should be recognised as an expense as it is incurred and included in profit or loss for the period.

Development phase



Definition: Development

Development is the application of research findings or other knowledge to a plan or design for the production of new or substantially improved materials, devices, products, processes, systems or services before the start of commercial production or use.

Examples of development activities include:

- The design, construction and testing of pre-production prototypes and models.
- The design of tolls involving new technology.
- □ The construction and operation of a pilot plant that is not large enough for economic commercial production.
- The design, construction and testing of new materials, products or processes.

2.3 Accounting treatment of development costs

Development costs are capitalised when they meet certain further criteria. (These comprise more detailed guidance on whether it is probable that future economic benefits from the asset will flow to the entity and whether the cost can be measured reliably).

Development costs must be recognised as an intangible asset, but only if all the following conditions can be demonstrated.

- □ It is technically feasible to complete the development project.
- □ The company 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 company itself.
- Resources are available to complete the development project.
- □ The development expenditure can be measured reliably (for example, via costing records).

If any one of these conditions is not met, the development expenditure must be treated in the same way as research costs and recognised in full as an expense when it is incurred.

Only expenditure incurred after all the conditions have been met can be capitalised.

Once such expenditure has been written off as an expense, it cannot subsequently be reinstated as an intangible asset.



Example: Accounting treatment of development costs

Company Q has undertaken the development of a new product. Total costs to date have been \$800,000. All of the conditions for recognising the development costs as an intangible asset have now been met.

However, \aleph 200,000 of the \aleph 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.

Development costs.

The \$200,000 incurred before all of the conditions for recognising the development costs as an intangible asset were met must be written off as an expense.

The remaining \$600,000 should be capitalised and recognised as an intangible asset (development costs).

Initial measurement

The cost of an internally generated intangible asset is the sum of expenditure incurred from the date when the intangible asset first meets the recognition criteria for such assets.

Expenditure recognised as an expense in previous annual financial statements or interim financial reports may not be capitalised.

The cost of an internally generated intangible asset comprises all expenditure that can be directly attributed, and is necessary to creating, producing, and preparing the asset for it to be capable of operating in the manner intended by management.

Where applicable cost includes:

- expenditure on materials and services used or consumed;
- the salaries, wages and other employment related costs of personnel directly engaged in generating the asset; and
- any expenditure that is directly attributable to generating the asset.

In addition, IAS 23 specifies criteria for the recognition of interest as an element of the cost of an internally generated intangible asset. The IAS 23 guidance was covered in the previous chapter.

Costs that are not components of cost of an internally generated intangible asset include:

- selling and administration overhead costs;
- □ initial operating losses incurred;
- costs that have previously been expensed, (e.g., during a research phase) must not be reinstated; and,
- Let training expenditure.

3 INTANGIBLE ASSETS ACQUIRED IN A BUSINESS COMBINATION

Section overview

- Recognition guidance
- Cost guidance
- In-process research and development

This section relates to intangible assets acquired when a company (the acquirer) buys a controlling interest in another company (the acquiree). The section largely relates to the recognition of intangibles in the consolidated financial statements of the parent.

3.1 Recognition guidance

Any intangible asset identified in a business combination will be recognised as both recognition criteria are deemed to be recognised.

The probability recognition criterion always considered to be satisfied for intangible assets acquired in business combinations. This is because the fair value of an intangible asset reflects expectations about the probability that the expected future economic benefits embodied in the asset will flow to the company. In other words, the entity expects there to be an inflow of economic benefits.

The reliable measurement criterion is always considered to be satisfied for intangible assets acquired in business combinations. If an asset acquired in a business combination is separable or arises from contractual or other legal rights, sufficient information exists to measure reliably the fair value of the asset.

Commentary

This means that an intangible asset that was not recognised in the financial statements of the new subsidiary might be recognised in the consolidated financial statements.



Illustration: Recognition

Company X buys 100% of Company Y.

Company Y owns a famous brand that it launched several years ago.

Analysis

The brand is not recognised in Company Y's financial statements (IAS 38 prohibits the recognition of internally generated brands).

From the Company X group viewpoint the brand is a purchased asset. Part of the consideration paid by Company X to buy Company Y was to buy the brand and it should be recognised in the consolidated financial statements.

Examples of intangible assets

The following are all items that would meet the definition of an intangible asset if acquired in a business combination.

- Market related intangibles
 - Trademarks, trade names, service marks, collective marks and certification marks;
 - Internet domain names;
 - Newspaper mastheads; and
 - Non-competition agreements
- Customer related intangibles
 - Customer lists;
 - Order or production backlog;
 - Customer contracts and the related customer relationships; and
- Artistic related intangibles
 - Plays, operas and ballets;
 - Books, magazines, newspapers and other literary works;
 - Musical works (compositions, song lyrics and advertising jingles);
 - Pictures and photographs; and
 - Video and audio visual material:
 - Music videos; and
 - Television programmes
- Contract based intangibles
 - Licensing and royalty agreements;
 - Construction permits;
 - Franchise agreements
 - Operating and broadcasting rights;
 - Use rights such as drilling, water, air, mineral, timber-cutting and route authorities;
- Technology based intangibles
 - Patented and unpatented technology;
 - Computer software and databases; and
 - Trade secrets (secret formulas, processes, recipes)

3.2 Cost guidance

If an intangible asset is acquired in a business combination, its cost is the fair value at the acquisition date.

If cost cannot be measured reliably then the asset will be subsumed within goodwill.

3.3 In-process research and development

Another similar example involves in-process research and development

The acquiree might have a research and development project in process. Furthermore, it might not recognise an asset for the project because the recognition criteria for internally generated intangible assets have not been met.

However, the acquirer would recognise the in-process research and development as an asset in the consolidated financial statements as long as it:

- meets the definition of an asset; and
- □ is identifiable, i.e. is separable or arises from contractual or other legal rights.



Illustration: In-process research and development

Company X buys 100% of Company Y.

Company Y has spent \$600,000 on a research and development project. This amount has all been expensed as the IAS 38 criteria for capitalising costs incurred in the development phase of a project have not been met. Company Y has knowhow as the result of the project.

Company X estimates the fair value of Company Y's knowhow which has arisen as a result of this project to be \$500,000.

Analysis

The in-process research and development is not recognised in Company Y's financial statements (IAS 38 prohibits the recognition of internally generated brands).

From the Company X group viewpoint the in-process research and development is a purchased asset. Part of the consideration paid by Company X to buy Company Y was to buy the knowhow resulting from the project and it should be recognised in the consolidated financial statements at its fair value of N500,000.

Subsequent expenditure on an acquired in-process research and development project

Expenditure incurred on an in-process research or development project acquired separately or in a business combination and recognised as an intangible asset is accounted for in the usual way by applying the IAS 38 recognition criteria.

This means that further expenditure on such a project would not be capitalised unless the criteria for the recognition of internally generated intangible assets were met.

Q

Illustration: Subsequent expenditure on acquired in-process R and D

Continuing the previous example. Company X owns 100% of Company Y and has recognised an intangible asset of \$500,000 as a result of the acquisition of the company.

Company Y has spent a further \$150,000 on the research and development project since the date of acquisition. This amount has all been expensed as the IAS 38 criteria for capitalising costs incurred in the development phase of a project have not been met.

Analysis

The №150,000 expenditure is not recognised in Company Y's financial statements (IAS 38 prohibits the recognition of internally generated brands).

From the Company X group viewpoint, further work on the in-process research and development project is research and the expenditure of \$150,000 must be expensed.

4 MEASUREMENT AFTER RECOGNITION

Section overview

- Choice of policy
- Revaluation model
- Amortisation of intangible assets
- Disposals of intangible assets

4.1 Choice of policy

Intangible assets are recognised at cost when first acquired.

IAS 38 allows a business to choose one of two measurement models as its accounting policy for property, intangible assets after acquisition. The same model should be applied to all assets in the same class.

The two measurement models for intangible assets after acquisition are:

- cost model (i.e. cost less accumulated depreciation); and
- revaluation model (i.e. revalued amount less accumulated depreciation since the most recent revaluation).

Class of assets

The same model should be applied to all assets in the same class. A class of intangible assets is a grouping of assets of a similar nature and use in an entity's operations. Examples of separate classes may include:

- brand names;
- mastheads and publishing titles;
- computer software;
- licences and franchises;
- copyrights, patents and other industrial property rights, service and operating rights;
- recipes, formulae, models, designs and prototypes; and
- intangible assets under development.

Cost model

An intangible asset is carried at its cost less any accumulated amortisation and any accumulated impairment losses after initial recognition.

4.2 Revaluation model

Intangible assets can be revalued according to the same rules as those applied to the revaluation of property, plant and equipment. These were explained in detail in the previous chapter so will be covered in less detail here.

An intangible asset is carried at a revalued amount, (its fair value at the date of the revaluation less any subsequent accumulated amortisation and any accumulated impairment losses).

This is only allowed if the fair value can be determined by reference to an active market in that type of intangible asset.



Definition: Active market

An active market is a market in which all the following conditions exist:

- (a) the items traded in the market are homogeneous;
- (b) willing buyers and sellers can normally be found at any time; and
- (c) prices are available to the public.

Active markets for intangible assets are rare. Very few companies revalue intangible assets in practice.

The requirement that intangible assets can only be revalued with reference to an active market is a key difference between the IAS 16 revaluation rules for property, plant and equipment and the IAS 38 revaluation rules for intangible assets.

An active market for an intangible asset might disappear. If the fair value of a revalued intangible asset can no longer be measured by reference to an active market the carrying amount of the asset going forward is its revalued amount at the date of the last revaluation less any subsequent accumulated amortisation and impairment losses.

Frequency of revaluations

Revaluations must be made with sufficient regularity so that the carrying amount does not differ materially from its fair value at the reporting date.

The frequency of revaluations should depend on the volatility in the value of the assets concerned. When the value of assets is subject to significant changes (high volatility), annual revaluations may be necessary.

However, such frequent revaluations are unnecessary for items subject to only insignificant changes in fair value. In such cases it may be necessary to revalue the item only every three or five years.

Changing the carrying amount of the asset

When an item of property, plant and equipment is revalued, any accumulated depreciation at the date of the revaluation is treated in one of the following ways:

Method 1: Restate accumulated depreciation proportionately with the change in the gross carrying amount of the asset so that the carrying amount of the asset after revaluation equals its revalued amount.

Method 2:

- Step 1: Transfer the accumulated depreciation to the asset account. The result of this is that the balance on the asset account is now the carrying amount of the asset and the accumulated depreciation account in respect of this asset is zero.
- **Step 2:** Change the balance on the asset account to the revalued amount.

Accounting for the revaluation

The revaluation is carried out according to the same principles applied in accounting for other assets.

	IAS 38
Upwards revaluations	Recognised in other comprehensive income and accumulated in equity under the heading of revaluation surplus.
However:	an increase is recognised in profit or loss to the extent that it reverses a revaluation decrease of the same asset previously recognised in profit or loss.
Downward revaluations	Recognised in profit or loss.
However:	A decrease is recognised in other comprehensive income to the extent of any credit balance in the revaluation surplus in respect of that asset thus reducing the amount accumulated in equity under the heading of revaluation surplus.

Realisation of the revaluation surplus

Most intangible assets eventually disappear from the statement of financial position either by becoming fully amortised or because the company sells them.

If nothing were done this would mean that there was a revaluation surplus on the face of the statement of financial position that related to an asset that was no longer owned.

IAS 38 allows (but does not require) the transfer of a revaluation surplus to retained earnings when the asset to which it relates is derecognised (realised).

This might happen over several years as the asset is depreciated or at a point in time when the asset is sold.

Revaluation of an asset causes an increase in the annual depreciation charge. The difference is known as excess depreciation (or incremental depreciation):

Excess depreciation is the difference between:

- Let the depreciation charge on the re-valued amount of the asset, and
- □ the depreciation that would have been charged on historical cost.

Each year a business might make a transfer from the revaluation surplus to the retained profits equal to the amount of the excess depreciation.

4.3 Amortisation of intangible assets

A company must assess whether the useful life of an intangible asset is:

- □ finite: or
- indefinite.

If the useful life of an intangible asset is assessed as being finite the company must assess its useful life.

An intangible asset is assessed as having an indefinite useful life when (based on an analysis of all of the relevant factors) there is no foreseeable limit to the period over which the asset is expected to generate net cash inflows.

Intangibles with a finite useful life

The depreciable amount of an intangible asset with a finite useful life is allocated on a systematic basis over its useful life.

Amortisation begins when the asset is available for use, i.e. when it is in the location and condition necessary for it to be capable of operating in the manner intended by management.

Amortisation ends at the earlier of the date that the asset is classified as held for sale in accordance with IFRS 5 and the date that the asset is derecognised.

The amortisation method used must reflect the pattern in which the asset's future economic benefits are expected to be consumed by the entity. If that pattern cannot be determined reliably, the straight-line method must be used.

The residual value of an intangible asset must be assumed to be zero unless:

- there is a commitment by a third party to purchase the asset at the end of its useful life; or
- □ there is an active market for the asset and:
 - residual value can be determined by reference to that market; and
 - it is probable that such a market will exist at the end of the asset's useful life.

The amortisation period and the amortisation method must be reviewed at least at each financial year-end.

- Where there is a change in the useful life, the carrying amount (cost minus accumulated depreciation) of the asset at the date of change is written off over the (revised) remaining useful life of the asset.
- ❑ Where there is a change in the depreciation method used, this is a change in accounting estimate. A change of accounting estimate is applied from the time of the change, and is not applied retrospectively. The carrying amount (cost minus accumulated depreciation) of the asset at the date of the change is written off over the remaining useful life of the asset.

Intangibles with an indefinite useful life

Where the useful life is assessed as indefinite:

- Let the intangible asset should not be amortised; but
- impairment reviews should be carried out annually (and even more frequently if there are any indications of impairment).

The useful life of an intangible asset that is not being amortised must be reviewed each period to determine whether events and circumstances continue to support an indefinite useful life assessment for that asset.

If they do not, the change in the useful life assessment from indefinite to finite is accounted for as a change in an accounting estimate in accordance with IAS 8. This means that the carrying amount at the date of the change is amortised over the estimated useful life from that date.

4.4 Disposals of intangible assets

The rules for de-recognition of intangible assets (accounting for their 'disposal') are the same as for property, plant and equipment under IAS 16. There is a gain or loss on disposal equal to the difference between the net disposal proceeds and the carrying value of the asset at the time of disposal.

5 DISCLOSURE REQUIREMENTS

Section overview

- Disclosure requirements
- Accounting policies

5.1 Disclosure requirements

In the financial statements, disclosures should be made separately for each class of intangible asset. (Within each class, disclosures must also be made by internally-generated intangibles and other intangibles, where both are recognised.)

Most of the disclosure requirements are the same as for tangible non-current assets in IAS 16. The only additional disclosure requirements are set out below.

- U Whether the useful lives of the assets are finite or indefinite.
- □ If the useful lives are finite, the useful lives or amortisation rates used.
- □ If the useful lives are indefinite, the carrying amount of the asset and the reasons supporting the assessment that the asset has an indefinite useful life.

e,

Example:

An example is shown below of a note to the financial statement with disclosures about intangible assets

	Internally- generated development costs	Software licences	Goodwill	Total
	₩m	₩m	₩m	₩m
Cost				
At the start of the year	290	64	900	1,254
Additions	60	14	-	74
Additions through business combinations	-	-	20	20
Disposals	(30)	(4)		(34)
At the end of the year	320	74	920	1,314
Accumulated depreciation and impairment losses				
At the start of the year	140	31	120	291
Amortisation expense	25	10	-	35
Impairment losses	-	-	15	15
Accumulated amortisation disposals	on 10	2	-	12
	 4 7 E		405	
At the end of the year	175		135	353
Net carrying amount				
At the start of the year	150	33	780	963
At the end of the year	145	31	785	961

- □ For any intangible asset that is individually material to the financial statements, the following disclosure is required:
 - a description
 - its carrying amount
 - the remaining amortisation period.
- □ The total amount of research and development expenditure written off (as an expense) during the period must also be disclosed.

5.2 Accounting policies

IAS 1 requires the disclosure of accounting policies used that are relevant to an understanding of the financial statements. Property, plant and equipment is often includes the largest numbers in the statement of financial position and the results in significant expense in the statement of profit or loss.

One of the learning outcomes in this area is that you be able to formulate accounting policies for property, plant and equipment.

There are several areas that are important to explain to users of financial statements.

Amortisation policy

The depreciable amount of an intangible asset must be written off over its useful life.

Formulating a policy in this area involves estimating the useful lives of different categories of intangible assets.

Under the guidance in IAS 38 the estimated residual values of an asset would usually be zero and the straight line method would usually be used.

Other explanations:

This is not so much about choosing a policy as explaining situations to users:

- Development expenditure: Does the company have any?
- □ Intangible assets acquired in business combinations in the period.
- Whether the company has intangible assets assessed as having an indefinite useful life.

Below is a typical note which covers many of the possible areas of accounting policy for intangible assets.



Illustration: Accounting policy – Intangible assets

The intangible assets of the group comprise patents, licences and computer software.

The group accounts for all intangible assets at historical cost less accumulated amortisation and accumulated impairment losses.

Computer software

Development costs that are directly attributable to the design and testing of identifiable and unique software products controlled by the group are recognised as intangible assets when the following criteria are met:

- a. it is technically feasible to complete the software product so that it will be available for use;
- b. management intends to complete the software product and use or sell it;
- c. there is an ability to use or sell the software product;
- d. it can be demonstrated how the software product will generate probable future economic benefits;
- e. adequate technical, financial and other resources to complete the development and to use or sell the software product are available; and
- f. the expenditure attributable to the software product during its development can be reliably measured.

Directly attributable costs that are capitalised as part of the software product include the software development employee costs and an appropriate portion of relevant overheads.

Development expenditures that do not meet these criteria are recognised as an expense as incurred. Costs associated with maintaining computer software programmes are recognised as an expense as incurred.

Useful lives

Depreciation is calculated using the straight-line method to allocate their cost or revalued amounts to their residual values over their estimated useful lives, as follows:

Patents: 25 30 years

Licenses 5 to15 years

Computer software 3 years

All intangible assets are estimated as having a zero residual value.

6 CHAPTER REVIEW

Chapter review

Before moving on to the next chapter check that you now know how to:

- Explain and apply the recognition rules to intangible assets acquired in different ways
- Measure intangible assets on initial recognition
- Measure intangible assets after initial recognition using the cost model and the revaluation model

Skills level Financial reporting



IAS 36: Impairment of assets

Contents

- 1 Impairment of assets
- 2 Cash generating units
- 3 Other issues
- 4 Chapter review

INTRODUCTION

Purpose

In this element the accounting from the foundation level is taken up a level into financial accounting in the context of more complex events and transactions with a greater emphasis on compliance with regulations including International Accounting Standards and generally accepted accounting practices in the private sectors.

Students will be expected to demonstrate an understanding of and competence in financial statement analysis and basic analysis of choices in accounting treatments.

Competencies

2	Preparing separate financial statements
2(b)	Identify and state the laws, regulations accounting standards and other requirements that govern the production of financial statements by such entities.
2(c)	Draft and compile financial statements, or extracts from them, of an entity in accordance with its chosen policies and in accordance with IFRS and local

IAS 36 is an examinable document

law.

Exam context

This chapter explains rules on impairment set out in IAS 36.

By the end of this chapter you will be able to:

- Explain the objective of IAS 36
- Explain the IAS 36 impairment review process
- Estimate recoverable amount and hence impairment loss (if any)
- Account for impairment loss on assets carried under a cost model
- Account for impairment loss on revalued assets
- Define a cash generating unit
- Allocate impairment loss to assets within a cash generating unit
- Describe when reversal of impairment loss is permitted

1 IMPAIRMENT OF ASSETS

Section overview

- Objective and scope of IAS 36
- Identifying impairment or possible impairment
- Measuring recoverable amount
- Accounting for impairment
- Summary of approach

1.1 Objective and scope of IAS 36

An asset is said to be impaired when its recoverable amount is less than its carrying amount in the statement of financial position.

From time to time an asset may have a carrying value that is greater than its fair value but this is not necessarily impairment as the situation might change in the future. Impairment means that the asset has suffered a permanent loss in value.

The objective of *IAS 36 Impairment of assets* is to ensure that assets are 'carried' (valued) in the financial statements at no more than their recoverable amount.

Scope of IAS 36

IAS 36 applies to all assets, with the following exceptions that are covered by other accounting standards:

- □ inventories (IAS 2);
- □ construction contracts (IAS 11);
- deferred tax assets (IAS 12);
- □ financial assets (IAS 39);
- investment property held at fair value (IAS 40);
- non-current assets classified as held for sale (IFRS 5).

Recoverable amount of assets

Definition

The *recoverable amount* of an asset is defined as the higher of its fair value minus costs of disposal, and its value in use.

Fair value is 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.

Value in use is the present value of future cash flows from using an asset, including its eventual disposal.

Impairment loss is the amount by which the carrying amount of an asset (or a cash-generating unit) exceeds its recoverable amount.

Cash-generating units will be explained later.

Stages in accounting for an impairment loss

There are various stages in accounting for an impairment loss:

Stage 1: Establish whether there is an indication of impairment.

Stage 2: If so, assess the recoverable amount.

Stage 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.

1.2 Identifying impairment or possible impairment

An entity must carry out an impairment review when there is evidence or an indication that impairment may have occurred. At the end of each reporting period, an entity should assess whether there is any indication that impairment might have occurred. If such an indication exists, the entity must estimate the recoverable amount of the asset, in order to establish whether impairment has occurred and if so, the amount of the impairment.

Indicators of impairment

The following are given by IAS 36 as possible **indicators of impairment**. These may be indicators outside the entity itself (external indicators), such as market factors and changes in the market. Alternatively, they may be internal indicators relating to the actual condition of the asset or the conditions of the entity's business operations.

When assessing whether there is an indication of impairment, IAS 36 requires that, as a minimum, the following sources are considered:

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.

If there is an indication that an asset (or cash-generating unit) is impaired then it is tested for impairment. This involves the calculating the recoverable amount of the item in question and comparing this to its carrying amount.

Additional requirements for testing for impairment

The following assets must be reviewed for impairment at least annually, even when there is no evidence of impairment:

- an intangible asset with an indefinite useful life; and
- **goodwill acquired in a business combination.**

1.3 Measuring recoverable amount

It has been explained that recoverable amount is the higher of an asset's:

- fair value less costs of disposal; and
- its value in use.

If either of these amounts is higher than the carrying value of the asset, there has been no impairment.

IAS 36 sets out the requirements for measuring 'fair value less costs of disposal' and 'value in use'.

Measuring fair value less costs of disposal

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, taxes 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.

Calculating value in use

Value in use is a value that represents the present value of the expected future cash flows from use of the asset, discounted at a suitable discount rate or cost of capital. Value in use is therefore 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 discount rate used should be the rate of return that the market would expect from an equally risky investment.

However, both the expected future cash flows and the discount rate might be adjusted to allow for uncertainty about the future – such as the business risk associated with the asset and expectations of possible variations in the amount or timing of expected future cash benefits from using the asset.

0

Example: Measurement of recoverable amount

A company has a machine in its statement of financial position at a carrying amount 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 valu	e less costs of disposal		₩000
Fair valu	le		240,000
Costs of	Costs of disposal		
			235,000
Year	Cash flow (₩000)	Discount factor	Present value
1	150,000	1/1.1	136,364
2	100,000	1/1.1 ²	82,645
3	50,000 + 25,000	1/1.1 ³	56,349
			275,358

The recoverable amount is the higher of 235,000 and 275,358, i.e. 275,358.

The asset must be valued at the lower of carrying value and recoverable amount.

The asset has a carrying value of 300,000, which is higher than the recoverable amount from using the asset.

It must therefore be written down to the recoverable amount, and an impairment of 24,642 (300,000 - 275,358) must be recognised.

1

1.4 Accounting for impairment

The impairment loss is normally recognised immediately in profit or loss.



Example: Measurement of recoverable amount

A company has a machine in its statement of financial position at a carrying amount of \$300,000.

The machine has been tested for impairment and found to have recoverable amount of \$275,358 meaning that the company must recognise an impairment loss of \$24,642.

This is accounted for as follows:

	Debit	Credit
Statement of profit or loss	24,642	
Property, plant and equipment		24,642



Practice question

On 1 January Year 1 Entity Q purchased for \$240,000 a machine with an estimated useful life of 20 years and an estimated zero residual value.

Depreciation is on a straight-line basis.

On 1 January Year 4 an impairment review showed the machine's recoverable amount to be \$100,000 and its remaining useful life to be 10 years.

Calculate:

- a) The carrying amount of the machine on **31** December Year **3** (immediately before the impairment).
- b) The impairment loss recognised in the year to 31 December Year 4.
- c) The depreciation charge in the year to 31 December Year 4.c)

However, an impairment loss recognised in respect of an asset carried at a previously recognised revaluation surplus is recognised in other comprehensive income to the extent that it is covered by that surplus. Thus it is treated in the same way as a downward revaluation, reducing the revaluation reserve balance relating to that asset in the statement of changes in equity.

Impairment not covered by a previously recognised surplus on the same asset is recognised in profit or loss.



Example: Measurement of recoverable amount

A company has a machine in its statement of financial position at a carrying amount of ₩300,000 including a previously recognised surplus of ₩20,000.

The machine has been tested for impairment and found to have recoverable amount of \$275,358 meaning that the company must recognise an impairment loss of \$24,642.

This is accounted for as follows:

	Debit	Credit
Statement of profit or loss	4,642	
Other comprehensive income	20,000	
Property, plant and equipment		24,642

Following the recognition of the impairment, the future depreciation of the asset must be based on the revised carrying amount, minus the residual value, over the remaining useful life.



Practice question

On 1 January Year 1 Entity Q purchased for 4240,000 a machine with an estimated useful life of 20 years and an estimated zero residual value.

Depreciation is on a straight-line basis.

The asset had been re-valued on 1 January Year 3 to \$250,000, but with no change in useful life at that date.

On 1 January Year 4 an impairment review showed the machine's recoverable amount to be \$100,000 and its remaining useful life to be 10 years.

Calculate:

- a) The carrying amount of the machine on 31 December Year 2 and hence the revaluation surplus arising on 1 January Year 3.
- b) The carrying amount of the machine on 31 December Year 3 (immediately before the impairment).
- c) The impairment loss recognised in the year to 31 December Year 4.
- d) The depreciation charge in the year to 31 December Year 4.

2

1.5 Summary of the approach

Impairment of an asset should be identified and accounted for as follows:

- (1) At the end of each reporting period, the entity should assess whether there are any indications that an asset may be impaired.
- (2) If there are such indications, the entity should estimate the asset's **recoverable amount**.
- (3) When the recoverable amount is less than the carrying value of the asset, the entity should reduce the asset's carrying value to its recoverable amount. The amount by which the value of the asset is written down is an **impairment loss**.
- (4) This impairment loss is recognised as a loss for the period.
- (5) However, if the impairment loss relates to an asset that has previously been re-valued upwards, it is first offset against any remaining revaluation surplus for that asset. When this happens it is reported as other comprehensive income for the period (a negative value) and not charged against profit.
- (5) Depreciation charges for the impaired asset in future periods should be adjusted to allocate the asset's revised carrying amount, minus any residual value, over its remaining useful life (revised if necessary).

2 CASH GENERATING UNITS

Section overview

- Cash-generating units
- Allocating an impairment loss to the assets of a cash generating unit

2.1 Cash-generating units

It is not always possible to calculate the recoverable amount of individual assets. Value in use often has to be calculated for groups of assets, because assets may not generate cash flows in isolation from each other. An asset that is potentially impaired may be part of a larger group of assets which form a cash-generating unit.

IAS 36 defines a cash-generating unit (CGU) as the smallest identifiable group of assets that generates cash inflows that are largely independent of the cash inflows from other assets or groups of assets.

Goodwill

The existence of cash-generating units may be particularly relevant to goodwill acquired in a business combination. Purchased goodwill must be reviewed for impairment annually, and the value of goodwill cannot be estimated in isolation. Often, goodwill relates to a whole business.

It may be possible to allocate purchased 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.

2.2 Allocating an impairment loss to the assets of 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 the goodwill allocated to the cash-generating unit
- next, to the other assets in the cash-generating unit, on a pro-rata basis (i.e. in proportion to the carrying amount of the assets of the cashgenerating unit).

However, the carrying amount of an asset cannot be reduced below the highest of:

- its fair value less costs of disposal (if determinable);
- its value in use (if determinable); and
- **zero**.

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Example: Allocation of impairment loss in cash-generating unit

A cash-generating unit is made up of the following assets.

	₩m
Property, plant and equipment	90
Goodwill	10
Other assets	60
	160

The recoverable amount of the cash-generating unit has been assessed as \$140 million.

The impairment loss would be allocated across the assets of the cash-generating unit as follows:

There is a total impairment loss of \$20 million (= \$160m - \$140m). Of this, \$10 million is allocated to goodwill, to write down the goodwill to \$0. The remaining \$10 million is then allocated to the other assets pro-rata.

Therefore:

₦6 million (= $₦10m \times 90/150$) of the impairment loss is allocated to property, plant and equipment, and

₦4 million (= $10m \times 60/150$) of the loss is allocated to the other assets in the unit.

The allocation has the following result:

	Before Ioss N m	Impairment Ioss N m	After Ioss N m
Property, plant and equipment	90	(6)	84
Goodwill	10	(10)	_
Other assets	60	(4)	56
	160	(20)	140

3 OTHER ISSUES

Section overview

- Reversal of an impairment loss
- Disclosure requirements for the impairment of assets

3.1 Reversal of 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 charged to the revaluation reserve, in which case the reversal should be credited to the revaluation reserve (and reported in the same way as a revaluation in 'other comprehensive income' for the period).

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 purchased goodwill **cannot** be reversed. This is because any reversal of an impairment loss to goodwill is likely to be caused by an increase in internally-generated goodwill rather than a reversal of the impairment of purchased goodwill. Internally-generated goodwill must not be reported as an asset.

3.2 Disclosure requirements for the impairment of assets

For all impairments, the following disclosures should be made for each class of assets:

- □ The amount of impairment losses recognised in profit or loss for the period and the line item in which those items are included.
- Similar information about reversals of impairment losses recognised in profit or loss for the period.
- □ The amount of impairment losses on revalued assets that have been recognised (or reversed) in other comprehensive income for the period (and in the revaluation reserve).
- □ If the recognition or reversal of an individual impairment loss is material to the financial statements, there should be additional disclosure of:
 - the events that led to the recognition or reversal of the impairment loss
 - the amount of the impairment loss recognised or reversed
 - the nature of the asset
 - whether the recoverable amount is fair value less costs of disposal or value in use, and how the figure for the recoverable amount was calculated.
- □ There are additional disclosures in aggregate for impairment losses (reversals) that are not individually material, and extensive disclosures for CGUs that include goodwill or intangible assets with an indefinite useful life, including estimated sensitivities for changes in assumptions used to derive a value in use or fair value less costs of disposal ("headroom" disclosures)

4 CHAPTER REVIEW

Chapter review

Before moving on to the next chapter check that you now know how to:

- Explain the objective of IAS 36
- Explain the IAS 36 impairment review process
- Estimate recoverable amount and hence impairment loss (if any)
- Account for impairment loss on assets carried under a cost model
- Account for impairment loss on revalued assets
- Define a cash generating unit
- Allocate impairment loss to assets within a cash generating unit
- Describe when reversal of impairment loss is permitted

SOLUTIONS TO PRACTICE QUESTIONS

Solu	ution	
On :	31 December Year 3 the machine was stated at the following	amount
a)	Carrying amount of the machine on 31 December Year 3	
	Cost	240,000
	Accumulated depreciation (3 × $(240,000 \div 20 \text{ years}))$	(36,000)
	Carrying amount	204,000
b)) Impairment loss at the beginning of Year 4 of ₩104,000 (₩204,000 – ₩100,000). This is charged to profit or loss.	
C)	Depreciation charge in Year 4 of ₩10,000 (= ₩100,000 ÷ 10). The depreciation charge is based on the recoverable amount of the asset.	

Sol	ution		2
a)	Carrying amount on	₩	
	Cost	240,000	
	Accumulated depreciation at 1 January Year 3 (2 years × (240,000 ÷ 20))	(24,000)	
	Carrying amount	216,000	
	Valuation at 1 January Year 3	250,000	
	Revaluation surplus	34,000	
b)	When the asset is revalued on 1 January Year 3, depreciation is char revalued amount over its remaining expected useful life. On 31 December Year 3 the machine was therefore stated at:	-	
	Voluction at 1 January (no voluced an aunt)	₩	
	Valuation at 1 January (re-valued amount) Accumulated depreciation in Year 3 (= ₩250,000 ÷ 18))	250,000 (13,889)	
	Carrying amount	236,111	
c) On 1 January Year 4 the impairment review shows an impairment loss of №136,111 (№236,111 – №100,000).			
	An impairment loss of $34,000$ will be taken to other comprehens (reducing the revaluation surplus for the asset to zero).	ive income	
	The remaining impairment loss of ₩102,111 (₩136,111 – ₩34,000) is recognised in the statement of profit or loss for Year 4.		
d)	Year 4 depreciation charge is ₩10,000 (₩100,000 ÷ 10 years).		

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Skills level Financial reporting



IFRS 5: Non-current assets held for sale and discontinued operations

Contents

- 1 Sale of non-current assets
- 2 Introduction to IFRS 5
- 3 Classification of non-current assets (or disposal groups) as held for sale
- 4 Measurement of non-current assets (or disposal groups) classified as held for sale
- 5 Presentation and disclosure
- 6 Discontinued operations
- 7 Chapter review

INTRODUCTION

Purpose

In this element the accounting from the foundation level is taken up a level into financial accounting in the context of more complex events and transactions with a greater emphasis on compliance with regulations including International Accounting Standards and generally accepted accounting practices in the private sectors.

Students will be expected to demonstrate an understanding of and competence in financial statement analysis and basic analysis of choices in accounting treatments.

Competencies

2	Preparing separate financial statements
2(b)	Identify and state the laws, regulations accounting standards and other requirements that govern the production of financial statements by such entities.
2(c)	Draft and compile financial statements, or extracts from them, of an entity in accordance with its chosen policies and in accordance with IFRS and local law.

IFRS 5 is an examinable document.

Exam context

This chapter explains the IFRS 5 rules on the measurement and presentation of non-current assets held for sale and discontinued operations.

By the end of this chapter you will be able to:

- Apply the held for sale criteria and identify if an assets is held for sale
- Measure assets classified as held for sale at the lower of carrying amount and fair value less costs to sell
- Account for any loss arising on classification of an asset as held for sale
- Allocated any loss arising to assets within a disposal group classified as held for sale
- Explain and apply the presentation rules on assets held for sale
- Explain and apply the presentation rules on disposal groups held for sale
- Define and explain the accounting treatment for discontinued operations

1 SALE OF NON-CURRENT ASSETS

Section overview

- General rules on derecognition
- Assets that are held for sale

1.1 General rules on derecognition

When an asset is derecognised, 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.

If a non-current asset is disposed of, 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 should **not** be included in sales revenue.

The gain or loss on the disposal is calculated as:

Illustration: Gain or loss on disposal		
		N
Sale proceeds on disposal		X
Less disposal costs		(X)
Net disposal value	-	X
Asset at cost/revalued amount	Х	
Less: Accumulated depreciation	(X)	
Carrying amount at date of disposal		(X)
Gain /loss on disposal	-	X

1.2 Assets that are held for sale

Sometimes, a company might hold an asset at the year-end that it has the intention of selling.

IFRS 5 Non-current assets held for sale and discontinued operations

contain rules which impact the measurement and presentation of such assets.

In summary:

Non-current assets (and groups of non-current assets) that meet certain strict criteria are classified as being held for sale.

Non-current assets that are held for sale are:

- subject to an impairment test;
- presented on a separate category on the face of the statement of financial position; and
- are no longer depreciated.

Any loss recognised on a non-current asset carried at cost as a result of the impairment test at the date of its classification as 'held for sale' is recognised in the statement of profit or loss.

Any loss recognised on a non-current asset carried at a revalued amount as a result of the impairment test at the date of its classification as 'held for sale' is recognised in other comprehensive income (to the extent that it is covered by the previously recognised surplus on the same asset) with the balance recognised in the statement of profit or loss.

The above rules will be explained in more detail in the following sections:

2 INTRODUCTION TO IFRS 5

Section overview

- Objective of IFRS 5
- Scope of IFRS 5

2.1 Objective of IFRS 5

IFRS 5 sets out requirements that specify the accounting treatment for assets held for sale, and the presentation and disclosure of discontinued operations.

IFRS 5 requires assets that meet the criteria to be classified as held for sale are:

- measured at the lower of carrying amount and fair value less costs to sell;
- not depreciated; and
- presented separately on the face of the statement of financial position.

Additionally the results of discontinued operations must be presented separately in the statement of profit or loss.

IFRS 5 identifies three classes of item that might be described as held for sale. These classes are of an increasing level of sophistication:

- non-current assets;
- disposal groups; and
- discontinued operations.

Disposal group



Definition

Disposal group – a group of assets to be disposed of in a single transaction, and any liabilities directly associated with those assets that will be transferred in the transaction.

A disposal group may be a group of cash-generating units, a single cashgenerating unit, or part of a cash-generating unit.

Some disposal groups might fall into the definition of a discontinued operation.

2.2 Scope of IFRS 5

Classification and presentation

The classification and presentation requirements of IFRS 5 apply to all recognised non-current assets and to all disposal groups.

Measurement

The measurement requirements of IFRS 5 apply to all recognised non-current assets and disposal groups except for:

- deferred tax assets (IAS 12 Income Taxes).
- assets arising from employee benefits (IAS 19 Employee Benefits).
- □ financial assets within the scope of IAS 39 Financial Instruments: Recognition and Measurement.
- non-current assets that are accounted for in accordance with the fair value model in IAS 40 Investment Property.
- non-current assets that are measured at fair value less estimated point-ofsale costs in accordance with IAS 41 Agriculture.
- contractual rights under insurance contracts as defined in IFRS 4 Insurance Contracts.

Comment on the scope of IFRS 5

The scope of IFRS 5 is a little complicated.

A non-current asset that is scoped out of IFRS 5 for measurement purposes may fall within the classification and presentation rules.

Such a non-current asset might be part of a disposal group. In this case the measurement rules of IFRS 5 apply to the disposal group as a whole but not to the scoped out assets within the group which are measured individually according to the rules set out in their own standards.

Abandonment of non-current assets

Non-current assets (or disposal groups) to be abandoned include non-current assets (or disposal groups) that are to be:

- used to the end of their economic life; or
- closed rather than sold.

A non-current asset (or disposal group) that is to be abandoned must not be classified as held for sale.

3 CLASSIFICATION OF NON-CURRENT ASSETS (OR DISPOSAL GROUPS) AS HELD FOR SALE

Section overview

- Rule
- Criteria

3.1 Rule

A non-current asset (or disposal group) must be classified as held for sale when its carrying amount will be recovered principally through a sale transaction rather than through continuing use.

3.2 Criteria

The following conditions must apply at the reporting date for an asset (or disposal group) to be classified as held for sale:

- it must be available for immediate sale in its present condition subject only to terms that are usual and customary for sales of such assets (or disposal groups);
- the sale must be highly probable, i.e.:
 - the appropriate level of management must be committed to a plan to sell the asset (or disposal group);
 - an active programme to locate a buyer and complete the plan must have been initiated; and
 - 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 must be expected to be completed within one year from the date of classification (except in limited circumstances) and actions required to complete the plan should indicate that it is unlikely that significant changes to the plan will be made or that the plan will be withdrawn.

If the criteria are met for a non-current asset (or disposal group) after the reporting date but before the authorisation of the financial statements for issue, that asset must not be classified as held for sale as at the reporting date.

However the entity is required to make certain disclosures in respect of the noncurrent asset (or disposal group).



Example: Classification of asset as held for sale

Entity R had the following asset at 31 March Year 4.

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 (after 31 March Year 4) the entity received an offer of 44 million and the property was eventually sold for 43.5 million during May Year 4, before the financial statements were authorised for issue.

Analysis as at 31 March Year 4

The property cannot be classified as 'held for sale'.

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 price is not reasonable in relation to its current fair value.



Example: Classification of asset as held for sale

Entity R had the following asset at 31 March Year 4.

Plant with a carrying value of $\cancel{1}2.5$ 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.

Analysis as at 31 March Year 4

The plant cannot be classified as 'held for sale'.

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.

4 MEASUREMENT OF NON-CURRENT ASSETS (OR DISPOSAL GROUPS) CLASSIFIED AS HELD FOR SALE

Section overview

- Measurement of non-current assets and disposal groups held for sale
- Allocation of an impairment loss on a disposal group
- Subsequent re-measurement
- Changes to a plan of sale

4.1 Measurement of non-current assets and disposal groups held for sale

Assets held for sale and disposal groups should be measured at the lower of:

- their carrying amount (i.e. current values in the statement of financial position, as established in accordance with accounting standards and principles), and
- □ fair value less costs to sell.

If the value of the 'held for sale' asset is adjusted from carrying amount to fair value less costs to sell, any impairment should be recognised as a loss in the statement of profit or loss for the period unless the asset to which it relates is carried at a previously recognised revaluation surplus. In this case the loss is taken to other comprehensive income to the extent that it is covered by the previously recognised surplus on that asset. Any amount not covered is recognised in the statement of profit or loss.

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.



Example: Impact of classification as held for sale

An asset is reclassified as 'held for sale', when its carrying amount is ₩20 million.

Its fair value less estimated costs to sell is ₦17 million.

The asset should be revalued at 17 million and a loss of 3 million should be reported in the period.

If the carrying amount is less than the fair value less costs to sell there is no impairment. In this case there is no adjustment to the carrying amount of the asset. (A gain is not recognised on reclassification as held for sale).



Example: Impact of classification as held for sale

An asset is reclassified as 'held for sale', when its carrying amount is \$20 million.

Its fair value less estimated costs to sell is ₦24 million.

The asset 'held for sale' should not be re-measured and should continue to be carried at $\cancel{1}20$ million.

A gain on disposal will be included in profit for the period when the disposal actually occurs.



Practice question

A machine was purchased on 1 January Year 1 for ₩80,000. It had a useful life of 8 years and no residual value.

1

2

On 31 December Year 4 the machine was classified as held for sale. On this date the machine's fair value was estimated at \$50,000 and the costs to sell were estimated at \$1,000

The machine was sold for ₩48,000 on 30 June Year 5.

Calculate the entries that are required in the statement of profit or loss for Year 4 and Year 5.



Practice question

A machine was purchased on 1 January Year 1 for ₩80,000. It had a useful life of 8 years and no residual value.

On 31 December Year 4 the machine was classified as held for sale. On this date the machine's fair value was estimated at \$41,000 and the costs to sell were estimated at \$2,000

The machine was sold for ₩37,500 on 30 June Year 5.

Calculate the entries that are required in the statement of profit or loss for Year 4 and Year 5.

4.2 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 reduce the carrying amounts of those non-current assets in the disposal group (that are within the scope of the IFRS 5 measurement rules) in the following order:

- goodwill; then
- other non-current assets pro-rated on the basis of their carrying values.



Example: Allocation of impairment loss in a disposal group

An entity has decided to dispose of a group of its assets.

The carrying amount of the assets immediately before the classification as held to sale were as follows:

	₩
Goodwill	20,000
Property, plant and equipment (at re-valued amounts)	52,000
Property, plant and equipment (at cost)	80,000
Inventory	21,000
Financial assets	17,000
Total	190,000

The entity estimates that the 'fair value less costs to sell' of the disposal group is \$160,000. The entity must recognise an impairment loss of \$30,000 (\$190,000 - \$160,000).

Allocation of the impairment loss:

The first ₩20,000 of the impairment loss reduces the goodwill to zero.

The remaining \$10,000 of the impairment loss should be allocated to the noncurrent assets in the disposal group pro rata to their carrying value.

	Carrying amount before allocation	Impairment loss	Carrying amount after allocation
	Ħ	N	Ħ
Goodwill	20,000	20,000	_
Property, plant and equipment (at re-valued amounts)	52,000	3,939	48.061
Property, plant and	,	,	,
equipment (at cost)	80,000	6,061	73,939
Inventory	21,000	_	21,000
Financial assets	17,000	_	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.			

4.3 Subsequent re-measurement

Subsequent re-measurement of the non-current asset (or disposal group) might lead to:

- a further impairment loss which must be recognised; or
- a gain, which is recognised but only to the extent that it is covered by a previously recognised impairment loss.

4.4 Changes to a plan of sale

If an asset (or disposal group) has been classified as held for sale, but the criteria are no longer met, it must be removed from this classification.

Such an asset is measured at the lower of:

- the amount at which it would have been carried if it had never been classified as held for sale (i.e.: its carrying amount before it was classified as held for sale as adjusted for any depreciation, amortisation or revaluations that would have been recognised if it had not been so classified); and
- its recoverable amount at the date of the subsequent decision not to sell.

Any necessary adjustment to the carrying amount is recognised in income from continuing operations, in the same statement of profit or loss caption used to present a gain or loss on assets held for sale.

5 PRESENTATION AND DISCLOSURE

Section overview

Assets (or disposal groups) held for sale

5.1 Assets (or disposal groups) held for sale

Statement of financial position presentation

Non-current assets classified as held for sale are presented separately from other assets in the statement of financial position.

The assets and liabilities of a disposal group classified as held for sale are presented separately from other assets and liabilities in the statement of financial position. These assets and liabilities must not be offset and presented as a single amount.

The major classes of assets and liabilities classified as held for sale must be separately disclosed either on the face of the statement of financial position or in the notes.

This disclosure is not required for disposal groups that are newly acquired subsidiaries that are classified as held for sale on acquisition.

Comparatives are not restated to reflect the classification in the statement of financial position for the latest period presented.

Gains or losses

Any gain or loss on the re-measurement of a non-current asset (or disposal group) classified as held for sale that does not meet the definition of a discontinued operation is included in profit or loss from continuing operations.

The gain or loss recognised on measuring or re-measuring a non-current asset (or disposal group) classified as held for sale is disclosed. If it is not presented separately on the face of the statement of profit or loss, the caption that includes that gain or loss must also be disclosed.

Other disclosures

The following information must be disclosed in the notes in the period in which a non-current asset (or disposal group) has been either classified as held for sale or sold:

- a description of the non-current asset (or disposal group);
- a description of the facts and circumstances of the sale, or leading to the expected disposal, and the expected manner and timing of that disposal;
- □ if applicable, the segment in which the non-current asset (or disposal group) is presented in accordance with *IFRS 8 Operating segments.*

6 DISCONTINUED OPERATIONS

Section overview

- Discontinued operation
- Definition of discontinued operations
- Presentation and disclosure of discontinued operations

6.1 Discontinued operation

IFRS 5 Non-current assets held for sale and discontinued operations sets out requirements for disclosure of financial information relating to discontinued operations.

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 make a more reliable prediction of the future performance of the entity.

This information can be produced by providing information about discontinued operations separately from information about continuing operations.

6.2 Definition of discontinued operations

A discontinued operation is a disposal group that satisfies extra criteria. (IFRS 5 does not say as much but this is a helpful way to think of it).



Definition

Discontinued operation - A component of an entity that either has been disposed of or is classified as held for sale and:

- 1. represents a separate major line of business or geographical area of operations,
- 2. is part of a single co-ordinated plan to dispose of a separate major line of business or geographical area of operations or
- 3. is a subsidiary acquired exclusively with a view to resale.

A component of an entity comprises operations and cash flows that can be clearly distinguished, operationally and for financial reporting purposes, from the rest of the entity.

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.

An operation cannot be classified as discontinued in the statement of financial position if the criteria for classifying it as discontinued are met 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.

A disposal group might be, for example, a major business division of a company.

For example a company that operates in both shipbuilding and travel and tourism might decide to put its shipbuilding division up for sale. If the circumstances meet the definition of 'held for sale' in IFRS 5, the shipbuilding division would be a disposal group held for sale.

6.3 Presentation and disclosure of discontinued operations

Presentation in the statement of profit or loss

The following must be disclosed for discontinued operations:

- a single amount on the face of the statement of profit or loss comprising the total of:
 - the post-tax profit or loss of discontinued operations; and
 - the post-tax gain or loss recognised on the measurement to fair value less costs to sell or on the disposal of the assets or disposal group(s) constituting the discontinued operation.
- an analysis of this single amount:
 - the revenue, expenses and pre-tax profit or loss of discontinued operations;
 - the related income tax expense;
 - the gain or loss recognised on the measurement to fair value less costs to sell or on the disposal of the assets or disposal group(s) constituting the discontinued operation; and
 - the related income tax expense.
- the analysis may be presented in the notes or on the face of the statement of profit or loss. (If presented on the face of the statement of profit or loss it must be presented in a section identified as relating to discontinued operations).

The analysis is not required for disposal groups that are newly acquired subsidiaries that are classified as held for sale on acquisition.

■ the net cash flows attributable to the operating, investing and financing activities of discontinued operations.

These disclosures may be presented in the notes or on the face of the financial statements.

These disclosures are not required for disposal groups that are newly acquired subsidiaries that are classified as held for sale on acquisition.

Comparatives

Comparatives must be restated for these disclosures so that the disclosures relate to all operations that have been discontinued by the reporting date for the latest period presented.



Example: Presentation of discontinued operations in the statement of financial position

Information relating to discontinued operations might be presented as follows:

Statement of profit or loss

X Limited: Statement of profit or loss for the year e 20X9	nded 31 Dec	ember
	20X9	20X8
	N 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 Discontinued operations	600	800
Profit for the period from discontinued operations	250	180
Profit for the period	850	980

Note

The single figure of \$250,000 for after-tax profit or loss from discontinued operations should be analysed in a note to the accounts. Alternatively, the analysis could be given on the face of the statement of profit or loss.

Presentation 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.

This also applies to the assets and liabilities of a discontinued operation.



Example: Presentation of discontinued operations in the statement of financial position

An entity has two disposal groups held for sale:

	Disposal group		
	Group 1	Group 2	Total
	₩000	₩000	₩000
Property, plant and equipment	600	300	900
Liabilities	(50)	(20)	(70)

Information relating to discontinued operations might be presented as follows:

Statement of financial position

	₩000
Assets	
Non-current assets	2,000
Current assets	720
Non-current assets classified as held for sale (see above)	900
Total assets	3,620
Equity and liabilities	
Share capital	1,000
Reserves	1,950
Total equity	2,950
Non-current liabilities	400
Current liabilities	200
Liabilities directly associated with non-current assets	
classified as held for sale (see above)	70
Total liabilities	670
Total equity and liabilities	3,620

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.

In the statement of financial position, the comparative figures for the previous year are not restated. The presentation in the statement of financial position therefore differs from the presentation in the statement of profit or loss.

7 CHAPTER REVIEW

Chapter review

Before moving on to the next chapter check that you now know how to:

- Apply the held for sale criteria and identify if an assets is held for sale
- Measure assets classified as held for sale at the lower of carrying amount and fair value less costs to sell
- Account for any loss arising on classification of an asset as held for sale
- Allocated any loss arising to assets within a disposal group classified as held for sale
- Explain and apply the presentation rules on assets held for sale
- Explain and apply the presentation rules on disposal groups held for sale
- Define and explain the accounting treatment for discontinued operations

SOLUTIONS TO PRACTICE QUESTIONS

Solution		1
Year 4		
The asset held for sales is carried at the lower of:		
Carrying amount:	N	
Cost	80,000	
Depreciation up to the point of reclassification		
80,000 × 4 years/8years	(40,000)	
	40,000	=
Fair value less costs to sell (₩50,000 – ₩1,000)	49,000	_
The machine therefore remains at its carrying value of $\$40,000$).	
Year 5		
The asset is sold to give the following profit on disposal:		
	₩	
Proceeds	48,000	
Carrying amount	(40,000)	_
	8,000	

Solution	2
Year 4	
The asset held for sales is carried at the lower of:	
Carrying amount:	₩
Cost	80,000
Depreciation up to the point of reclassification	
80,000 × 4 years/8years	(40,000)
	40,000
Fair value less costs to sell (₦41,000 – ₦2,000)	39,000
The machine is therefore written down to ₩39,000.	
The statement of profit or loss for Year 4 will include an imp №1,000 (₦40,000 – ₦39,000).	pairment loss of
Year 5	
The asset is sold to give the following loss on disposal:	
	₩
Proceeds	37,500
Carrying amount	(39,000)
	1,500

Skills level Financial reporting



IAS 17: Leases

Contents

- 1 Introduction and definitions
- 2 Lease classification
- 3 Accounting for a finance lease: Lessee accounting
- 4 Accounting for a finance lease: Lessor accounting
- 5 Accounting for an operating lease
- 6 Sale and leaseback transactions
- 7 Impact on presentation
- 8 Chapter review

INTRODUCTION

Purpose

In this element the accounting from the foundation level is taken up a level into financial accounting in the context of more complex events and transactions with a greater emphasis on compliance with regulations including International Accounting Standards and generally accepted accounting practices in the private sectors.

Students will be expected to demonstrate an understanding of and competence in financial statement analysis and basic analysis of choices in accounting treatments.

Competencies

2	Preparing separate financial statements
2(b)	Identify and state the laws, regulations accounting standards and other requirements that govern the production of financial statements by such entities.
2(c)	Draft and compile financial statements, or extracts from them, of an entity in accordance with its chosen policies and in accordance with IFRS and local law.

IAS 17 is an examinable document.

Exam context

This chapter explains the accounting treatment for leases from the point of view of the lessee and the lessor.

By the end of this chapter you will be able to:

- Define and identify different types of lease
- Prepare and present extracts of financial statements in respect of lessee accounting
- Prepare and present extracts of financial statements in respect of lessor accounting,
- Prepare and present extracts of financial statements in respect of sale and lease back arrangements
- Analyse the effect of different leasing transactions on the presentation of financial statements

1 INTRODUCTION AND DEFINITIONS

Section overview

- Leases
- Types of lessor
- Inception and commencement
- Defined periods
- Residual values
- Minimum lease payments
- Interest rate implicit in the lease
- Other definitions

1.1 Leases

IAS 17 prescribes the accounting treatment of leased assets in the financial statements of lessees and lessors.



Definition: Lease

Lease: An agreement whereby the lessor conveys to the lessee in return for a payment or series of payments the right to use an asset for an agreed period of time.

A lease is a way of obtaining a use of an asset, such as a machine, without purchasing it outright. The company that owns the asset (the lessor) allows another party (the lessee) to use the asset for a specified period of time in return for a series of rental payments.

Types of lease

IAS 17 identifies two types of lease.



Definitions

A finance lease is a lease that transfers substantially all the risks and rewards incidental to ownership of an asset. Title may or may not eventually be transferred.

An operating lease is a lease other than a finance lease.

The identification of a lease as a finance lease or an operating lease is crucial as it determines how a lease is accounted for by the lessor and the lessee.

This is explained in more detail in later sections.

1.2 Types of lessors

Companies might be lessors as a result of a variety of business models.

Finance companies (often banks and their subsidiaries)

Finance companies provide finance for the purchase of assets. In addition they might finance the use of assets through leases.



Illustration:

A manufacturing company might need a new major asset.

The manufacturing company would approach the finance company who, would buy the asset and then lease it out to the manufacturing company.

Finance companies are often associated with finance leases but they also fund large operating leases. Many airlines have use of aircraft through operating leases through finance companies.

Hire companies

These companies own a stock of capital assets which they will lease out for varying periods.

They include:

- tool hire companies;
- plant hire companies; and
- □ car hire companies

Hire companies are usually involved in operating leases.

Manufacturer/dealer lessors

Some companies make or buy assets to sell. They may offer to lease the asset out as an alternative to outright sale.

Many motor vehicle manufacturers and dealers do this. Such leases would usually be finance leases (but not necessarily).

Property companies

Many companies own properties which they lease out to others. These companies might apply *IAS 40: Investment Properties* to these assets. This is outside the scope of your syllabus but is mentioned for completeness.

1.3 Inception and commencement



Definitions: Inception of the lease

The inception of the lease is the earlier of the date of the lease agreement and the date of commitment by the parties to the principal provisions of the lease.

As at this date:

- (a) a lease is classified as either an operating or a finance lease; and
- (b) in the case of a finance lease, the amounts to be recognised at the commencement of the lease term are determined.

The type of lease in a contract (finance or operating) is identified at the date of inception. This is where the parties to the lease contract commit to the terms of the contract.



Definition: Commencement of a lease

The commencement of the lease term is the date from which the lessee is entitled to exercise its right to use the leased asset. It is the date of initial recognition of the lease (i.e. the recognition of the assets, liabilities, income or expenses resulting from the lease, as appropriate).

The accounting treatment required is applied to a lease at the date of commencement. This is the date that a lessee starts to use the asset or, at least, is entitled to start to use the asset.



Illustration:

The Lokoja Railway Company has entered a contract to lease new rolling stock from Siemens AG.

The contract was signed on 31 December 2013.

The rolling stock will be delivered late in 2014 and be available for use on 1 January 2015.

31 December 2013 is the date of inception – At this point the parties to the contract are able to identify the type of lease.

1 January 2015 is the date of commencement – The IAS **17** accounting treatment is applied from this point.

A lease agreement may allow for an adjustment to the terms of the lease contract during the period between the inception of the lease and the commencement of the lease term. Such adjustments might be to take account of unexpected changes in costs (for example the lessor's costs of making the asset that is the subject of the lease).

In such cases the effect of any such changes is deemed to have taken place at the inception of the lease.

1.4 Defined periods

IAS 17 refers to different periods when describing its rules.



Definition: Lease term

The lease term is the non-cancellable period for which the lessee has contracted to lease the asset together with any further terms for which the lessee has the option to continue to lease the asset, with or without further payment, when at the inception of the lease it is reasonably certain that the lessee will exercise the option.

A lease may be split into a primary period followed by an option to extend the lease for a further period.

In some cases, the lessee might be able to exercise such an option with a small rental or even for no rental at all. If such an option exists and it is reasonably certain that the lessee will exercise the option, the second period is part of the lease term.



Illustration:

llorin Construction (IC) are about to lease an earth digging machine from another company.

Machines of this type usually last for 20 years.

The lease is for an initial period of 10 years at a rental of 10,000,000 per annum. The contract allows IC to extend the lease for a further 10 years after the initial period at a cost of 10 per annum.

Analysis

It would seem very likely that IC would continue to lease the asset beyond the initial lease term. The term of this lease is 20 years.

At first sight it seems very strange that a lessor would be willing to lease its asset out for the second 10 year period at so low a rent. However, the payments have been set with this in mind. The payment of \$1,000,000 per annum over the first 10 years compensates the lessor for the cash price of the asset and provides the lessor with a mark-up.



Definitions: Economic and useful life

Economic life is either:

- (a) the period over which an asset is expected to be economically usable by one or more users; or
- (b) the number of production or similar units expected to be obtained from the asset by one or more users.

Useful life is the estimated remaining period, from the commencement of the lease term, without limitation by the lease term, over which the economic benefits embodied in the asset are expected to be consumed by the entity.

Economic life relates to the life of the asset whereas useful life relates to the period that a party will obtain benefits from that asset.

Q

Illustration:

On 1 January 2014 the Tin Can Island Port Authority leased a dredger for 6 months.

The dredger is 5 years old on that date. Ships of this kind are usually able to provide 50 years' service.

The dredger has an economic life of 45 years.

On the 1 January 2014 the dredger will have a useful life of 6 month's for the Tin Can Island Port Authority.

1.5 Residual values

When a company that owns an asset leases it to another party they have two interests in that asset:

- Let give them a right to receive a series of rentals over the lease term; and
- □ They own the asset at the end of the lease.

The value of the asset at the end of the lease is called its residual value. This figure might be guaranteed by the lessee. This means that if the asset is not worth the amount guaranteed the lessee must pay the lessor the shortfall.

On the other hand the residual value might not be guaranteed.



Definitions: Guaranteed and unguaranteed residual value

Guaranteed residual value is:

- (a) for a lessee, that part of the residual value that is guaranteed by the lessee or by a party related to the lessee (the amount of the guarantee being the maximum amount that could, in any event, become payable); and
- (b) for a lessor, that part of the residual value that is guaranteed by the lessee or by a third party unrelated to the lessor that is financially capable of discharging the obligations under the guarantee.

Unguaranteed residual value is that portion of the residual value of the leased asset, the realisation of which by the lessor is not assured or is guaranteed solely by a party related to the lessor.

The guaranteed and unguaranteed residual values might influence the classification of a lease and its measurement.

1.6 Minimum lease payments

The definitions in this section are not easy to understand. You will need to work through them carefully.

In essence, the term *minimum lease payments* refers to the payments that a lessee expects to make over a lease term or to the receipts that a lessor expects over the economic life of the asset.

In a straight forward example the minimum lease payments from the lessee's point of view will be the same as the minimum lease payments from the lessor's point of view.



Illustration:

Company A has an asset with an economic life of 10 years.

Company A leases the asset to Company B for 10 years at ₩100,000 per annum.

There is no expected residual value.

The minimum lease payments from the lessor's view (Company A) are 10 receipts of 100,000 per annum.

The minimum lease payments from the lessee's view (Company B) are 10 payments of 100,000 per annum.

Many leases in practice are like the lease in the above illustration. However, there are other leases where this is not the case. The definition of minimum lease payments takes that into account.



Definition: Minimum lease payments

Minimum lease payments are the payments over the lease term that the lessee is or can be required to make, excluding contingent rent, costs for services and taxes to be paid by and reimbursed to the lessor, together with:

- (a) for a lessee, any amounts guaranteed by the lessee or by a party related to the lessee; or
- (b) for a lessor, any residual value guaranteed to the lessor by:
 - (i) the lessee;
 - (ii) a party related to the lessee; or
 - (iii) a third party unrelated to the lessor that is financially capable of discharging the obligations under the guarantee.

However, if the lessee has an option to purchase the asset at a price that is expected to be sufficiently lower than fair value at the date the option becomes exercisable for it to be reasonably certain, at the inception of the lease, that the option will be exercised, the minimum lease payments comprise the minimum payments payable over the lease term to the expected date of exercise of this purchase option and the payment required to exercise it.

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Example: Minimum lease payments

A finance company has purchased an asset and will lease it out in a series of leases as follows:

The first lease is to Company A for a period of 5 years at an annual rental of 10,000.

After the end of the lease to Company A the asset will be leased to Company B for 1 year at a rental of ₦10,000. Company B is a party related to Company A.

After the end of the lease to Company B the asset will be leased to Company C for 1 year at a rental of ₩10,000. Company C is not related to Companies A and B.

Minimum lease payments

The minimum lease payments from the point of view of Company A and from the point of view of the lessor are as follows:

Years	Company A's MLPs	Lessor's MLPs	
1 to 5	10,000	10,000	
6	10,000	10,000	
7		10,000	

As you will see later the minimum lease payments can be important in deciding whether a lease is a finance lease or an operating lease and they enter into the measurement of finance leases.

Minimum lease payments are also important in calculating the interest rate implicit in a lease.

1.7 Interest rate implicit in the lease



Definition: Interest rate implicit in the lease

The interest rate implicit in the lease is the discount rate that, at the inception of the lease, causes the aggregate present value of (a) the minimum lease payments and (b) the unguaranteed residual value to be equal to the sum of (i) the fair value of the leased asset and (ii) any initial direct costs of the lessor.

The interest rate implicit in the lease is the IRR of the cash flows from the lessor's viewpoint. It is the rate that equates the future cash inflows for the lessor to the amount that the lessor invested in the asset.



Example: Interest rate implicit in the lease

A finance company has purchased an asset for \$50,000 and will lease it out in a series of leases as follows:

The first lease is to Company A for a period of 5 years at an annual rental of \$10,000.

After the end of the lease to Company A the asset will be leased to Company B for 1 year at a rental of ₦10,000. Company B is a party related to Company A.

After the end of the lease to Company B the asset will be leased to Company C for 1 year at a rental of ₦10,000. Company C is not related to Companies A and B.

At the end of this lease the asset is expected to have an unguaranteed residual value of \$2,573.

The interest rate implicit in the lease is 10%.

Proof

Time	Narrative	Lessor's cash flows	Discount factor (10%)	Present value	
0	Fair value of the asset	(50,000)	1	(50,000)	
1 to 7	Lessor's MLPs	10,000	4.868	48,680	
7	Unguaranteed residual value	2,573	0.513	1,320	
				50,000	
				nil	

The interest rate implicit in the lease (its IRR) was given in the above example. In an exam question you might have to calculate it in the usual way.

Initial direct costs

The definition of interest rate implicit in the lease makes reference to incremental initial direct costs.



Definition: Initial direct costs

Initial direct costs are incremental costs that are directly attributable to negotiating and arranging a lease, except for such costs incurred by manufacturer or dealer lessors.

The accounting treatment for initial direct costs will be explained later.

Lessee's incremental borrowing rate of interest

The interest rate implicit in the lease might be important in deciding whether a lease is a finance lease or an operating lease.

It is calculated from the lessor's viewpoint. Sometimes the lessee might not be able to ascertain the interest rate implicit in the lease. In that case it would use the lessee's incremental borrowing cost instead.



Definition: Lessee's incremental borrowing rate of interest

The lessee's incremental borrowing rate of interest is the rate of interest the lessee would have to pay on a similar lease or, if that is not determinable, the rate that, at the inception of the lease, the lessee would incur to borrow over a similar term, and with a similar security, the funds necessary to purchase the asset.

1.8 Other definitions

Definition: Non-cancellable lease

A non-cancellable lease is a lease that is cancellable only:

- (a) upon the occurrence of some remote contingency;
- (b) with the permission of the lessor;
- (c) if the lessee enters into a new lease for the same or an equivalent asset with the same lessor; or
- (d) upon payment by the lessee of such an additional amount that, at inception of the lease, continuation of the lease is reasonably certain.

Further definitions important to finance lessor accounting will be provided in that section.

2 LEASE CLASSIFICATION

Section overview

- Finance leases and operating leases
- Identifying a finance lease
- Commentary on finance lease indicators
- Leases of land and buildings

2.1 Finance leases and operating leases

IAS 17 describes two types of lease (with each type being accounted for in a different way):

- □ finance leases; and
- operating leases.

The definitions of each type are repeated here for convenience.



Definitions

A finance lease is a lease that transfers substantially all the risks and rewards incidental to ownership of an asset. Title may or may not eventually be transferred.

An operating lease is a lease other than a finance lease.

A lease is classified as a finance lease if it transfers substantially all the risks and rewards incidental to ownership. A lease is classified as an operating lease if it does not transfer substantially all the risks and rewards incidental to ownership.

Risks may be represented by the possibility of losses from:

- idle capacity;
- technological obsolescence;
- variations in return caused by changes in economic conditions.

Rewards may be represented by the expectation of;

- profitable use of the asset over its economic life;
- gains from increases in value or profits on disposal.

Substance over form

Whether a lease is a finance lease or an operating lease depends on the substance of the transaction rather than the form of the contract.

The legal form of a finance lease is that the lessor is the legal owner of the leased asset.

The economic substance of a finance lease is that the lessee has all the benefits and costs associated with ownership of the asset. The finance lessee is in the same position as it would have been if it had borrowed money to buy the asset itself. That is why such leases are called finance leases; they provide finance for the use of an asset.

2.2 Identifying a finance lease

The following situations (individually or in combination) would normally lead to a lease being classified as a finance lease:

- At the end of the term of the lease, the legal ownership of the asset will be transferred from the lessor to the lessee, under the terms of the lease agreement;
- □ The lessee has the option, at a future date, to purchase the asset from the lessor, and the agreed purchase price is substantially lower than the expected fair value of the asset at the date the option to buy can be exercised. (In this situation, it is therefore probable that the lessee will exercise the option to buy the asset);
- The term of the lease is for a major part of the expected economic life of the asset;
- At the inception of the lease, the present value of all the future lease payments amounts to substantially all of the fair value of the leased asset, or more;
- □ The leased asset is of such a specialised nature that it can only be used by the lessee (without the need for a major modification);
- □ If the lessee can cancel the lease, the lessor's losses associated with the cancellation are borne by the lessee;
- Gains or losses from the fluctuation in the fair value of the residual accrue to the lessee (for example, in the form of a rent rebate equalling most of the sales proceeds at the end of the lease); and
- □ The lessee has the ability to continue the lease for a secondary period at a rent that is substantially lower than market rent.

In all these situations, it can normally be concluded that substantially all the risks and rewards incidental to ownership are transferred to the lessee.

These indicators are not always conclusive. Classification should always be based on the substance of the agreement taking account of all information.

Leases are classified at the inception of the lease. Sometimes a lessee and lessor agree to change the provisions of a lease and the changes might be of a sort that would have changed the lease classification if the new terms had been in effect at the inception of the lease. In these cases the revised agreement is regarded as a new agreement over its term.

However, changes in estimates (for example, changes in estimates of the economic life or of the residual value of the leased property), or changes in circumstances (for example, default by the lessee), do not give rise to a new classification of a lease for accounting purposes.

2.3 Commentary on finance lease indicators

It is not always obvious why the above circumstances indicate that a lease is a finance lease. This section provides an explanation on some of these.

To understand these it is useful to think of the terms from the lessor's viewpoint.

Bargain purchase option

If a lease includes a term whereby the lessee can buy the leased asset at a bargain price at the end of the lease that lease is a finance lease.

If the lessor includes this term in the lease the lessor would expect the lessor to take advantage of it. Therefore the lessor knows that it needs to make sure to recover the cost of the asset together with any related interest during the lease term. The rentals and final sale price are set at a level which allows it to do this.

Therefore, the lessee will pay the full cash price of the asset together with related finance expense over the lease term.

- The lessee would only do this if it had access to the risks and benefits of ownership.
- In substance, this is just like borrowing the cash and buying the asset.

Therefore, the lease is a finance lease.

Lease is for a major part of the expected economic life of the asset.

If the lessor includes this term in the lease the lessor knows that when the asset is given back to it at the end of the lease, the asset will only have a small value.

Therefore the lessor knows that it needs to make sure to recover the cost of the asset together with any related interest during the lease term. The rentals are set at a level which allows it to do this.

Therefore, the lessee will pay the full cash price of the asset together with related finance expense over the lease term.

- The lessee would only do this if it had access to the risks and benefits of ownership.
- In substance, this is just like borrowing the cash and buying the asset.

Therefore, the lease is a finance lease.

Specialised nature of the asset

If the lessor includes this term in the lease the lessor knows that when the lease comes to an end it will be unable to lease the asset on to another party.

Therefore the lessor knows that it needs to make sure to recover the cost of the asset together with any related interest during the lease term. The rentals are set at a level which allows it to do this.

Therefore, the lessee will pay the full cash price of the asset together with related finance expense over the lease term.

- The lessee would only do this if it had access to the risks and benefits of ownership.
- In substance, this is just like borrowing the cash and buying the asset.

Therefore, the lease is a finance lease.

PV of future lease payments amounts to substantially all of the fair value of the leased asset

A lease is a finance lease if at the inception of the lease, the present value of all the future lease payments amounts to substantially all of the fair value of the leased asset, or more. (The discount rate to be used in calculating the present value of the minimum lease payments is the interest rate implicit in the lease).

In this case the lessee is paying the full cash price of the asset together with related finance expense over the lease term.



Example: PV of future lease payments

A finance company has purchased an asset to lease out to a manufacturing company.

The asset cost for ₩500,000 and has an economic life of 10 years.

The lease is for 9 years at an annual rental (in arrears) of \$87,000 per annum. The interest rate implicit in the lease is 10%.

Analysis: Lessor's view

Time	Narrative	Cash flows	Discount factor (10%)	Present value
1 to 9	Lessor's MLPs	87,000	5.759	501,033

This is more than the fair value of the asset. This lease is a finance lease (also note that the lease is for the major part of the expected economic life of the asset which is another finance lease indicator).

Analysis: Lessee's view

Time	Narrative	Cash flows	Discount factor (10%)	Present value
1 to 9	Lessee's MLPs	87,000	5.759	501,033

This is more than the fair value of the asset. This lease is a finance lease (also note that the lease is for the major part of the expected economic life of the asset which is another finance lease indicator).

In the above example the lessee and the lessor have the same view of the lease. This is not necessarily the case.



Example: PV of future lease payments

A finance company has purchased an asset for \$50,000 and will lease it out in a series of leases as follows:

The first lease is to Company A for a period of 4 years at an annual rental of \$10,000.

After the end of the lease to Company A the asset will be leased to Company B for 3 years at a rental of ₦10,000. Company B is not related to Company A.

At the end of this lease the asset is expected to have an unguaranteed residual value of \$2,573.

The Interest rate implicit in the lease is 10%.

Analysis: Lessor's view

Time	Narrative	Cash flows	Discount factor (10%)	Present value
1 to 7	Lessor's MLPs	10,000	4.868	48,680

This is 97.4% ($^{48,680}/_{50,000}\times100$) of the fair value of the asset.

Most would agree that this was substantially all of the fair value of the asset (though IAS 17 does not give a numerical benchmark).

This lease is a finance lease.

Analysis: Company A's view

Time	Narrative	Cash flows	Discount factor (10%)	Present value
1 to 4	Lessor's MLPs	10,000	3.170	31,700

This is 63.4% ($\frac{31,700}{50,000} \times 100$) of the fair value of the asset.

Most would agree that this is not substantially all of the fair value of the asset (though IAS 17 does not give a numerical benchmark). This lease is an operating lease.

0,

Practice question

Ibadan Construction has leased a cement lorry.

The cash price of the lorry would be ₩3,000,000.

The lease is for 6 years at an annual rental (in arrears) of \$600,000. The asset is believed to have an economic life of 7 years.

The interest rate implicit in the lease is 7%.

Ibadan Construction is responsible for maintaining and insuring the asset.

State with reasons the kind of lease Ibadan has entered into.

1

2.4 Leases of land and buildings

A property lease usually includes both land and buildings. Each element should be classified separately. In other words, a property lease is viewed as a lease of land and a different lease of the building.

Leases of land and buildings are classified as operating or finance leases in the same way as leases of other assets.

Land element

An important consideration is that land normally has an indefinite economic life. This means that the lease term will not normally be for a major part of the life of the asset and the asset will have a significant value at the end of the lease. This implies that the land element of the lease will usually be an operating lease.

This is not always the case. In some parts of the world a property lease might be very long (say 999 years). In a case like this the unguaranteed residual value might be very large but in present value terms is negligible, leading the present value of the minimum lease payments to be substantially all of the fair value of the asset at the inception of the lease. Such a lease could be a finance lease.

Building element

The building is classified as a finance lease or as an operating lease according to the guidance set out and explained in sections 2.2 and 2.3 above.

Splitting the payments

It is necessary to split the rental payments for the land and building into the rental for the land and the rental for the building.

The minimum lease payments are allocated between the land and the buildings elements in proportion to the relative fair values of the leasehold interests in the land element and buildings element of the lease at the inception of the lease.

The relative fair value of the leasehold interests is from the point of view of the lessee. This means that the relative fair value of the leasehold interests is not the same as the relative fair value of the land and the building.



Illustration:

A company leases a property for ₩450,000 per annum (in arrears).

The lease is for 10 years and the useful life of the building is 5 years.

	Land (₦)	Building (Ħ)
Fair value	2,000,000	500,000
Fair value of leasehold interest	1,000,000	500,000

The rentals are allocated between the land and buildings in the ratio of 1,000,000 to 500,000 or 2 to 1

	H.
Rental for land ($^2/_3 \times 450,000$)	300,000
Rental for building (1/3 \times 450,000)	150,000

If this cannot be done the entire lease must be classified as a finance lease unless it is clear that both elements are operating leases, in which case the entire lease is classified as an operating lease.

If the land element is immaterial, the land and buildings may be treated as a single unit for the purpose of lease classification. In such a case, the economic life of the building is regarded as the economic life of the entire leased asset.

3 ACCOUNTING FOR A FINANCE LEASE: LESSEE ACCOUNTING

Section overview

- Substance over form
- Finance lease accounting: Initial recognition
- Finance lease accounting: Subsequent measurement of the asset
- Finance lease accounting: Subsequent measurement of the liability
- Calculating and allocating finance charges (interest)
- Current and non-current elements of the finance lease liability
- Lease payments made in advance
- Disclosure

3.1 Substance over form

An earlier section explained that whether a lease is a finance lease or an operating lease depends on the substance of the contract rather than its form.

The economic substance of a finance lease is that the lessee in effect has all the benefits and costs associated with ownership of the asset. In substance it is as if the lessee borrowed money to buy the asset.

This is the basis of the accounting treatment required for finance leases in the books of the lessee.

Similarly, the lessor no longer has the benefits and costs associated with ownership. The lessor should not account for the asset in its books. In substance, the lessor has lent money to another party to enable them to buy the asset. The lessor accounts for a receivable in its books being the right to receive a future flow of rentals.

3.2 Finance lease accounting: Initial recognition

A finance lease is capitalised at the commencement of the lease term. This involves the recognition of the asset that is subject to the lease and a liability for the future lease payments.

The asset and liability are recognised at the commencement of the lease at the lower of:

- Let the fair value of the asset (the cash price if purchased outright); and
- Let the present value of the minimum lease payments.

The present value of the minimum lease payments is discounted using the interest rate implicit in the lease. If it is not practicable to determine this, the lessee's incremental borrowing rate must be used.

The liability is the capital amount (the principal) that the lessee will have to pay back to the lessor over the term of the lease.

Illustration: Double entry on initial recognition of a finance lease

(Assumes that the leased asset is an item of property, plant and equipment)		
	Debit	Credit
Property, plant and machinery – (at cost)	Х	
Liabilities: finance lease obligations		Х

Initial direct costs are often incurred in connection with specific leasing activities, such as negotiating and securing leasing arrangements.

Any initial direct costs of the lessee are added to the amount recognised as an asset.



Illustration:

Debit	Credit
Х	
	Х
	Debit X



Example:

Ibadan Construction enters into a 6 year finance lease of a machine on 1 January Year 1.

The fair value of the machine at the commencement of the lease was \$80,000 and Ibadan Construction incurred initial direct costs of \$2,000 when arranging the lease.

Double entry:

	Debit	Credit
Property, plant and machinery – (at cost)	80,000	
Liabilities: finance lease obligations		80,000
Property, plant and machinery – (at cost)	2,000	
Cash/bank		2,000

3.3 Finance lease accounting: Subsequent measurement of the asset

A finance lease gives rise to depreciation expense for depreciable assets as well as finance expense for each accounting period.

The depreciation policy for depreciable leased assets must be consistent with that for similar owned assets and is calculated in accordance with *IAS 16: Property, Plant and Equipment and IAS 38: Intangible Assets.*

If there is no reasonable certainty that the lessee will obtain ownership by the end of the lease, the asset is depreciated over the shorter of:

- its expected useful life; and
- □ the term of the lease.



Illustration:

	Debit	Credit
Statement of profit or loss (depreciation expense)	Х	
Accumulated depreciation		Х



Example:

Ibadan Construction enters into a 6 year finance lease of a machine on 1 January Year 1.

The fair value of the machine at the commencement of the lease was \$80,000 and Ibadan Construction incurred initial direct costs of \$2,000 when arranging the lease.

The estimated residual value of the asset at the end of the lease is \$8,000.

The estimated useful life of the asset is 5 years.

Ibadan Construction has incurred initial direct costs of ₦2,000.

The accounting policy for similar owned machines is to depreciate them over their useful life on a straight line basis.

Annual depreciation charge:

Initial cost:	Ħ
Fair value of the machine	80,000
Initial direct costs	2,000
	82,000
Residual value	(8,000)
Depreciable amount	74,000
Useful life (shorter of the lease term and the useful life)	5 years
Annual depreciation charge	14,800

The leased asset is included in the statement of financial position at its carrying amount (cost less accumulated depreciation) in the same way as similar assets.



	Year 1	Year 2	Year 3	Year 4	Year 5
	Ħ	₩	₩	₩	₩
Cost	82,000	82,000	82,000	82,000	82,000
Accumulated depreciation:					
Brought forward	nil	14,800	29,600	44,400	59,200
Charge for the					
year	14,800	14,800	14,800	14,800	14,800
Carried forward	14,800	29,600	44,400	59,200	74,000
Carrying amount	67,200	52,400	37,600	22,800	8,000

useful life that is the estimated residual value

3.4 Finance lease accounting: Subsequent measurement of the liability

During each year, the lessee makes one or more lease payments. The payment is recorded in the ledger account as follows.

Q

Illustration:			
	Debit	Credit	
Liabilities: Finance lease obligations	X		
Cash/bank		X	

A finance lease liability is measured in the same way as any other liability. The balance at any point in time is as follows:



ustration:	
	Ħ
Amount borrowed at the start of the lease (the amount recognised on initial recognition of the lease)	X
Plus: Interest accrued	X
Minus: Repayments (lease payments or rentals)	(X)
Repayment of loan principal	(X)
Amount owed now.	Х

In effect, each lease payment consists of two elements:

- a finance charge (interest charge) on the liability to the lessor, and
- a partial repayment of the liability (the finance lease obligation).

The finance charge is treated as a finance cost in profit or loss for the period. The partial repayment of the lease obligation reduces the amount of the liability that remains unpaid.

Finance charge

The total rental payments over the life of the lease will be more than the amount initially recognised as a liability. The difference is finance charge.

The total finance charge that arises over the life of the lease is the difference between the amount borrowed and the sum of all payments.

	Illustration: Total finance charge	
7		₩
	Lessee's minimum lease payments (sum of all payments made by the lessee to the lessor)	x
	Amount on initial recognition	(X)
	Total finance charge	X



Example: Total finance charge

Ibadan Construction enters into a 6 year finance lease of a machine on 1 January Year 1.

The fair value of the machine at the commencement of the lease was \$80,000 and Ibadan Construction incurred initial direct costs of \$2,000 when arranging the lease.

The annual lease payments are ₩18,000, payable at the end of each year.

The estimated residual value of the asset at the end of the lease is \$8,000 and Ibadan Construction has guaranteed this amount.

The interest rate implicit in the lease is 11.176751%.

Total finance charge

Ħ
108,000
8,000
116,000
(80,000)
36,000

The finance charge (interest) is recognised over the life of the lease by adding a periodic charge to the liability for the finance lease obligation with the other side of the entry as an expense in profit or loss for the year.



Illustration:					
	Debit	Credit			
Statement of profit or loss: interest expense	Х				
Liabilities: Finance lease obligations		Х			

3.5 Calculating and allocating finance charges (interest)

The total finance charge for a leased asset is allocated "so as to provide a constant rate of charge on the outstanding obligation".

This means that as the lease liability decreases at each year-end, the interest charge for the next year will be lower than it was for the previous year.

The method implied by the IAS 17 guidance is to use an interest rate to allocate the interest. This method is called the actuarial method. (The sum of digits method usually gives an acceptable approximation to the actuarial method).

Questions in your exam are likely to require the use of an interest rate (which you may have to calculate as the interest rate implicit in the lease).

Actuarial method

The **actuarial method** uses discounting arithmetic to establish the interest rate that is implicit in the lease. This interest rate is then applied to the opening balance of the lease liability at the start of each period, in order to calculate the finance charge.



Example: Allocation of the finance charge

Ibadan Construction enters into a 6 year finance lease of a machine on 1 January Year 1.

The fair value of the machine at the commencement of the lease was \$80,000 and Ibadan Construction incurred initial direct costs of \$2,000 when arranging the lease.

The annual lease payments are ₩18,000, payable at the end of each year.

The estimated residual value of the asset at the end of the lease is \$8,000 and Ibadan Construction has guaranteed this amount.

The interest rate implicit in the lease is 11.176751%.

Finance lease liability:

Year	Opening liability	Interest (11.176751%)	Lease payments	Closing liability
1	80,000	8,941	(18,000)	70,941
2	70,941	7,929	(18,000)	60,870
3	60,870	6,803	(18,000)	49,674
4	49,674	5,552	(18,000)	37,226
5	37,226	4,161	(18,000)	23,386
6	23,386	2,614	(26,000)	0
		36,000	_	

The interest expense is calculated by multiplying the opening liability by 11.176751% in each year (so as to provide a constant rate of charge on the outstanding obligation).

The finance lease obligation consists of the capital balance outstanding. This can be shown as follows:



Finance lease liability:

Example:

(ear	Opening balance	Lease payments	Interest	Capital repayments	Closing balance
1	80,000	(18,000)	8,941	(9,059)	70,941
2	70,941	(18,000)	7,929	(10,071)	60,870
3	60,870	(18,000)	6,803	(11,197)	49,674
4	49,674	(18,000)	5,552	(12,448)	37,226
5	37,226	(18,000)	4,161	(13,839)	23,386
6	23,386	(26,000)	2,614	(23,386)	0

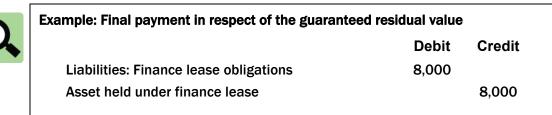
The final payment

In the above example the final payment by the lessee is ₩26,000. This is in fact made up of two amounts, the final rental of ₩18,000 and the guaranteed residual value of ₩8,000.

It is worth considering the payment in respect of the guaranteed residual value in a little more detail.

At the end of the lease the asset that is the subject of the lease is transferred back to the lessor. It has been depreciated down to its estimated residual value of \$8,000.

The transfer is recorded as follows:



In other words the \$8,000 part of the final year payment to the lessor of \$26,000 is not cash but the transfer of the asset.

If the asset is worth less that \Re ,000 the lessee must make good any shortfall. In this case the asset is written down to its value at the date of the transfer (as agreed between the lessee and the lessor) and the lessee will pay cash to the lessor to compensate for any difference.



Example (continued): Final payment in respect of the guaranteed residual value

The asset has a carrying amount of ₩8,000 at the end of the lease but is only worth ₩5,000.

The lessee would make the following double entries.

Write down the asset	Debit	Credit	
Statement of profit or loss	3,000		
Asset held under finance lease		3,000	
Pay the lessor the guaranteed residual value			
Liabilities: Finance lease obligations	8,000		
Asset held under finance lease		5,000	
Cash/bank		3,000	

3.6 Current and non-current elements of the finance lease liability

The total liability must be divided between:

- the current liability (amount payable within the next 12 months), and
- the non-current liability.

The easy way to do it is to use the tables to identify the current liability or the non-current liability and then find the other as a balancing figure.



Example: Sp	xample: Split of current and non-current liability at the end of year ${f 1}$					
Year	Opening balance	Lease payments	Interest	Capital repayments	Closing balance	
1	80,000	(18,000)	8,941	(9,059)	70,941	
2	70,941	(18,000)	7,929	(10,071)	60,870	
				^ _	1	
				This is the current liability	This is the non-current liability	
Liability	/:			Ħ		
Current	Current liability			10,071		
Non-cur	Non-current liability			60,870		
Total lia	ability (for pro	of)		70,941		

3.7 Lease payments made in advance

When the lease payments for a finance lease are made at the start of each period instead of the end of the period, the total finance charge is the same (because neither the amount borrowed nor the total rentals have changed) but the interest must be recognised over a shorter period. This is because the liability is paid off one period earlier.

This means that the interest rate used for payments in advance will be bigger than that used for the same payments in arrears.

Also note that when the lease payments for a finance lease are made at the **start** of each period, the opening liability for the finance lease obligation is reduced by the lease payment at the beginning of the year, and the interest charge must be applied to the remaining balance.



Example: Allocation of finance charge

Ibadan Construction enters into a 6 year finance lease of a machine on 1 January Year 1.

The fair value of the machine at the commencement of the lease was \$80,000 and Ibadan Construction incurred initial direct costs of \$2,000 when arranging the lease.

The annual lease payments are ₩18,000, payable at the start of each year.

The estimated residual value of the asset at the end of the lease is \$8,000 and Ibadan Construction has guaranteed this amount.

The interest rate implicit in the lease is 16.1434%.

Finance lease liability:

(Note: "Year 0" is the first day of year 1. It would be better to think of it as time 0).

Year	Opening liability	Lease payments	Liability after day 1 payment	Interest at 16.1434%.	Closing liability
0	80,000	(18,000)	62,000	10,009	72,009
1	72,009	(18,000)	54,009	8,719	62,728
2	62,728	(18,000)	44,728	7,221	51,948
3	51,948	(18,000)	33,948	5,480	39,429
4	39,429	(18,000)	21,429	3,459	24,888
5	24,888	(18,000)	6,888	1,112	8,000
6	8,000	(8,000)	0		
				36,000	

The interest expense is calculated by multiplying the opening liability by 16.1434% in each year (so as to provide a constant rate of charge on the outstanding obligation).

In the above example the first payment of №18,000 is made on the first day of the lease term. Therefore it does not include any interest and is a repayment of capital.

The year 1 interest of \$10,009 is recognised at the end of year 1 (31 December Year 1). It is paid the next day by the payment of \$18,000 made on 1 January Year 2.

The closing liability at the end of year 1 is made up of the interest accrued in year 1 and an amount of capital which will be paid off in year 2.

This can be shown for all of the years below.



Example: Capital repayments

Schedule to show repayment of capital:

Year	Opening balance	Lease payments	Interest	Capital repayments	Closing balance
1	80,000	(18,000)	-	(18,000)	62,000
2	62,000	(18,000)	10,009	(7,991)	54,009
3	51,948	(18,000)	8,719	(9,281)	44,728
4	39,429	(18,000)	7,221	(10,779)	33,948
5	24,888	(18,000)	5,480	(12,520)	21,429
6 (start)	8,000	(18,000)	3,459	(14,541)	6,888
6 (end)	6,888	(8,000)	1,112	(6,888)	0

Current and non-current liability

If payments are made annually in advance, the next payment is a current liability. Therefore in the above example the ₦18,000 paid on 1 January Year 2 is a current liability.

However, this is made up of two elements, interest of \$10,009 and a capital repayment of \$7,991. These elements could be shown separately.

This means that the closing liability at the end of year 1 as identified on the previous page (\$72,009) is made up of three parts:

- □ the interest recognised in year 1 but unpaid at the year-end (₦10,009);
- □ the current element of the capital owed on the lease (₩7,991); and
- \Box the non-current element of the capital owed on the lease (\$54,009).



Year	Opening balance	Lease payments	Interest	Capital repayments	Closing balance
1	80,000	(18,000)	-	(18,000)	62,000
2	62,000	(18,000)	10,009	(7,991)	54,009
			Interest expense current liability	Finance lease current liability	Finance lease non- current liability
Liability:				Ħ	
Current li	abilities				
Interest expense				10,009	
Current part of finance lease liability Non-current liability				7,991	
Non-current part of finance lease liability			54,009		
Total finance lease liability (for proof)			62,000		
Total liability (for proof)			72,009		



Practice question

The fair value of an asset, leased under a finance lease commencing on 1 January Year 1 is \$10,000.

The lease is for three years with payments of 4,021 annually on 1 January Year 1, Year 2 and Year 3.

The interest rate implicit in the lease is 22.25%.

Required

Complete the lease payment table for all three years 1 to 3, and calculate the current liability and the non-current liability at 31 December Year 1 under the actuarial method.

2

3.8 Disclosures

Finance lessees must disclose the following:

- the net carrying amount at the end of the reporting period for each class of asset;
- a reconciliation between the total of future minimum lease payments at the end of the reporting period, and their present value (note that the present value of the minimum lease payments is the total finance lease liability as at the reporting date);
- □ the total of future minimum lease payments at the end of the reporting period, and their present value, for each of the following periods:
 - not later than one year;
 - later than one year and not later than five years;
 - later than five years.



Example: Finance lessee disclosures

Using the example used in section 3.4 to show the disclosures as at the end of the first year.

Minimum lease payments	Gross	PV
	Ħ	N
No later than 1 year	18,000	16,190
Later than 1 year and no later than 5 year		
(4× 18,000 + 8,000)	80,000	54,751
Later than 5 years	nil	nil
	98,000	70,491
Less finance charge that relates to future periods		
(36,000 - 8,941) ¹	(27,059)	
Present value of finance lease liabilities (the total		
finance lease liability)	70,941	70,491

¹ The finance charge that relates to future periods is the total finance charge less the finance charge already expensed.

Working

	Gross (₦)	Discount factor (11.18%)	Present value (₦)
1 year's time	18,000	0.8995	16,190
2 years' time	18,000	0.8090	14,563
3 years' time	18,000	0.7277	13,099
4 years' time	18,000	0.6546	11,782
5 years' time	26,000	0.5887	15,307
	80,000	-	54,751
	98,000	-	70,941
	38,000	=	10,941

Finance lessees must also disclose the following:

- □ contingent rents recognised as an expense in the period;
- □ the total of future minimum sublease payments expected to be received under non-cancellable subleases at the end of the reporting period;
- a general description of the lessee's material leasing arrangements including, but not limited to, the following:
 - the basis on which contingent rent payable is determined;
 - the existence and terms of renewal or purchase options and escalation clauses; and
 - restrictions imposed by lease arrangements, such as those concerning dividends, additional debt, and further leasing.



Definition: Contingent rent

Contingent rent is that portion of the lease payments that is not fixed in amount but is based on the future amount of a factor that changes other than with the passage of time (e.g. percentage of future sales, amount of future use, future price indices, future market rates of interest).

4 ACCOUNTING FOR A FINANCE LEASE: LESSOR ACCOUNTING

Section overview

- Definitions
- Finance lease accounting
- Manufacturer/dealer leases
- Finance lessor disclosures

4.1 Definitions

The lessor does not record the leased asset in his own financial statements because he has transferred the risks and rewards of ownership of the physical leased asset to the lessee. Instead, he records the amount due to him under the terms of the finance lease as a receivable.

The receivable is described as the net investment in the lease.



Definitions: Gross and net investment in the lease

Gross investment in the lease is the aggregate of:

- (a) the minimum lease payments receivable by the lessor under a finance lease, and
- (b) any unguaranteed residual value accruing to the lessor.

Net investment in the lease is the gross investment in the lease discounted at the interest rate implicit in the lease.

An earlier section explained that the interest rate implicit in the lease is the discount rate that, at the inception of the lease, causes:

- □ the aggregate present value of the minimum lease payments and the unguaranteed residual value; to be equal to
- □ the sum of the fair value of the leased asset and any initial direct costs of the lessor.

Therefore the net investment in the lease is the sum of the fair value of the asset plus the initial direct costs.

4.2 Finance lease accounting

Many of the entries to be made in the ledger accounts of the lessor are a 'mirror image' of those made by the lessee in respect of his lease liability.

	Lessee	Lessor
Initial recognition	Finance lease payable	Finance lease receivable (net investment in the lease)
Subsequent measurement	Finance cost	Finance income
Pattern of recognition	So as to provide a constant periodic rate of charge on the outstanding obligation	So as to provide a constant periodic rate of return on the net investment in the lease.

Initial recognition

The lessor records a receivable for the capital amount owed by the lessee. This should be stated at the amount of the 'net investment in the lease'. The net investment in the lease is the fair value of the asset.



Illustration: Double entry on Initial recognition	of a finance lease	
	Debit	Credit
Net investment in the lease	Х	
Cash/bank		Х

For finance leases other than those involving manufacturer or dealer lessors, initial direct costs are included in the initial measurement of the finance lease receivable and reduce the amount of income recognised over the lease term.

This is because they reduce the total finance income which is the difference between all future payments and the receivable initially recognised.

Initial direct costs of manufacturer or dealer lessors in connection with negotiating and arranging a lease are excluded from the definition of initial direct costs. As a result, they are excluded from the net investment in the lease.

The treatment of similar costs incurred by manufacturers and dealers is explained later.

Subsequent measurement of the receivable

During each year, the lessor receives payments from the lessor. Each receipt is recorded in the ledger account as follows.

Illustration: Lessor receipts		
	Debit	Credit
Cash/bank	Х	
Net investment in the lease		X

A finance lease receivable (net investment in the lease) is measured in the same way as any other financial asset. The balance at any point in time is as follows:

Illustration: Net investment in the lease	
	Ħ
Amount loaned at the start of the lease (the amount recognised on initial recognition of the lease)	Х
Plus: Interest accrued	Х
Minus: Repayments (lease payments or rentals)	(X)
Repayment of loan principal	(X)
Amount owed to the lessor now.	Х

In effect, each lease receipt consists of two elements:

- finance income on the receivable; and
- a partial repayment of the receivable (net investment in the lease).

The finance charge is recognised as income in profit or loss for the period. The partial repayment of the lease receivable reduces the amount owed to the lessor.

Finance income

The total rental receipts over the life of the lease will be more than the amount initially recognised as a receivable. The difference is finance income.

The total finance income that arises over the life of the lease is the difference between the amount invested in the lease (the amount loaned plus the initial direct costs) and the sum of all receipts.

Illustration: Total finance income	
	Ħ
Lessor's minimum lease payments	Х
Initial direct costs	Х
	X
Amount on initial recognition	(X)
Total finance charge	X



Example: Total finance income

Kano Finance agreed to lease a machine to Ibadan Construction commencing on 1 January Year 1.

The lease was a 6 year finance lease of a machine on 1 January Year 1 with annual lease payments of №18,000, payable in arrears.

The fair value of the machine at the commencement of the lease was \$80,000 and Kano Finance incurred initial direct costs of \$2,000 when arranging the lease.

The estimated residual value of the asset at the end of the lease is 10,000. The lessee has guaranteed an amount of 8,000.

The interest rate implicit in the lease is 10.798%.

Total finance income

H H
108,000
8,000
2,000
118,000
(80,000)
(2,000)
(82,000)
36,000

The finance income is recognised over the life of the lease by adding a periodic return to the net investment in the lease with the other side of the entry as income in profit or loss for the year.



Illustration:

	Debit	Credit
Net investment in the lease	Х	
Statement of profit or loss: finance income		Х

Calculating and allocating finance income

Finance income is recognised so as to give a constant periodic rate of return on the lessor's net investment in the finance lease.



Example: Calculating and allocating finance income

Kano Finance agreed to lease a machine to Ibadan Construction commencing on 1 January Year 1.

The lease was a 6 year finance lease of a machine on 1 January Year 1 with annual lease payments of №18,000, payable in arrears.

The fair value of the machine at the commencement of the lease was \$80,000 and Kano Finance incurred initial direct costs of \$2,000 when arranging the lease.

The estimated residual value of the asset at the end of the lease is \$10,000. The lessee has guaranteed an amount of \$8,000.

The interest rate implicit in the lease is 10.798%.

Proof that interest rate implicit in the lease is 10.798%

Year	Narrative	Cash flow	Discount factor (10.798%)	Present value
	Minimum lease payments			
1 to 6	Annual rentals	18,000	4.2553	76,595
6	Guaranteed residual value	10,000	0.54052	5,405
				82,000
	Fair value of the asset			80,000
	Initial direct costs			2,000
				82,000



Example: Calculating and allocating finance income

Kano Finance agreed to lease a machine to Ibadan Construction commencing on 1 January Year 1.

The lease was a 6 year finance lease of a machine on 1 January Year 1 with annual lease payments of №18,000, payable in arrears.

The fair value of the machine at the commencement of the lease was \$80,000 and Kano Finance incurred initial direct costs of \$2,000 when arranging the lease.

The estimated residual value of the asset at the end of the lease is \$8,000 and the lessee has guaranteed this amount.

The interest rate implicit in the lease is 10.798%.

Net investment in the lease

Year	Opening net investment	Interest (10.798%)	Lease receipts	Closing net investment
1	82,000	8,854	(18,000)	72,854
2	72,854	7,867	(18,000)	62,721
3	62,721	6,773	(18,000)	51,494
4	51,494	5,560	(18,000)	39,054
5	39,054	4,217	(18,000)	25,271
6	25,271	2,729	(26,000)	2,000
	—	36,000	_	

The interest income is calculated by multiplying the opening receivable by 10.798% in each year (so as to provide a constant rate of return on the net investment in the lease).

The final balance on the account is the unguaranteed residual value.

4.3 Manufacturer/dealer leases

Manufacturers or dealers often offer to customers the choice of either buying or leasing an asset. A finance lease of an asset by a manufacturer or dealer lessor gives rise to two types of income:

- profit or loss equivalent to the profit or loss resulting from an outright sale of the asset being leased, at normal selling prices, reflecting any applicable volume or trade discounts; and
- □ finance income over the lease term.

Revenue

The sales revenue recognised at the commencement of the lease term is the lower of:

- Let the fair value of the asset; and
- the present value of the lessor's minimum lease payments at a market rate of interest.

Cost of sale

The cost of sale recognised at the commencement of the lease term is the carrying amount of the leased asset less the present value of the unguaranteed residual value.

The deduction of the present value of the unguaranteed residual value recognises that this part of the asset is not being sold. This amount is transferred to the lease receivable. The balance on the lease receivable is then the present value of the amounts which the lessor will collect off the lessee plus the present value of the unguaranteed residual value. This is the net investment in the lease as defined in section 4.1.

Costs incurred by manufacturer or dealer lessors in connection with negotiating and arranging a lease must be recognised as an expense when the selling profit is recognised.

Profit or loss on the sale

The difference between the sales revenue and the cost of sale is the selling profit or loss. Profit or loss on these transactions is recognised in accordance with the policy followed for recognising profit on outright sales.

The manufacturer or dealer might offer artificially low rates of interest on the finance transaction. In such cases the selling profit is restricted to that which would apply if a market rate of interest were charged.

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Example: Manufacturer or dealer leases	
Multan Motors is a car dealer.	
It sells cars and offers a certain model for sale	by lease.
The following information is relevant:	
Price of the car in a cash sale	₩2,000,000
Cost of the car	₩1,500,000
Finance option:	
Annual rental	₩804,230
Lease term	3 years
Interest rate	10%
Estimated residual value	nil
Lessor's cost of setting up the lease	₩20,000
Discount factor	
t1 to t3 @ 10%	2.486852 (written as 2.487)
Working: Revenue – lower of:	Ħ
Fair value of the asset	2,000,000
Present value of the minimum lease paym	ents
804,230 × 2.487	2,000,000
Initial double entry:	Dabié Oradia
Revenue	Debit Credit
Lease receivable (Net investment in the lease	
Statement of profit or loss	2,000,000
Cost of sale	1 500 000
Statement of profit or loss	1,500,000
Asset (Inventory)	1,500,000
Cost of setting up the lease	
Statement of profit or loss	20,000
Cash/bank	20,000

0

Example: Manufacturer or dealer lease (continued)

Net investment in the lease (over its life):

Year	Opening net investment	Interest (10%)	Lease receipts	Closing net investment
1	2,000,000	200,000	(804,230)	1,395,770
2	1,395,770	139,577	(804,230)	731,117
3	731,117	73,113	(804,230)	nil

The interest income is calculated by multiplying the opening receivable by 10% in each year (so as to provide a constant rate of return on the net investment in the lease).

Summary of double entry in year 1:

	Bank	Inventory	Net investment in the lease	Profit or loss
B/f		1,500,000 ^{Dr}		
Revenue			2,000,000 ^{Dr}	2,000,000 ^{Cr}
Cost of sales		(1 ,500,000) ^{Cr}		(1 ,500,000) ^{Dr}
Set up cost	(20,000) ^{Cr}			(20 ,000) ^{Dr}
Profit on sale				480,000 ^{Cr}
Lease income			200,000 ^{Dr}	200,000 ^{cr}
Lease rental	804,230 ^{Dr}		(804,230) ^{Cr}	
			1,395,770 ^{Dr}	680,000 ^{cr}

Example: Manufacturer or dealer leases with ungua	ranteed residual	value
The following information is relevant:		
Price of the car in a cash sale	₩2,0	00,000
Cost of the car	₩1,5	00,000
Finance option:		
Annual rental	₩76	4,018
Lease term	3 y	vears
Interest rate	1	0%
Estimated residual value	₩13	3,100
Lessor's cost of setting up the lease	₩20	0,000
Discount factors:		
t3 @ 10% 0.7513	3148 (written as	0.751)
t1 to t3 @ 10% 2.486	852 (written as 2	2.487)
Workings		
W1: Revenue – lower of:		N
Fair value of the asset	2,0	000,000
Present value of the minimum lease payments		
764,018× 2.487	1,9	000,000
W2: Present value of the unguaranteed residua	l value	₩
Present value of the minimum lease payments		
133,156 × 0.751	10	00,000
Initial double entry:		
Revenue	Debit	Credit
Lease receivable (Net investment in the lease)	1,900,000	
Statement of profit or loss		1,900,000
Cost of sale		
Statement of profit or loss	1,400,000	
Asset (Inventory)		1,400,000
Transfer		
Lease receivable (Net investment in the lease)	100,000	
Asset (Inventory)		100,000
Cost of setting up the lease		
Statement of profit or loss	20,000	
Statement of profit of 1035		

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Example: Manufacturer or dealer lease (continued)

Net investment in the lease (over its life):

Year	Opening net investment	Interest (10%)	Lease receipts	Closing net investment
1	1,900,000			
	100,000			
	2,000,000	200,000	(764,018)	1,435,982
2	1,435,982	143,598	(764,018)	815,562
3	815,562	81,556	(764,018)	133,100

The interest income is calculated by multiplying the opening receivable by 10% in each year (so as to provide a constant rate of return on the net investment in the lease).

The balance on the account at the end of the lease term is the unguranteed residual value.

Summary of double entry in year 1:

	Bank	Inventory	Net investment in the lease	Profit or loss
B/f		1,500,000 ^{Dr}		
Revenue			1,900,000 ^{Dr}	1,900,000 ^{Cr}
Cost of sales		(1 ,400,000) ^{Cr}		(1,400,000) ^{Dr}
Set up cost	(20,000) ^{Cr}			(20,000) ^{Dr}
Profit on sale				480,000 ^{cr}
Transfer		(100 ,000) ^{cr}	100,000 ^{Dr}	
Lease income			200,000 ^{Dr}	200,000 ^{cr}
Lease rental	764,018 ^{Dr}		(764,018) ^{Cr}	
			1,435,982 ^{Dr}	680,000 ^{Cr}

4.4 Finance lessor disclosures

A finance lessor must disclose the following:

- a reconciliation between the gross investment in the lease at the end of the reporting period, and the present value of minimum lease payments receivable at the end of the reporting period;
- the gross investment in the lease and the present value of minimum lease payments receivable at the end of the reporting period, for each of the following periods:
 - not later than one year;
 - later than one year and not later than five years;
 - later than five years;
- unearned finance income;
- □ the unguaranteed residual values accruing to the benefit of the lessor;
- □ the accumulated allowance for uncollectible minimum lease payments receivable;
- □ contingent rents recognised as income in the period;
- a general description of the lessor's material leasing arrangements.

Definitions: Unearned finance income

Unearned finance income is the difference between:

- (a) the gross investment in the lease, and
- (b) the net investment in the lease.

5 ACCOUNTING FOR AN OPERATING LEASE

Section overview

- Operating leases in the financial statements of the lessee
- Operating lessee disclosures
- Operating leases in the financial statements of the lessor
- Operating lessor disclosures

5.1 Operating leases in the financial statements of the lessee

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 **Leases** states that the total payments made by the lessee under an operating lease should be recognised as an expense, 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 as an expense 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.



Example: Accounting for operating leases

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 expense for the operating lease for each of the four years.
- (b) Calculate the asset or liability in the statement of financial position at the end of Year 1 and at the end of Year 2.



Ans	wer		
(a)	Total lease payments = ₩50,000 + (₩50,000 × 4 years) = ₩250,000		
	Annual charge for the lease (annual expense) = $\frac{1}{100}$ $\frac{1}{100}$	₩250,000 ÷ 4 years =	
	Statement of financial position at end of Year 1	Ħ	
	Lease payments in Year 1 (₩50,000 + ₦50,000)	100,000	
	Charged as an expense in Year 1	(62,500)	
	Prepayment: asset at end of Year 1	37,500	
(b)			
	Statement of financial position at end of Year 2	₩	
	Balance b/f from Year 1 (prepayment)	37,500	
	Lease payment in Year 2	50,000	
		87,500	
	Charged as an expense in Year 2	(62,500)	
	Prepayment: asset at end of Year 2	25,000	

5.2 Operating lessee disclosures

Operating lessees must disclose the following:

- the total of future minimum lease payments under non-cancellable operating leases for each of the following periods:
 - not later than one year;
 - later than one year and not later than five years;
 - later than five years;
- □ the total of future minimum sublease payments expected to be received under non-cancellable subleases at the end of the reporting period;
- lease and sublease payments recognised as an expense in the period, with separate amounts for minimum lease payments, contingent rents, and sublease payments;
- a general description of the lessee's significant leasing arrangements including, but not limited to, the following:
 - the basis on which contingent rent payable is determined;
 - the existence and terms of renewal or purchase options and escalation clauses; and
 - restrictions imposed by lease arrangements, such as those concerning dividends, additional debt and further leasing.

5.3 Operating leases in the financial statements of the lessor

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.

It will be shown in an appropriate category of **property, plant and equipment** at its carrying value (cost/valuation minus accumulated depreciation).

In respect of the leased asset, the lessor's annual statement of profit or loss will include:

- depreciation on the asset as an expense, and
- rental income (as for the lessee, this is usually calculated on a straight-line basis).

Lease income from operating leases is recognised in income on a straight-line basis over the lease term, unless another systematic basis is more representative of the time pattern in which use benefit derived from the leased asset is diminished.

Initial direct costs incurred by lessors in negotiating and arranging an operating lease are added to the carrying amount of the leased asset and recognised as an expense over the lease term on the same basis as the lease income.

The depreciation policy for depreciable leased assets must be consistent with the lessor's normal depreciation policy for similar assets, and calculated in accordance with IAS 16 and IAS 38.

Manufacturer/dealer leases

A manufacturer or dealer lessor must not recognise any selling profit on entering into an operating lease. It is not the equivalent of a sale as the risks and benefits of ownership do not pass.

5.4 Operating lessor disclosures

Operating lessors must disclose the following:

- the future minimum lease payments under non-cancellable operating leases in the aggregate and for each of the following periods:
 - not later than one year;
 - later than one year and not later than five years;
 - later than five years.
- total contingent rents recognised as income in the period.
- a general description of the lessor's leasing arrangements.

6 SALE AND LEASEBACK TRANSACTIONS

Section overview

- Sale and leaseback transactions
- Sale and finance leaseback (finance lease)
- Sale and operating leaseback (operating lease)

6.1 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.

6.2 Sale and finance leaseback (finance lease)

Before the transaction the owner has the risks and rewards of ownership. The owner sells the asset and then leases it back under a finance lease. The owner has retained the risks and rewards of ownership. In substance this is not a sale so profit should not be recognised. The accounting treatment is as follows.

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 term (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.

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Example: Sale and finance leaseback

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 328,000 per annum in arrears.

	Debit	Credit	
The sale	N	N	
Cash	120,000		
Asset		70,000	
Deferred income		50,000	
The leaseback			
Asset	120,000		
Lease obligation		120,000	

6.3 Sale and operating leaseback (operating lease)

Again, there are two stages to the transaction, the sale and the operating leaseback. The substance and legal form of the transaction are the same. The asset has been sold by the lessee (known as the seller/lessee) and the risks and rewards have been permanently transferred to the lessor as the leaseback is an operating lease in nature.

On sale, the asset should be removed from the seller/lessee'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

This is just a normal sale. If an asset is sold at fair value, the gain or loss on disposal is recognised immediately in profit or loss in the usual way.

Example: Sale and operating leaseback – Sale at fair value

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.

	Debit	Credit
	N	₩
Cash	1,500,000	
Asset		1,000,000
Statement of profit or loss		500,000

Sale at less than fair value

If an 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 makes a loss and this is compensated for by future lease payments at below market price, the loss should not be recognised immediately, but deferred and then released to profit or loss over the expected period of use (the lease period).



Example: Sale and operating leaseback - Sale below fair value

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 \$2 million and a remaining useful life of ten years.

	Debit	Credit
	Ħ	₩
Cash	1,500,000	
Asset		2,000,000
Statement of profit or loss	500,000	

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Example: Sale and operating leaseback – Sale below fair value compensated by lower future rentals

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 \$2 million and a remaining useful life of ten years.

The company accepted an offer below the fair value of the asset because it was able to negotiate rentals at below the market rate in compensation.

	Debit	Credit
	N	N
Cash	1,500,000	
Asset		2,000,000
Deferred loss (on the statement of financial position)	500,000	

The deferred loss amortised in proportion to the lease payments over the period for which the asset is expected to be used.

Sale at more than fair value

If an asset is sold at more than fair value, the normal gain or loss on disposal (based on the difference between the carrying amount and fair value) is recognised immediately in profit or loss.

The excess profit (based on the difference between the fair value and actual sale value) should be deferred and released to profit or loss over the expected period of use (the lease period).



Example: Sale and operating leaseback – Sale above fair value

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.

The fair value of the asset at the date of sale was ₩1.2 million.

	Debit	Credit	
	Ħ	₩	
Cash	1,500,000		
Asset		1,000,000	
Statement of profit or loss (Normal profit of ₦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.			

7 IMPACT ON PRESENTATION

Section overview

• The effect of classifying a lease incorrectly

7.1 The effect of classifying a lease incorrectly

If a finance lease is treated as an operating lease, the financial statements do not fairly present the financial position of the entity:

- □ The leased asset is not recognised in the statement of financial position, even though the substance of the lease is that the entity owns it.
- □ The liability for the lease payments is not recognised in the statement of financial position.

Therefore both assets and liabilities are understated. The lease becomes a form of 'off balance sheet finance', hidden from the users of the financial statements. The entity's (lessee's) liabilities can appear to be much lower than they actually are.

Classifying a lease incorrectly affects the numbers in the financial statements.

An example seen earlier in the chapter is used to illustrate this.



Example:

The fair value of an asset, leased under a finance lease commencing on 1 January Year 1 is ₩12,886.

The lease is for three years with payments of \$5,000 annually in arrears on 31 December Year 1, Year 2 and Year 3. The interest rate implicit in the lease is 8%.

Finance lease liability (given again for your convenience)

Year	Opening balance	Interest (8%)	Lease payment	Closing balance
1	12,886	1,031	(5,000)	8,917
2	8,917	713	(5,000)	4,630
3	4,630	370	(5,000)	-
		2,114	-	

The numbers that would appear in the financial statements for year 1 if the lease were treated as finance lease or as an operating lease are shown below:

Statement of financial position	Finance lease	Operating lease
Non-current asset	₩	
Asset held under finance lease (12,886 – $(1/3 \text{ of } 12,866=4,289)$	8,597	_
Liability:	Ħ	
Non-current liability	4,630	_
Current liability	4,287	_
Total liability	8,917	_
Statement of profit or loss		
Depreciation charge $(1/3 \text{ of } 12,866)$	4,289	_
Finance charge	1,013	_
Rental	_	5,000
	5,302	5,000

8 CHAPTER REVIEW

Chapter review

Before moving on to the next chapter check that you now know how to:

- Define and identify different types of lease
- Prepare and present extracts of financial statements in respect of lessee accounting
- Prepare and present extracts of financial statements in respect of lessor
- Prepare and present extracts of financial statements in respect of sale and lease back arrangements
- Analyse the effect of different leasing transactions on the presentation of financial statements

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SOLUTIONS TO PRACTICE QUESTIONS

Solution

The lease is a finance lease.

Reasons

The lease is for a major part of the life of the asset (6 out of 7 years).

Ibadan Construction must ensure the asset. It is exposed to one of the major risks of ownership of the asset (its loss).

The present value of the minimum lease payments is 95.3% $(^{4.767\,^{\times}\,600,000}/_{3,000,000})$ of the fair value of the asset at the inception of the lease.

Solution					2
			Ħ		
Total lease pa	ayments (3 ×	∺ ₩4,021)	12,06	3	
Minus: Cash p	price of the a	isset	(10,00	0)	
Total finance	charge		2,06	3	
Actuarial meth	od				
Year ended 31 December	Opening balance	Lease payment	Capital outstanding	Interest at 22.25%	Closing balance
	₩	₩	₽	₩	Ħ
Year 1	10,000	(4,021)	5,979	1,330	7,309
Year 2	7,309	(4,021)	3,288	733	4,021
Year 3	4,021	(4,021)	-	-	-
The year-end li	ability at the	end of Yea	r 1 is ₦7,309 in	total.	
	urrent liabili he first payn	•	iability at the s 8).	start of the ne	kt year afte
	t liability is t yet accrue		nt in year 2 less	any interest co	ontained in i
				Ħ	
Current liabili	ty, end of Ye	ar 1	4	,021	
	ability, end o	of Year 1	3	,288	
Non-current I	· · · · · · · · · · · · · · · · · · ·				

Skills level Financial reporting



IAS 37: Provisions, contingent liabilities and contingent assets

Contents

- 1 Provisions: Recognition
- 2 Provisions: Measurement
- 3 Provisions: Double entry and disclosure
- 4 Guidance on specific provisions
- 5 Contingent liabilities and contingent assets
- 6 Chapter review

INTRODUCTION

Purpose

In this element the accounting from the foundation level is taken up a level into financial accounting in the context of more complex events and transactions with a greater emphasis on compliance with regulations including International Accounting Standards and generally accepted accounting practices in the private sectors.

Students will be expected to demonstrate an understanding of and competence in financial statement analysis and basic analysis of choices in accounting treatments.

Competencies

2	Preparing separate financial statements
2(b)	Identify and state the laws, regulations accounting standards and other requirements that govern the production of financial statements by such entities.
2(c)	Draft and compile financial statements, or extracts from them, of an entity in accordance with its chosen policies and in accordance with IFRS and local law.

IAS 37 is an examinable document.

Exam context

This chapter explains the rules on recognition of provisions. It also explains the necessary disclosures in respect of contingencies

By the end of this chapter you will be able to:

- Define liability, provision, contingent liability and contingent asset
- Distinguish between provisions, contingent liabilities or contingent assets
- Understand and apply the recognition criteria for provisions under IFRS
- Calculate/ measure provisions
- Account for changes in provisions
- Report provisions in final accounts

1 PROVISIONS: RECOGNITION

Section overview

- Introduction
- Recognition criteria for provisions
- Present obligation
- Obligation arising out of a past event
- Probable outflow of economic benefits

1.1 Introduction

The first five sections of this chapter explain rules set out in *IAS 37: Provisions, contingent liabilities and contingent assets.*



Definitions

Provisions are liabilities of uncertain timing or amount.

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

An obligating event is an event that creates a legal or constructive obligation that results in an enterprise having no realistic alternative to settling that obligation.

Provisions differ from other liabilities because there is uncertainty about the timing or amount of the future cash flows required to settle the liability.

Accruals are liabilities to pay for goods or services that have been received or supplied but not yet invoiced. There is often a degree of estimation in the measurement of accruals but any inherent uncertainty is much less than for provisions.

IAS 37 applies to all provisions and contingencies apart from those covered by the specific requirements of other standards.

In some countries the term "provision" is also used to describe the reduction in the value of an asset. For example accountants might talk of provision for depreciation, provision for doubtful debts and so on. These "provisions" are not covered by this standard which is only about provisions that are liabilities.

Major accounting issues

There are three issues to address in accounting for provisions:

- whether or not a provision should be recognised;
- how to measure a provision that is recognised; and
- what is the double entry on initial recognition of a provision and how is it remeasured on subsequent reporting dates.

1.2 Recognition criteria for provisions

A provision should be recognised when:

- a company has a present obligation (legal or constructive) as a result of a past event;
- it is probable that an outflow of economic benefits will be required to settle the obligation; and
- a reliable estimate can be made of the amount of the obligation.

If one of these conditions is not met then a provision cannot be recognised.

1.3 Present obligation

An obligation must exist in order for a provision to be recognised.

An obligation may be legal or constructive.

- A **legal obligation** is one arising from a contract, or some other aspect of the law.
- A **constructive obligation** is one arising from the company's actions, whereby
 - through established past practice, published policies, or a specific current statement, the company has indicated to other parties that it will accept certain responsibilities; and
 - as a result, the company has created a valid expectation that it will discharge those responsibilities.



Example: Constructive obligation

A clothing retailer has a policy of taking back items of clothing that customers have purchased, and refunding the purchase price, simply because the purchaser has changed his or her mind about the item.

The retailer does not have a legal obligation to do this under the consumer protection legislation that applies in the jurisdiction in which it operates.

If this is the usual practice of a particular retailer, and the retailer's policy is wellknown or has been made known to customers, then a constructive obligation exists whenever a sale is made.

A provision would be recognised for sales returns subject to the other two criteria being satisfied.

In most cases it will be clear that a past event has given rise to a present obligation. However, in rare cases this may not be the case. In these cases, the past event is deemed to give rise to a present obligation if it is more likely than not that a present obligation exists at the end of the reporting period. This determination must be based on all available evidence,

1.4 Obligation arising out of a past event

A past event that leads to a present obligation is called an obligating event. For this to be the case it is necessary that the company has no realistic alternative to settling the obligation created by the event.

This is the case only:

- where the settlement of the obligation can be enforced by law; or
- □ in the case of a constructive obligation, where the event (which may be an action of the company) creates valid expectations in other parties that the company will discharge the obligation.

The event leading to the obligation must be **past**, and must have occurred before the 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.



Illustration:

A company is planning a reorganisation. These plans are in an early stage.

There is no obligation (legal or constructive) to undertake the reorganisation. The company cannot create a provision for reorganisation costs.

Only obligations arising from past events that exist independently of a company's future actions are recognised as provisions.



Example:

Lagos Properties owns a series of high rise modern office blocks in several major cities in Nigeria.

The government introduces legislation that requires toughened safety glass to be fitted in all windows on floors above the ground floor. The legislation only applies initially to new buildings but all buildings will have to comply within 5 years.

Analysis:

There is no obligating event.

Even though Lagos Properties will have to comply within 5 years it can avoid the future expenditure by its future actions, for example by selling the buildings. There is no present obligation for that future expenditure and no provision is recognised.



Example:

Aba Energy Company operates in a country where there is no environmental legislation. Its operations cause pollution in this country.

Aba Energy Company has a widely published policy in which it undertakes to clean up all contamination that it causes and it has a record of honouring this published policy.

Analysis:

There is an obligating event. Aba Energy Company has a constructive obligation which will lead to an outflow of resources embodying economic benefits regardless of the future actions of the company. A provision would be recognised for the clean-up subject to the other two criteria being satisfied. An obligation always involves another party to whom the obligation is owed.

However, it is not necessary to know the identity of that party. It is perfectly possible to have an obligation to the public at large or to a group of people.



Example:

Maiduguri Household Appliances Corporation gives warranties at the time of sale to purchasers of its products. Under the terms of the sale contract the company undertakes to make good any manufacturing defects that become apparent within three years from the date of sale.

In the period it has sold 250,000 appliances and estimates that about 2% will prove faulty.

Analysis:

There is an obligating event being the sale of an item with the promise to repair it as necessary. The fact that Maiduguri Household Appliances Corporation does not know which of its customers will seek repairs in the future is irrelevant to the existence of the obligation.

A provision would be recognised for the future repairs subject to the other two criteria being satisfied.

Note that the estimate that only 2% will be faulty is irrelevant in terms of recognising a provision. However, it would be important when it came to measuring the size of the provisions. This is covered in the next section.

An obligation always involves a commitment to another party. Therefore, a management decision does not give rise to a constructive obligation unless it has been communicated before the end of the reporting period to those affected by it in a sufficiently specific manner to raise a valid expectation in them that the company will discharge its responsibilities.



Example:

On 13 December Jos Engineering decided to close a factory. The closure will lead to 100 redundancies at a significant cost to the company.

At 31 December no news of this plan had been communicated to the workforce.

Analysis:

There is no obligating event. This will only come into existence when communication of the decision and its consequences are communicated to the workforce.

An event may not give rise to an obligation immediately but may do so at a later date due to a change in circumstances. These include:

- changes in the law; or
- where an act of the company (for example, a sufficiently specific public statement) gives rise to a constructive obligation.

If details of a proposed new law have yet to be finalised, an obligation arises only when the legislation is virtually certain to be enacted as drafted.

1.5 Probable outflow of economic benefits

The outflow of benefits must be probable. 'Probable' is defined by IAS 37 as 'more likely than not to occur'.



Illustration:

A company may have given a guarantee but may not expect to have to honour it. No provision arises because a payment under the guarantee is not probable.

More likely than not implies a greater than 50% chance but be careful to think about this in the right way.



Example:

Maiduguri Household Appliances Corporation gives warranties at the time of sale to purchasers of its products. Under the terms of the sale contract the company undertakes to make good any manufacturing defects that become apparent within three years from the date of sale.

In the period it has sold 250,000 appliances and estimates that about 2% will prove faulty.

Analysis:

The outflow of benefits is probable. It is more likely than not that 2% will be faulty. (In other words there is more than a 50% chance that 2% of items will prove to be faulty).

2 PROVISIONS: MEASUREMENT

Section overview

- Introduction
- Uncertainties
- Time value
- Future events
- Reimbursements

2.1 Introduction

The amount recognised as a provision must be the best estimate, as at the end of the reporting period, of the future expenditure required to settle the obligation. This is the amount that the company would have to pay to settle the obligation at this date. It is the amount that the company would have to pay a third party to take the obligation off its hands.

The estimates of the outcome and financial effect of an obligation are made by management based on judgement and experience of similar transactions and perhaps reports from independent experts.

Risks and uncertainties should be taken into account in reaching the best estimate. Events after the reporting period will provide useful evidence. (Events after the reporting period are dealt with in more detail later.)

2.2 Uncertainties

Uncertainties about the amount to be recognised as a provision are dealt with by various means according to the circumstances.

In measuring a single obligation, the best estimate of the liability may be the most likely outcome. However, other possible outcomes should be considered. 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.



Example:

Gombe Prefabricators Limited (GPL) has won a contract to provide temporary accommodation for workers involved in building a new airport. The contract involves the erection of accommodation blocks on a public park and two years later the removal of the blocks and the reinstatement of the site.

The blocks have been built and it is now GPL's year-end.

GPL estimates that the task of removing the blocks and reinstating the park to its present condition might be complex, resulting in costs with a present value of $\frac{1}{1}$, 2000,000, or straightforward, resulting in costs with a present value of $\frac{1}{3}$, 300,000.

GPL estimates that there is a 60% chance of the job being straightforward.

Should a provision be recognised and if so at what value?

Analysis

Should a provision be recognised?

Yes. A present obligation arises due to the existence of a contractual term and the building of the block.
Yes. This is certain.
Yes. Data is available.

A provision should be recognised.

How should the provision be measured? (What is the best estimate of expenditure required to settle the obligation?)

The most likely outcome is that the job will be straightforward. In this case the provision would be recognised at \$1,300,000.

However there is a significant chance that the job will be complex so perhaps GPL should measure the liability at the higher amount. This may sound a little vague but in practice this comes down to a matter of judgement. 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 of the cost of the future obligations. This is done by weighting all possible outcomes by their associated probabilities.



Example:

Sokoto Manufacturing has sold 10,000 units in the year. Sales accrued evenly over the year.

It estimates that for every 100 items sold, 20 will require small repairs at a cost of \$100, 10 will require substantial repairs at a cost of \$400 each and 5 will require major repairs or replacement at a cost of \$800 each.

On average the need for a repair becomes apparent 6 months after a sale.

What is the closing provision?

A provision will be required for the sales in the second six months of the year as presumably the repairs necessary in respect of the sales in the first six months have been completed by the year end.

Sales accrue evenly, therefore, the sales in the second six months are 5,000 units ($^{6}/_{12} \times 10,000$).

Repair	Number	Cost per repair (₩)	Total (₩)
Small	20% × 5,000 = 1,000	100	100,000
Substantial	10% × 5,000 = 500	400	200,000
Major	5% × 5,000 = 250	800	200,000
Provision			500,000

Note that this would be reduced by the repairs already made by the year end

2.3 Time value

Where the effect of the time value of money is material, a provision is measured at the present value of the expenditures expected to be required to settle the obligation.

The discount rate used should be a pre-tax rate (or rates) that reflect(s) current market assessments of the time value of money and the risks specific to the liability.

The need to discount is often found when accounting for decommissioning liabilities. These are discussed in section 2.4.



Example:

Gombe Prefabricators Limited (GPL) has won a contract to provide temporary accommodation for workers involved in building a new airport. The contract involves the erection of accommodation blocks on a public park and two years later the removal of the blocks and the reinstatement of the site.

The blocks have been built and it is now 31 December 2013 (GPL's year-end).

GPL estimates that in two years it will have to pay \aleph 2,000,000 to remove the blocks and reinstate the site.

The pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the liability is 10%.

The provision that should be recognised at 31 December 2013 is as follows:

₦2,000,000× $\frac{1}{(1.1)^2}$ = ₦1,652,893

2.4 Future events

Expected future events may be important in measuring provisions. For example, a company may believe that the cost of cleaning up a site at the end of its life will be reduced by future changes in technology.

The measurement of an obligation must take expected future changes into account where there is sufficient objective evidence that they will occur. In such cases the measurement of the provision should be based on the reasonable expectations of technically qualified, objective observers, taking account of all available evidence as to the technology that will be available at the time of the clean-up.

This means that a company might include expected cost reductions associated with increased experience in applying existing technology or the expected cost of applying existing technology to a larger or more complex clean-up operation than has previously been carried out.

One future event might be the effect of possible new legislation.

The measurement process should take this into account when there is sufficient objective evidence that the legislation is virtually certain to be enacted.

In practice, the proceeds of the sale of an asset in the future might be used to pay for an event for which a provision is recognised today. However, gains from the expected disposal of assets must not be taken into account in measuring a provision.

2.5 Reimbursements

In some cases, a part or all of a company's provision may be recoverable from a third party. For example, a company paying out to a customer under the terms of a guarantee may itself be able to claim money back from one of its own suppliers.

IAS 37 requires that such a reimbursement:

- should only be recognised where receipt is virtually certain; and
- should be treated as a separate asset in the statement of financial position (i.e. not netted off against the provision) at an amount no greater than that of the provision.

However, IAS 37 allows the expense relating to a provision to be presented net of the amount recognised for a reimbursement in the statement of profit or loss.

3 PROVISIONS: DOUBLE ENTRY AND DISCLOSURES

Section overview

- Introduction
- Measurement on initial recognition
- Use of provisions
- Subsequent measurement
- Disclosures about provisions

3.1 Introduction

IAS 37 is about the recognition and measurement of provisions which are of course a credit balance. It gives little guidance on the recognition of the debit entry on initial recognition of a provision saying that whether an expense or asset is recognised is left to guidance in other standards.

3.2 Measurement on initial recognition

In most cases the debit entry that arises when a provision is recognised is an expense. There is one important case where it is capitalised as an asset (on recognition of a decommissioning liability) and this is discussed later.



Illustration: Usual double entry on initial recognition of a provision			
	Debit	Credit	
Profit or loss (expense)	Х		
Provision		X	

3.3 Use of provisions

A provision is set up to recognise an expense (usually) that exists at the reporting date. When the expense is paid the following double entry is used:



Illustration: Using a provision.				
	Debit	Credit		
Provision	Х			
Cash		X		

If the provision is more than the amount needed to settle the liability the balance is released as a credit back through the income statement.

If the provision is insufficient to settle the liability an extra expense is recognised.

IAS 37 also states that a provision may be used only for expenditures for which the provision was originally recognised.



Example: Use of provisions

A company has created a provision of \$300,000 for the cost of warranties and guarantees.

The company now finds that it will probably has to pay ₩250,000 to settle a legal dispute.

It cannot use the warranties provision for the costs of the legal dispute. An extra 3250,000 expense must be recognised.

3.4 Subsequent measurement

Each provision must be reviewed at the end of each reporting period. This might result in derecognition of a provision that no longer meets the recognition criteria or in the re-measurement of a provision. An increase in a provision would result in the recognition of a further expense or a reduction in expense as the previously recognised provision is reduced through a credit to profit or loss.



Ilustration: Subsequent re-measurement of provisions.		
	Debit	Credit
Derecognition of a provision that is no longer needed.		
Provision	Х	
Income statement		Х
Increase in a provision:		
Profit or loss (expense)	Х	
Provision		Х
Decrease in a provision:		
Provision	Х	
Profit or loss		Х



Example: Subsequent measurement

31 December 2012

A company was sued by a customer in the year ended 31 December 2012.

Legal advice is that the customer is virtually certain to win the case as several similar cases have already been decided in the favour of the injured parties.

At 31 December 2012, the company's lawyer was of the opinion that, the cost of the settlement would be 1,000,000.

A provision is recognised in the amount of 1,000,000 as follows (reducing profit for the year by that amount).

	Debit (₩)	Credit (₩)
Expenses	1,000,000	
Provision		1,000,000

31 December 2013

The claim has still not been settled. The lawyer now advises that the claim will probably be settled in the customer's favour at \$1,200,000.

The provision is increased to ₩1,200,000 as follows.

	Debit (₩)	Credit (₩)
Expenses	200,000	
Provision		200,000

31 December 2014

The claim has still not been settled. The lawyer now believes that the claim will be settled at \$900,000.

The provision is reduced to ₩900,000 as follows.

	Debit (Ħ)	Credit (Ħ)
Provision	300,000	
Expenses		300,000

The reduction in the provision increases profit in the year and the provision in the statement of financial position is adjusted down to the revised estimate of \$900,000.

31 December 2014

The claim is settled for \$950,000. On settlement, the double entry in the ledger accounts will be:

	Debit (₩)	Credit (₩)
Expenses	50,000	
Provision	900,000	
Cash		950,000

The charge against profit on settlement of the legal claim is ₦50,000.

The provision no longer exists. The total amount charged against profit over the four years was the final settlement figure of \$950,000.

When a provision is included in the statement of financial position at a discounted value (at present value) the amount of the provision will increase over time, to reflect the passage of time. In other words, as time passes the amount of the discount gets smaller, so the reported provision increases. This increase in value is included in **borrowing costs** for the period.

3.5 Disclosures about provisions

IAS 37 requires the following disclosures about provisions in notes to the financial statements.

For each class of provision:

- □ the opening and closing balances and movements in the provision during the year;
- a brief description of:
 - the nature of the obligation;
 - the expected timing of any settlement; and
 - an indication of the uncertainties surrounding the amount and timing of any settlement.

4 GUIDANCE ON SPECIFIC PROVISIONS

Section overview

- Onerous contracts
- Future operating losses
- Restructuring
- Decommissioning liabilities and similar provisions
- Future repairs to assets

IAS 37 explains how its rules apply in given circumstances. Some of the guidance is in the body of the standard and some in an appendix to the standard.

4.1 Onerous contracts



Definition

An onerous contract is a contract where the unavoidable costs of fulfilling/completing the contract now exceed the benefits to be received (the contract revenue).

A provision should be made for the additional unavoidable costs of an onerous contract. (The 'additional unavoidable costs' are the amount by which costs that cannot be avoided are expected to exceed the benefits).

The example in IAS 37 relates to an operating lease.



Example: Onerous contract

On 31 December 2013, Company H is half way through an eight year operating lease on its factory when it moves to a new factory due to an expansion of demand for its products.

It cannot cancel the lease or sub-let the factory and there is no prospect of being able to sub-let it.

Annual lease payments are ₩60,000.

Analysis

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, which cannot be avoided.)

The amount can be measured reliably ($\$60,000 \times 4$ years, discounted to a present value).

The discounted value of the future lease payments for four years may therefore be recognised as a provision.

Other circumstances that might lead to the recognition of a provision in respect of an onerous contract relate to supply contracts.



Example: Onerous contract

Ogbomosho Clothing has a contract to buy 300 metres of silk from a supplier each month for ₩3,000 per metre.

Ogbomosho Clothing had a contract with a Dubai retailer to sell each dress for \$5,000 but this retailer has fallen into administration and the administrators have cancelled the contract as they were entitled to do under one of its clauses.

Ogbomosho Clothing cannot sell the dresses to any other customer.

The contract to buy the silk can be cancelled with three months' notice.

Analysis

The company can cancel the contract but must pay for the next three months deliveries:

Cost (300m × ₦3,000 × 3 months)

₦2,700,000

A provision should be recognised for this amount.

4.2 Future operating losses

A company 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.

4.3 Restructuring

A company may plan to restructure a significant part of its operations. Examples of restructuring are:

- Let the sale or termination of a line of business
- □ the closure of business operations in a country or geographical region, or relocation of operations from one region or country to another
- major changes in management structure, such as the removal of an entire 'layer' of management from the management hierarchy
- fundamental reorganisations changing the nature and focus of the company's operations.

A provision is recognised for the future restructuring costs only if a present obligation exists.

A constructive obligation to restructure arises only when a company:

- has a detailed formal plan for the restructuring identifying at least:
 - the business or part of a business concerned;
 - the principal locations affected;
 - the location, function, and approximate number of employees who will be compensated for terminating their services;
 - the expenditures that will be undertaken; and
 - when the plan will be implemented; and
- has raised a valid expectation in those affected that it will carry out the restructuring by starting to implement that plan or announcing its main features to those affected by it.

A restructuring decision made before the end of the reporting period does not give rise to a constructive obligation unless the company has:

- started to implement the plan; or
- announced the main features of the plan to those affected by it in a sufficiently specific manner to raise a valid expectation in them that the restructuring will occur.

A company might start to implement a restructuring plan, or announces its main features to those affected, after the reporting period but before the financial statements are authorised for issue.

Disclosure is required *under IAS 10 Events after the Reporting Period* if the restructuring is material.

A restructuring provision must only include the direct expenditures arising from the restructuring. These are those that are both:

- necessarily entailed by the restructuring; and
- not associated with the ongoing activities of the company.

A restructuring provision would not include costs that are associated with ongoing activities such as:

- retraining or relocating continuing staff;
- marketing; or
- investment in new systems etc.

4.4 Decommissioning liabilities and similar provisions

A company may be required to 'clean up' a location where it has been working when production ceases.

This is often the case in industries where companies are only granted licenses to operate on condition that they undertake to perform future clean-up operations.

Such industries include, oil and gas, mining and nuclear power.

For example, a company 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.

The normal rules apply for the recognition of a provision: a company recognises a provision only where it has an obligation to rectify environmental damage as a result of a past event.

A company 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) a company has actually promised to decontaminate a site or if it has adopted environmentally friendly policies and has made the public aware of this.

Accounting for a provision for a decommissioning liability

IAS 16 Property, plant and equipment identifies the initial estimate of the costs of dismantling and removing an item and restoring the site upon which it is located as part of the cost of an asset.

Future clean-up costs often occur many years in the future so any provision recognised is usually discounted to its present value.

Illustration: Initial recognition of a provision for a decommissioning	liability
Debit	Credit
Non-current asset X	
Provision	Х

The asset is depreciated over its useful life in the same way as other non-current assets.

The provision is remeasured at each reporting date. If there has been no change in the estimates (i.e. the future cash cost, the timing of the expenditure and the discount rate) the provision will increase each year because the payment of the cash becomes one year closer. This increase is described as being due to the unwinding of the discount.

The amount due to the unwinding of the discount must be expensed.



Example: Deferred consideration

A company has constructed an oil rig which became operational on 1 January 2013.

The company has contracted to remove the oil rig and all associated infrastructure and to restore the site to repair any environmental damage to the site on completion of drilling activity. This is estimated to be at a cost of \$8,000,000 in 10 years' time.

The pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the liability is 10%.

1 January 2013 – Initial measurement

№8,000,000 × $\frac{1}{(1.1)^{10}}$ = №3,084,346

Debit

3,084,346

Credit

3.084.346

Asset

Provision

31 December 2013

The provision is remeasured as:

№8,000,000 ×
$$\frac{1}{(1.1)^9}$$
 = №3,392,781

Provision:		Ħ
Balance b/f		3,084,346
Interest expense (the unwinding of the discount)		308,435
Balance c/f		3,392,781
The asset is depreciated (say on a stra	ight line)	
Asset:		N
Cost		8,000,000
Depreciation (^{N8,000,000} /10 years)		(800,000)
Carrying amount		7,200,000
Double entry:		
	Debit	Credit
Profit or loss (interest expense)	308,435	
Provision		308,435
Profit or loss (depreciation expense)	800,000	
Accumulated depreciation		800,000

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A provision for making good environmental damage might be recognised both on when an asset is installed and then increased as the asset is used.



Example:

A company is about to begin to operate a coal mine. At the end of the reporting period, the mineshaft 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 company 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 plugging the mine and removing the equipment and various buildings and the remaining 80% will relate to restoring the damage caused by the actual extraction of coal.

Analysis

The company has a legal obligation to rectify the environmental damage caused by the actual digging of the mineshaft and construction of the site. An outflow of economic benefits is probable.

Therefore the company 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 company 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).

4.5 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, companies 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 a company almost always has an alternative to incurring the expenditure, even if it is required by law (for example, for safety reasons). For example, the company 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 company has an obligation to incur the expenditure, which is unlikely. The obligating event is normally the actual repair or purchase of the replacement part.

Instead of recognising a provision, a company should capitalise expenditure incurred on replacement of an asset and depreciate this cost over its useful life. This is the period until the part needs to be replaced again. For example, the cost of replacing the furnace lining should be capitalised, so that the furnace lining is a non-current asset; the cost should then be depreciated over five years. (Note: *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.)

Normal repair costs, however, are expenses that should be included in profit or loss as incurred.

5 CONTINGENT LIABILITIES AND CONTINGENT ASSETS

Section overview

- Definitions
- Recognising contingent liabilities or contingent assets
- Disclosures about contingent liabilities and contingent assets
- Summary: liabilities, provisions, contingent liabilities and contingent assets

5.1 Definitions

'Contingent' means 'dependent on something else happening'.

Contingent liability

A contingent liability is one that does not exist at the reporting date but may do so in the future or it is a liability that exists at the reporting date but cannot be recognised because it fails one of the IAS 37 recognition criteria.



Definition: Contingent liability

A contingent liability is either of the following:

A contingent liability is a possible obligation that arises from past events and whose existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the entity.

OR

A contingent liability is a present obligation that arises from past events but is not recognised because it is not probable that an outflow of economic benefits will be required to settle the obligation or the amount of the obligation cannot be measured with sufficient reliability.

IAS 37 makes a distinction between:

- provisions which are recognised as liabilities (assuming that a reliable estimate can be made) because they are present obligations and it is probable that an outflow of resources embodying economic benefits will be required to settle the obligations; and
- contingent liabilities which are not recognised as liabilities because they are either:
 - possible obligations;
 - present obligations that do not meet the recognition criteria for provisions because either:
 - it is not probable that an outflow of resources embodying economic benefits will be required to settle the obligation; or
 - a sufficiently reliable estimate of the amount of the obligation cannot be made).



Example:

Company G is involved in a legal dispute with a customer, who is making a claim against Company G for losses it has suffered as a consequence of a breach of contract.

If Company G's lawyers believe that the likelihood of the claim succeeding is **possible** rather than probable, then the claim should be treated as a contingent liability and not as a provision.

Contingent asset



Definition: Contingent asset

A contingent asset is a possible asset that arises from past events whose existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the entity.

An example of a contingent asset might be a possible gain arising from an outstanding legal action against a third party. The existence of the asset (the money receivable) will only be confirmed by the outcome of the legal dispute.

5.2 Recognising contingent liabilities or contingent assets

Contingent liabilities and contingent assets **are not recognised** in the financial statements.

In some circumstances, information about the existence of a contingent asset or a contingent liability should be **disclosed** in the notes to the financial statements.

- Contingent liabilities should be disclosed unless the possibility of any outflow in settlement is remote (the meaning of 'remote' is not defined in IAS 37).
- Contingent assets should be disclosed only if an inflow in settlement is probable. 'Probable' is defined by IAS 37 as 'more likely than not'. (And if an inflow is certain, the item is an actual asset that should be recognised in the statement of financial position.)

5.3 Disclosures about contingent liabilities and contingent assets

Where disclosure of a contingent liability or a contingent asset is appropriate, the following disclosures are required:

- 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.

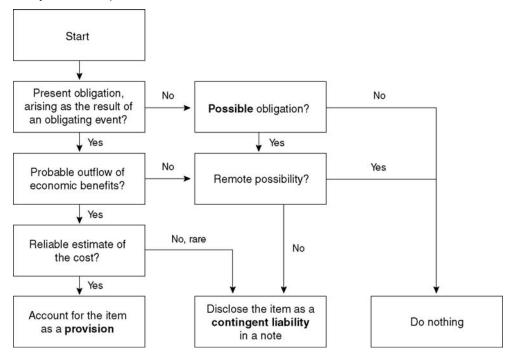
5.4 Summary: liabilities, provisions, contingent liabilities and contingent assets

The following table provides a summary of the rules about whether items should be treated as liabilities, provisions, contingent liabilities or contingent assets.

Criteria	Provision	Contingent liability		Contingent asset
Present obligation/ asset arising from past events?	Yes	Yes	No (but may come into existance in the future)	Only a possible asset
Will settlement result in outflow/ inflow of economic benefits?	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	Recognise a provision	Disclose as a contingent liability (unless the possibility of outflow is remote)	Disclose as a contingent liability (unless the possibility of outflow is remote)	Only disclose if inflow is probable

Decision tree

An Appendix to IAS 37 includes a decision tree, showing the rules for deciding whether an item should be recognised as a provision, reported as a contingent liability, or not reported at all in the financial statements.



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Practice question

Sokoto Transformers Ltd (STL) is organised into several divisions.

The following events relate to the year ended 31 December 2013.

1 A number of products are sold with a warranty. At the beginning of the year the provision stood at ₩750,000.

A number of claims have been settled during the period for 400,000.

As at the year end there were unsettled claims from 150 customers. Experience is that 40% of the claims submitted do not fulfil warranty conditions and can be defended at no cost.

The average cost of settling the other claims will be ₩7,000 each.

2 A transformer unit supplied to Rahim Yar Khan District Hospital exploded during the year.

The hospital has initiated legal proceedings for damages of ₦10 million against STL.

STL's legal advisors have warned that STL has only a 40% chance of defending the claim successfully. The present value of this claim has been estimated at $\frac{1}{10}$ 9 million.

The explosion was due to faulty components supplied to STL for inclusion in the transformer. Legal proceedings have been started against the supplier. STL's legal advisors say that STL have a very good chance of winning the case and should receive 40% of the amount that they have to pay to the hospital.

3 On 1 July 2013 STL entered into a two-year, fixed price contract to supply a customer 100 units per month.

The forecast profit per unit was \$1,600 but, due to unforeseen cost increases and production problems, each unit is anticipated to make a loss of \$800.

4 On 1 July 2012 one of STL's divisions has commenced the extraction of minerals in an overseas country. The extraction process causes pollution progressively as the ore is extracted.

There is no environmental clean-up law enacted in the country.

STL made public statements during the licence negotiations that as a responsible company it would restore the environment at the end of the licence.

STL has a licence to operate for 5 years. At the end of five years the cost of cleaning (on the basis of the planned extraction) will be \$5,000,000.

Extraction commenced on 1 July 2013 and is currently at planned levels.

Required

Prepare the provisions and contingencies note for the financial statements for the year ended 31 December 2013, including narrative commentary.

6 CHAPTER REVIEW

Chapter review

Before moving on to the next chapter check that you now know how to:

- Define liability, provision, contingent liability and contingent asset
- Distinguish between provisions, contingent liabilities or contingent assets
- Understand and apply the recognition criteria for provisions under IFRS
- Calculate/ measure provisions
- Account for changes in provisions
- Report provisions in final accounts

Solution: Provisions and contingencies				1		
	Warranty N 000	Legal claim N 000	Onerous contract ₩000	Clean-up costs ₩000	Total N 000	
	HOUD	HUUU	HOUU	HOUD	ROOO	
At 1 January 2013	750	nil	nil	500	1,250	
Used in the year	(400)				(400)	
Statement of profit or loss						
(balance)	280	9,000	1,440	1,000	11,720	
At 31 December						
2013	630	9,000	1,440	1,500	12,570	
	W1		W2	W3	W4	=

SOLUTION TO PRACTICE QUESTION

Warranty: The company grants warranties on certain categories of goods. The measurement of the provision is on the company's experience of the likelihood and cost of paying out under the warranty.

Legal claim: The legal claim provision is in respect of a claim made by a customer for damages as a result of faulty equipment supplied by the company. It represents the present value of the amount at which the company's legal advisors believe the claim is likely to be settled.

Onerous contract: The provision for the onerous contract is in respect of a two-year fixed-price contract which the company entered into on 1 July 2013. Due to unforeseen cost increases and production problems, a loss on this contract is now anticipated. The provision is based on the amount of this loss up to the end of the contract.

Clean-up costs: The provision for clean-up costs is in respect of the company's overseas mineral extraction operations.

The company is 18 months into a five year operating licence. The estimated cost of cleaning up the site at the end of the five years is №5,000,000. A provision of №1,000,000 per annum is recognised.

Contingent asset: The company is making a claim against a supplier of components. These components led in part to the legal claim against the company for which a provision has been made above. Legal advice is that this claim is likely to succeed and should amount to around 40% of the total damages (\\$3.6 million).

- W1 Warranty provision: 150 × ₩7,000 × 60% = ₩630,000.
- W2 Onerous contract: 18 months \times 100 units \times \aleph 800 = \aleph 1,440,000.
- W3 Clean up costs: ₩1,000,000 per annum as it is the extraction that causes the cost.

Skills level Financial reporting



IAS 12: Income taxes

Contents

- 1 Accounting for taxation
- 2 Deferred tax: Introduction
- 3 Recognition of deferred tax: basic approach
- 4 Recognition and measurement rules
- 5 Presentation and disclosure
- 6 Chapter review

INTRODUCTION

Purpose

In this element the accounting from the foundation level is taken up a level into financial accounting in the context of more complex events and transactions with a greater emphasis on compliance with regulations including International Accounting Standards and generally accepted accounting practices in the private sectors.

Students will be expected to demonstrate an understanding of and competence in financial statement analysis and basic analysis of choices in accounting treatments.

Competencies

2	Preparing separate financial statements
2(b)	Identify and state the laws, regulations accounting standards and other requirements that govern the production of financial statements by such entities.
2(c)	Draft and compile financial statements, or extracts from them, of an entity in accordance with its chosen policies and in accordance with IFRS and local

IAS 12 is an examinable document.

law.

Exam context

This chapter explains the accounting treatments for current tax and deferred tax.

By the end of this chapter you will be able to:

- Account for current tax
- Define temporary differences
- Identify temporary differences that cause deferred tax liabilities and deferred tax assets
- Determine the amount of deferred tax to be recognised in respect of temporary differences identified
- Apply the disclosure requirements of IAS12

1 ACCOUNTING FOR TAXATION

Section overview

- Taxation of profits
- Over-estimate or under-estimate of tax from the previous year
- Taxation in the statement of financial position

1.1 Taxation of profits

Companies pay tax on their profits. The tax charge is based on their accounting profit as adjusted according to the tax law of Nigeria.



Definitions

Accounting profit is profit or loss for a period before deducting tax expense.

Taxable profit (tax loss) is the profit (loss) for a period, determined in accordance with the rules established by the taxation authorities, upon which income taxes are payable (recoverable).

Current tax is the amount of income taxes payable (recoverable) in respect of the taxable profit (tax loss) for a period.

Tax computation

A series of adjustments is made against a company's accounting profit to arrive at its taxable profit. These adjustments involve:

- Adding back inadmissible deductions (accounting expenses which are not allowed as a deduction against taxable profit).
- Deducting admissible deductions which include:
 - expenses that are allowable as a deduction against taxable profit but which have not been recognised in the financial statements.
 - Income recognised in the financial statements but which is not taxed.

The tax rate is applied to the taxable profit to calculate how much a company owes in tax for the period. IFRS describes this as *current tax*.

An exam question might require you to perform a basic taxation computation from information given in the question.

Illustration: Tax computation format	
	Ħ
Accounting profit before tax	Х
Add back: Inadmissible deductions	Х
Less: Admissible deductions	(X)
Taxable profit	X
Tax rate	x%
Tax payable (current tax)	X

e,

Example: Taxation computation

Enugu Traders had an accounting profit of ₩789,000 for the year ended 31 December 2013.

The accounting profit was after depreciation of \$70,000 and included a profit on disposal (capital gain) of \$97,000.

The company had incurred borrowing costs of 170,000 in the year of which 10,000 had been capitalised in accordance with IAS 23.

The company holds some assets under finance leases. During the year it had recognised finance charge in respect of the leases was \$15,000 and rentals paid were \$80,000.

At 1 January 2013 the tax written down value of machinery was 120,000 and for buildings was 600,000.

Tax regime

All borrowing costs are deductible for tax purposes.

Capital gains are not taxable.

Fines are not tax deductible.

Finance lease rentals are deductible in full for tax purposes.

Accounting depreciation is not allowable for tax purposes.

Tax depreciation is claimable at 10% per annum for buildings and 15% per annum for machinery applied to tax written down value at the start of the year.

Tax is paid at 30%

The tax computation is as follows:

	N
Accounting profit	789,000
Add back inadmissible deductions:	
Accounting depreciation	70,000
Fine paid	125,000
Finance charge on finance lease	15,000
	210,000
Less: Admissible deductions	
Tax depreciation (15% \times 120,000 + 10% \times 600,000)	78,000
Lease payments	80,000
Capital gain	97,000
Borrowing cost capitalised	10,000
	(265,000)
Taxable profit	734,000
Tax rate	30%
Tax payable	220,200

N

Tax base

The above example referred to the tax written down value of the machinery and buildings. This is the tax authority's view of the carrying amount of the asset measured as cost less depreciation calculated according to the tax legislation.

IFRS uses the term tax base to refer to an asset or liability measured according to the tax rules.



Definition

The tax base of an asset or liability is the amount attributed to that asset or liability for tax purposes.

The tax base of an asset is the amount that the tax authorities will allow as a deduction in the future.

Measurement

Current tax liabilities (assets) for the current and prior periods must be measured at the amount expected to be paid to (recovered from) the taxation authorities, using the tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period.

1.2 Over-estimate or under-estimate of tax from the previous year

Current tax for current and prior periods must be recognised as a liability until paid. If the amount already paid exceeds the amount due the excess must be recognised as an asset.

When the financial statements are prepared, the tax charge on the profits for the year is likely to be an estimate. The figure for tax on profits in the statement of profit or loss is therefore not the amount of tax that will eventually be payable, because it is only an estimate. The actual tax charge, agreed with the tax authorities some time later, is likely to be different.

In these circumstances, the tax charge for the year is adjusted for any underestimate or over-estimate of tax in the previous year.

- an under-estimate of tax on the previous year's profits is added to the tax charge for the current year.
- an over-estimate of tax on the previous year's profits is deducted from the tax charge for the current year.



mple: Over-estimate or under-estimate of tax		
	Ħ	Ħ
Profit from operations		460,000
Interest		(60,000)
Profit before tax	-	400,000
Tax:		
Adjustment for under-estimate of tax in the previous year	3,000	
Tax on current year profits	100,000	
Tax charge for the year		(103,000)
Profit after tax	-	297,000

1.3 Taxation in the statement of financial position

The taxation charge for the year is the liability that the company expects to pay. The timing of tax payments on profits varies from one country to another, depending on the tax rules in each country. The actual amount of tax payable, and reported in the statement of financial position as a current liability (taxation payable), is calculated as follows:



Illustration: Taxation in the statement of financial position	
	Ħ
Tax payable at the beginning of the year	Х
Tax charge for the year	Х
	X

Tax payments made during the year	(X)
Tax payable at the end of the year	Х



Example: Taxation in the financial statements

Fresh Company has a financial year ending on 31 December.

At 31 December 2012 it had a liability for income tax of ₩77,000.

The tax on profits for the year to 31 December 2013 was ₩114,000.

The tax charge for the year to 31 December 2012 was over-estimated by ₩6,000.

 During the year to 31 December 2013, the company made payments of ₩123,000 in income tax.

 This would result in the following accounting treatment:

 Tax charge in the statement of profit or loss

 ₩

 Tory on current year profits

Tax on current year profits	114,000
Adjustment for over-estimate of tax in the previous year	(6,000)
Taxation charge for the year	108,000
Tax liability in the statement of financial position	Ħ
Tax payable at the beginning of the year	77,000
Tax charge for the year	108,000
	185,000
Tax payments made during the year	(123,000)
Tax payable at the end of the year	62,000

2 DEFERRED TAX: INTRODUCTION

Section overview

- Deferred taxation Underlying problem
- Identifying deferred tax balances
- IAS 12 approach to the problem

2.1 Deferred taxation - Underlying problem

As explained in the last section, in most jurisdictions the rules for the recognition and measurement of certain assets, liabilities, income and expenses for tax purposes differ from the equivalent rules under IFRSs. This results in different figures in the financial statements and in the tax computations/tax working papers.

It is convenient to envisage two separate sets of accounts:

- □ one set constructed following IFRS rules; and,
- a second set following the tax rules (tax computations).

This results in a breakdown in the tax rate percentage relationship between the profit before tax figure and the taxation figure. In other words the tax charge is not the tax rate applied to the profit before tax.



Example: Deferred taxation - Underlying problem

X Limited made accounting profit before tax of ₩50,000 in each of the years, 20X1, 20X2 and 20X3 and pays tax at 30%.

X Limited bought an item of plant on 1 January 20X1 for ₩9,000. This asset is to be depreciated on a straight line basis over 3 years.

Accounting depreciation is not allowed as a taxable deduction in the jurisdiction in which the company operates. Instead tax allowable depreciation is available as shown in the following tax computations.

	20X1	20X2	20X3
	Ħ	Ħ	₩
Accounting profit (after depreciation)	50,000	50,000	50,000
Add back depreciation	3,000	3,000	3,000
Deduct capital allowances	(4,500)	(2,500)	(2,000)
	(1,500)	500	1,000
Taxable profit	48,500	50,500	51,000
Tax @ 30%	14,550	15,150	15,300

Example continued: Deferred taxation - Underlying problem

In the absence of the recognition of deferred tax this would be reported as follows:

X Limited: Statement of profit or loss for the years ending:

	20X1	20X2	20X3	Total
	Ħ	Ħ	₩	₩
Profit before tax	50,000	50,000	50,000	150,000
Income tax @ 30% (as above)	(14,550)	(15,150)	(15,300)	(45,000)
Profit after tax	35,450	34,850	34,700	105,000

Looking at the total column, the profit before tax is linked to the taxation figure through the tax rate ($150,000 \times 30\% = 45,000$).

This is not the case in each separate year.

This is because the tax rate is not applied to the accounting profit before tax but to find the current tax charge but to that figure after adjustments.

The item of plant is written off in the calculation of both accounting profit and taxable profit but by different amounts in different periods. The differences are temporary in nature as over the three year period, the same expense is recognised for the item of plant under both the accounting rules and the tax rules.

Transactions recognised in the financial statements in one period may have their tax effect deferred to (or more rarely, accelerated from) another. Thus the tax is not matched with the underlying transaction that has given rise to it.

In the above example the tax consequences of an expense (depreciation in this case) are recognised in different periods to when the expense is recognised.

Accounting for deferred tax is based on the principle that the tax consequence of an item should be recognised in the same period as the item is recognised. It tries to match tax expenses and credits to the period in which the underlying transactions to which they relate are recognised.

In order to do this, the taxation effect that arises due to the differences between the figures recognised under IFRS and the tax rules is recognised in the financial statements.

The double entry to achieve this is between a deferred tax balance in the statement of financial position (which might be an asset or a liability) and the tax charge in the statement of profit or loss. (More complex double entry is possible but this is outside the scope of your syllabus).

The result of this is that the overall tax expense recognised in the statement of profit or loss is made up of the current tax and deferred tax numbers.



Definition: Tax expense

Tax expense (tax income) is the aggregate amount included in the determination of profit or loss for the period in respect of current tax and deferred tax.

2.2 Identifying deferred tax balances

The differences between the two sets of rules will result in different numbers in the financial statements and in the tax computations.

Two perspectives

These differences can be viewed from:

- a statement of profit or loss (income and expenses) perspective:
 - the differences arising in the period are identified by comparing income and expenses recognised under IFRS to the equivalent figures that are taxable or allowable under tax legislation;
 - the approach identifies the deferred tax expense or credit recognised in the statement of profit or loss for the period (with the other side of the entry recognised as a liability or asset);or
- a statement of financial position (assets and liabilities) perspective:
 - the differences are identified on a cumulative basis by comparing the carrying amount of assets and liabilities under IFRS to the carrying amount of the same assets and liabilities according to the tax rules;
 - the approach identifies the deferred tax liability (or asset) that should be recognised (with the movement on this amount recognised as a credit or expense in the statement of profit or loss).

IAS 12 uses the statement of financial position perspective but both will be explained here for greater understanding.



Example continued: Two perspectives

The following table identifies the differences between the accounting treatment and the taxation treatment of the item of plant from both perspectives.

	Carrying amount	Tax base	Assets and liabilities	Income and expenses
Cost at 01/01/X1	9,000	9,000		
Charge for the year	(3,000)	(4,500)		(1,500)
Cost at 31/12/X1	6,000	4,500	1,500	
Charge for the year	(3,000)	(2,500)		500
Cost at 31/12/X2	3,000	2,000	1,000	
Charge for the year	(3,000)	(2,000)		1,000
Cost at 31/12/X3	_	_		_

Statement of profit or loss perspective



Example continued: Statement of profit or loss perspective

20X1:

₩3,000 is disallowed but ₩4,500 is allowed instead.

- \Rightarrow taxable expense is \$1,500 greater than the accounting expense.
- \Rightarrow taxable profit is 1,500 less than accounting profit.
- \Rightarrow current tax is reduced by 30% of 1,500 (450).
- \Rightarrow deferred tax expense of \$450 must be recognised to restore the balance (Dr: Tax expense / Cr: Deferred taxation liability).

20X2:

₩3,000 is disallowed but ₩2,500 is allowed instead.

- \Rightarrow taxable expense is \$500 less than the accounting expense.
- ⇒taxable profit is ₩500 more than accounting profit.
- \Rightarrow current tax is increased by 30% of \ddagger 500 (\ddagger 150).
- ⇒ deferred tax credit of ₩150 must be recognised to restore the balance (Dr: Deferred taxation liability / Cr: Tax expense).

20X3:

₦3,000 is disallowed but ₦2,000 is allowed instead.

- \Rightarrow taxable expense is \$1,000 less than the accounting expense.
- \Rightarrow taxable profit is \$1,000 more than accounting profit.
- \Rightarrow current tax is increased by 30% of 1,000 (300).
- \Rightarrow deferred tax credit of \$300 must be recognised to restore the balance (Dr: Deferred taxation liability / Cr: Tax expense).

The statement of profit or loss would now be as follows:

	20X1	20X2	20X3
	₩	Ħ	₩
Profit before tax	50,000	50,000	50,000
Income tax @ 30% W1	14,550	15,150	15,300
Deferred tax	450	(150)	(300)
	(15,000)	(15,000)	(15,000)
Profit after tax	35,000	35,000	35,000
Statement of financial position	20X1	20X2	20X3
Deferred tax liability:	₩	Ħ	Ħ
Balance b/f	nil	450	300
Movement in the year	450	(150)	(300)
	450	300	nil

Statement of financial position perspective



Example continued: Statement of financial position perspective

This approach compares the carrying amount of assets and liabilities in the financial statements to their tax base to identify the cumulative differences to that point in time.

These differences are called temporary differences.

An asset in the financial statements compared to the taxman's view requires the recognition of a deferred tax liability which is measured by applying the tax rate to the temporary difference.

	Carrying amount	Tax base	Temporary difference	Tax @ 30%
At 31/12/X1	6,000	4,500	1,500	450
At 31/12/X2	3,000	2,000	1,000	300
At 31/12/X3	nil	nil	nil	nil

By the end of 20X1

The asset in the financial statements is \$1,500 more than the tax base. A deferred tax liability of \$450 must be recognised.

	Debit	Credit
Tax expense	450	
Deferred tax liability		450

By the end of 20X2

The asset in the financial statements is \$1,000 more than the tax base.

A deferred tax liability of ₩300 must be recognised but there was ₩450 at the start of the year so the liability must be reduced.

	Debit	Credit
Deferred tax liability	150	
Tax expense		150

By the end of 20X3

The asset in the financial statements is the same as the tax base (nil).

A deferred tax liability of nil must be recognised but there was ₩300 at the start of the year so the liability must be reduced.

	Debit	Credit
Deferred tax liability	300	
Tax expense		300

These amounts are the same as on the previous page and would have the same impact on the financial statements.

The recognition of deferred taxation has restored the relationship between profit before tax and the tax charge through the tax rate in each year (30% of \$50,000 = \$15,000).

Terminology

When a difference comes into existence or grows it is said to originate. When the difference reduces in size it is said to reverse.

Thus, in the above example a difference of \$1,500 originated in 20X1. This difference then reversed in 20X2 and 20X3.

Warning

Do not think that an origination always leads to the recognition of a liability and an expense. The direction of the double entry depends on the circumstances that gave rise to the temporary difference. This is covered in section 3 of this chapter.

2.3 IAS 12 approach to the problem

IAS 12: Income taxes, advocates a statement of financial position approach.

Business must identify a deferred tax liability (or perhaps asset) at each reporting date.

It must do this by identifying the differences between the carrying amount of assets and liabilities in the financial statements to the tax base (tax authority's view of those same items). These differences are known as temporary differences (this will be explained in more detail in the next section).

Once the temporary differences have been identified the deferred tax balance is calculated by applying the appropriate tax rate to the difference.

3 RECOGNITION OF DEFERRED TAX: BASIC APPROACH

Section overview

- Identifying the temporary difference
- Taxable and deductible temporary differences
- Accounting for deferred tax
- Sources of temporary differences

3.1 Identifying the temporary difference

Accounting for deferred tax is based on the identification of the temporary differences.



Definition: Temporary difference

Temporary differences are differences between the carrying amount of an asset or liability in the statement of financial position and its tax base.

Temporary differences may be either:

- (a) taxable temporary differences, which are temporary differences that will result in taxable amounts in determining taxable profit (tax loss) of future periods when the carrying amount of the asset or liability is recovered or settled; or
- (b) deductible temporary differences, which are temporary differences that will result in amounts that are deductible in determining taxable profit (tax loss) of future periods when the carrying amount of the asset or liability is recovered or settled.

The tax base of an asset is the amount that will be deductible for tax purposes against any taxable economic benefit that will flow to an entity when it recovers the carrying amount of the asset.



Definition: Tax base

The tax base of an asset or liability is the amount attributed to that asset or liability for tax purposes.

3.2 Taxable and deductible temporary differences

Temporary differences may be either taxable temporary differences or deductible temporary differences.

Taxable temporary differences

A taxable temporary difference is caused by a debit in the carrying amount of an asset or liability in the financial statements compared to the tax base of that item.

Taxable temporary differences lead to the recognition of deferred tax liabilities.



Example: Taxable temporary differences

Each of the following is a taxable temporary difference leading to the recognition of a deferred tax liability.

	Carrying amount	Tax base	Temporary difference	Deferred tax liability (30%)
Non-current asset	1,000	800	200	60
Inventory	650	600	50	15
Receivable	800	500	300	90
Receivable (note 1)	500	nil	500	150
Payable (note 2)	(1,000)	(1,200)	200	60

Note 1:

This implies that an item accounted for using the accruals basis in the financial statements is being taxed on a cash bases.

If an item is taxed on cash basis the tax base would be zero as no receivable would be recognised under the tax rules.

Note 2:

The credit balance in the financial statements is \$1,000 and the tax base is a credit of \$1,200. Therefore, the financial statements show a debit balance of 200 compared to the tax base. This leads to a deferred tax liability.

IAS 12 rationalises the approach as follows (using the non-current assets figures to illustrate)

Inherent in the recognition of an asset is that the carrying amount (\$1,000) will be recovered in the form of economic benefits that will flow to the entity in future periods.

When the carrying amount exceeds the tax base (as it does in this case at \$800) the amount of taxable economic benefit will exceed the amount that will be allowed as a deduction for tax purposes.

This difference is a taxable temporary difference and the obligation to pay the resulting income tax in the future periods is a liability that exists at the reporting date.

The company will only be able to expense \$800 in the tax computations against the recovery of \$1,000.

The $\bigstar200$ that is not covered will be taxed and that tax should be recognised for now.



Definition: Deferred tax liability

Deferred tax liabilities are the amounts of income taxes payable in future periods in respect of taxable temporary differences.

Deductible temporary differences

A deductible temporary difference is caused by a credit in the carrying amount of an asset or liability in the financial statements compared to the tax base of that item.

Deductible temporary differences lead to the recognition of deferred tax assets.



Example: Deductible temporary differences

Each of the following is a deductible temporary difference leading to the recognition of a deferred tax asset.

	Carrying amount	Tax base	Temporary difference	Deferred tax asset (30%)
Non-current asset (note 1)	1,000	1,200	(200)	60
Receivable	800	900	(100)	30
Payable	(1,200)	(1,000)	(200)	60

Note 1:

There is a debit balance for the non-current asset of \$1,000 and its tax base is a debit of \$1,200. Therefore, the financial statements show a credit balance of 200 compared to the tax base. This leads to a deferred tax asset.



Definition: Deferred tax asset

Deferred tax assets are the amounts of income taxes recoverable in future periods in respect of:

- (a) deductible temporary differences;
- (b) the carry forward of unused tax losses; and
- (c) the carry forward of unused tax credits.

(The deferred tax assets arising from the carry forward of unused tax losses and the carry forward of unused tax credits are not in your syllabus).

3.3 Accounting for deferred tax

Accounting for deferred taxation involves the recognition of a liability (or an asset) in the statement of financial position at each year end. The business must then account for the movement on the liability.

The other side of the entry that changes the balance on the deferred taxation liability (asset) is recognised in the statement of profit or loss. (Note, that some differences require double entry to other comprehensive income or directly to equity but the deferred tax consequences of these is outside you syllabus).

Approach

The calculation of the balance to be recognised in the statement of financial position is quite straightforward.

- Step 1: Identify the temporary differences (this should always involve a columnar working as in the example below);
- **Step 2:** Multiply the temporary differences by the appropriate tax rate.
- **Step 3:** Compare this figure to the opening figure and complete the double entry.



Example: Accounting for deferred tax

X plc has non-current assets with a carrying value of 200,000 and a tax base of 140,000.

It has recognised a receivable of \$10,000. This relates to income which is taxed on cash basis.

It has also accrued for an expense in the amount of \$20,000. Tax relief is only given on this expense when it is paid.

At the start of the year X plc had a deferred tax liability of ₩12,000.

Required

Show the movement on the deferred tax account and construct the journal to record this movement.

In order to answer a question like this you need to complete the following proforma:

Deferred taxation balance at the start of the year	12,000
Transfer to the income statement (as a balancing figure)	?
Deferred taxation balance at the end of the year (working)	?

In order to complete this you need a working to identify the temporary differences.

₩



Example continued: Accounting for deferred tax

The temporary differences are identified and the required deferred tax balance calculated as follows:

Working:

	Carrying amount	Tax base	Temporary differences	DT balance at 30%
	Ħ	Ħ	N	Ħ
Non-current assets	200,000	140,000	60,000	18,000 (liability)
Accrued income	10,000	-	10,000	3,000 (liability)
Accrued expense	(20,000)	_	(20,000)	(6,000) asset
			50,000	15,000

The answer can then be completed by filling in the missing figures and constructing the journal as follows:

		N
Deferred taxation balance at the start of the year		12,000
Statement of profit or loss (as a balancing figure)		3,000
Deferred taxation balance at the end of the year (working)	15,000
Journal:	Debit	Credit
Income statement (tax expense)	3,000	
Deferred tax liability		3,000

3.4 Sources of temporary differences

Circumstances under which temporary differences arise include;

- Situations when income or expense is included in accounting profit in one period but included in the taxable profit in a different period. Examples include:
 - items which are taxed on a cash basis but which will be accounted for on an accruals basis.
 - situations where the accounting depreciation does not equal tax allowable depreciation.
- Revaluation of assets where the tax authorities do not amend the tax base when the asset is revalued. (Not in your syllabus).

Examples leading to the recognition of deferred tax liabilities

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: Recognition of deferred tax liabilities

A plc recognises interest receivable of ₩600,000 in its financial statements.

No cash has yet been received and interest is taxed on a cash basis. The interest receivable has a tax base of nil.

	Carrying amount	Tax base	Temporary difference	
	#	#	₩	
Interest receivable	600,000	-	600,000	
Deferred tax liability @ 30%			180,000	

Development costs may be capitalised and amortised (in accordance with IAS 38) but tax relief may be given for the development costs as they are paid.



Example: Recognition of deferred tax liabilities

In the year ended 30 June 2014, B PIc incurred development costs of ₩320,000. These were capitalised in accordance with IAS 38, with an amortisation charge of

₩15,000 in 2014.

Development costs are an allowable expense for tax purposes in the period in which they are paid. The relevant tax rate is 30%.

Carrying amount	Tax base	Temporary difference	
Ħ	Ħ	Ħ	
305,000	_	305,000	
		91,500	
	amount ₩	amount Tax base ₩ ₩	amount Tax base difference N N N 305,000 – 305,000

Accounting depreciation is not deductible for tax purposes in most tax regimes. Instead the governments allow a deduction on statutory grounds.



Example: Recognition of deferred tax liabilities

C plc has non-current assets at 31 December 2013 with a cost of ₩5,000,000.

Accumulated depreciation for accounting purposes is ₩2,250,000 to give a carrying amount of ₩2,750,000

Tax deductible depreciation of ₦3,000,000 has been deducted to date.

The fixed assets have a tax base of ₩2,000,000.

	Carrying amount ₩	Tax base ₩	Temporary difference ₦	
Non-current asset	2,750,000	2,000,000	750,000	
Deferred tax liability @ 30%			225,000	

Examples leading to the recognition of deferred tax assets

Warranty costs may be recognised as a liability (in accordance with IAS 37) but tax relief may be given only when the cash is spent in the future.



Example: Recognition of deferred tax assets

D plc 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. (Therefore the tax base is nil).

The company is very profitable and does not expect this to change. (This means that they expect to pay tax in the future so should be able to recover the deferred tax asset).

	Carrying amount	Tax base	Temporary difference
	Ħ	Ħ	N
Warranty provision	100,000	_	100,000
Deferred tax asset @ 30%			30,000
This time the financial state the tax authority's view of th asset.		•	•

It is possible to have a temporary difference even if there is no asset or liability. In such cases there is a zero value for the asset (or liability). For example, research costs may be expensed as incurred (in accordance with IAS 38) but tax relief may be given for the costs at a later date.



Example: Recognition of deferred tax assets

In the year ended 31 December 2013, E PIc incurred research costs of ₦500,000. These were expensed accordance with IAS 38.

Research costs are not permitted as a taxable deduction until a later period. The relevant tax rate is 30%.

	Carrying amount	Tax base	Temporary difference	
	Ħ	Ħ	Ħ	
Research costs	nil	500,000	500,000	
Deferred tax asset @ 30%			150,000	

4 RECOGNITION AND MEASUREMENT RULES

Section overview

- Recognition of deferred tax liabilities
- Recognition of deferred tax assets
- A recognition issue non-taxable items
- Measurement of deferred tax balances

4.1 Recognition of deferred tax liabilities

A deferred tax liability must be recognised for all taxable temporary differences, except to the extent that the deferred tax liability arises from:

- Let the initial recognition of goodwill; or
- the initial recognition of an asset or liability in a transaction which:
 - is not a business combination; and
 - at the time of the transaction, affects neither accounting profit nor taxable profit (tax loss).

There is further guidance on the recognition of deferred tax liabilities in respect of taxable temporary differences arising in a business combination but that is outside the scope of your syllabus.

Comment on the exceptions: Goodwill

Goodwill usually exists only in group accounts. Groups are not taxed as such: it is the members of a group that are the taxable entities, i.e. the parent and each subsidiary are taxed separately. Goodwill in group accounts is not an asset recognised by the tax authorities so has a tax base of nil. This means that goodwill is a temporary difference but does not lead to the recognition of a deferred tax liability because of the exception.



Example: Goodwill

In the year ended 31 December 2013, A Plc acquired 80% of another company and recognised goodwill of №100,000 in respect of this acquisition.

The relevant tax rate is 30%.

	Carrying amount	Tax base	Temporary difference
	Ħ	Ħ	N
Goodwill	100,000	nil	100,000
Deferred tax (due to the e	xception)		nil
The exception refers to th	e initial recognition of	of goodwill. He	owever, there is

The exception refers to the initial recognition of goodwill. However, there is no deferred tax in respect of this difference at any time in the future even if the carrying amount (and hence the temporary difference) changes.. In some jurisdictions goodwill can arise in individual company financial statements. Furthermore, the goodwill might be tax deductible in those jurisdictions. In such cases goodwill is just the same as any other asset and its tax consequences would be recognised in the same way.



Example: Goodwill

In the year ended 31 December 2013, B Plc acquired a partnership and recognised good will of ₩100,000 in respect of this acquisition.

The relevant tax rate is 30%.

NNNGoodwill100,000100,000nilDeferred tax on initial recognitionnil		Carrying amount	Tax base	Temporary difference
		N	Ħ	₩
Deferred tax on initial recognition nil	Goodwill	100,000	100,000	nil
	Deferred tax on initial reco	gnition		nil

In the future, both the carrying amount and the tax base of the goodwill might change leading to deferred tax consequences.

Comment on the exceptions: Initial recognition of other items

A temporary difference may arise on initial recognition of an asset or liability, for example if part or all of the cost of an asset will not be deductible for tax purposes. This exception relates to the initial recognition of an asset or liability in a transaction that is not a business combination. In other words, the exception does not apply if the initial recognition is due to a business combination. There is guidance on deferred tax arising in business combinations but this is not examinable at this level.

If the transaction is not a business combination and effects either accounting profit or taxable profit the exception does not apply and deferred tax is recognised on initial recognition.



Example: Goodwill

In the year ended 31 December 2013, C Plc lent ₩100,000 to another company and incurred costs of ₩5,000 in arranging the loan. The loan is recognised at ₩105,000 in the accounts.

Under the tax rules in C Plc's jurisdiction the cost of arranging the loan is deductible in the period in which the loan is made.

The relevant tax rate is 30%.

	Carrying amount				Temporary difference
	₩	#	#		
Goodwill	105,000	100,000	5,000		
Deferred tax on initial recogn	ition		1,500		

If the transaction is not a business combination, and affects neither accounting profit nor taxable profit, deferred tax would normally be recognised but the exception prohibits it.



Example: Initial recognition

In the year ended 31 December 2013, D Plc acquired a non-current asset at a cost of ₩100,000. The asset is to be depreciated on a straight line basis over its useful life of 5 years.

The asset falls outside the tax system. Depreciation is not allowable for tax purposes and there is no tax deductible equivalent. Any gain on disposal is not taxable and any loss on disposal not taxable.

The relevant tax rate is 30%.

Initial recognition:

	Carrying amount	Tax base	Temporary difference
	Ħ	Ħ	₩
lon-current asset	100,000	nil	100,000
Deferred tax on initial rec	ognition (due to the	e exception)	nil
Subsequent measuremen	nt (1 year later)		
Subsequent measuremen	nt (1 year later) Carrying amount	Tax base	Temporary difference
Subsequent measuremen	Carrying	Tax base ₩	
Subsequent measuremen Non-current asset	Carrying amount		difference
	Carrying amount ₩ 80,000	₩ nil	difference ₩

4.2 Recognition of deferred tax assets

A deferred tax asset must be recognised for all deductible temporary differences to the extent that it is probable that taxable profit will be available against which the deductible temporary difference can be utilised, unless the deferred tax asset arises from the initial recognition of an asset or liability in a transaction that:

- □ is not a business combination; and
- at the time of the transaction, affects neither accounting profit nor taxable profit (tax loss).

There is further guidance on the recognition of deferred tax asset in respect of deductible temporary differences arising in a business combination but that is outside the scope of your syllabus.

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.

This means that IAS 12 brings a different standard to the recognition of deferred tax assets than it does to deferred tax liabilities:

- liabilities are always be recognised in full (subject to certain exemptions beyond the scope of your syllabus); but
- assets may not be recognised in full (or in some cases at all).

IAS 12 also requires that the carrying amount of a deferred tax asset must be reviewed at the end of each reporting period to check if it is still probable that sufficient taxable profit is expected to be available to allow the benefit of its use.

If this is not the case the carrying amount of the deferred tax asset must be reduced to the amount that it is expected will be used in the future. Any such reduction might be reversed in the future if circumstances change again.

4.3 A recognition issue – non-taxable items

The definition of temporary difference is repeated here for convenience:



Definition: Temporary difference

Temporary differences are differences between the carrying amount of an asset or liability in the statement of financial position and its tax base.

Deferred tax should be recognised only in respect of those items where expense or income is recognised in both accounting profit and taxable profit but in different periods.

Unfortunately, applying the definition of temporary difference given above would result in the inclusion of items where the difference might not be temporary but permanent in nature.



Example: Permanent difference.

E Plc has recognised ₦100,000 income as a receivable in its accounting profit for the year.

This income is not taxable.

Applying the definition of temporary difference would lead to the following:

	Carrying amount	Tax base	Temporary difference
	Ħ	Ħ	Ħ
Receivable	100,000	nil	100,000

However, this is not a temporary difference. It is not a transaction recognised in accounting profits in one period and taxable profits in another.

It is never recognised in taxable profits.

Items not taxable or tax allowable should not result in the recognition of deferred tax balances. In order to achieve this effect, IAS 12 includes the following rules:

- the tax base of an asset is the amount that will be deductible for tax purposes against any taxable economic benefits that will flow to an entity when it recovers the carrying amount of the asset. If those economic benefits will not be taxable, the tax base of the asset is equal to its carrying amount.
- the tax base of a liability is its carrying amount, less any amount that will be deductible for tax purposes in respect of that liability in future periods. In the case of revenue which is received in advance, the tax base of the resulting liability is its carrying amount, less any amount of the revenue that will not be taxable in future periods.

Returning to the above example:



Example: Permanent difference.

E Plc has recognised N100,000 income as a receivable in its accounting profit for the year.

This income is not taxable.

Applying the definition of temporary difference would lead to the following:

	Carrying		Temporary	
	amount	Tax base	difference	
	N	Ħ	N	
Receivable	100,000	100,000	nil	

The item is not taxable so its tax base is set to be the same as its carrying amount.

This results in a nil temporary difference and prevents the recognition of deferred tax on this asset.

This sounds rather complicated but just remember that it is a mechanism to exclude non-taxable items from the consideration of deferred tax (even though the definition might have included them).

Remember this: there is no deferred tax to recognise on items that are not taxed or for which no tax relief is given.

Closing comment

Accounting for deferred taxation restores the relationship that should exist between the profit before tax in the financial statements, the tax rate and the tax charge. In earlier examples we saw that after accounting for deferred tax the tax expense (current and deferred tax) was equal to the tax rate \times the accounting profit before tax.

This will not be the case if there are permanent differences.

4.4 Measurement of deferred tax balances

Deferred tax assets and liabilities must not be discounted.

Deferred tax assets and liabilities must be measured at the tax rates that are expected to apply to the period when the asset is realised or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period.

5 PRESENTATION AND DISCLOSURE

Section overview

- Presentation
- Disclosure

5.1 Presentation

IAS 12: Income taxes contains rules on when current tax liabilities may be offset against current tax assets

Offset of current tax liabilities and assets

A company must offset current tax assets and current tax liabilities if, and only if, it:

- has a legally enforceable right to set off the recognised amounts; and
- □ intends either to settle on a net basis, or to realise the asset and settle the liability simultaneously.

These are the same rules as apply to assets and liabilities in general as described in IAS 1.

In the context of taxation balances whether a current tax liability and asset may be offset is usually specified in tax law, thus satisfying the first criterion.

In most cases, where offset is legally available the asset would then be settled on a net basis (i.e. the company would pay the net amount).

Offset of deferred tax liabilities and assets

A company must offset deferred tax assets and deferred tax liabilities if, and only if:

- the entity has a legally enforceable right to set off current tax assets against current tax liabilities; and
- □ the deferred tax assets and the deferred tax liabilities relate to income taxes levied by the same taxation authority on either:
 - the same taxable entity; or
 - different taxable entities which intend either to settle current tax liabilities and assets on a net basis, or to realise the assets and settle the liabilities simultaneously, in each future period in which significant amounts of deferred tax liabilities or assets are expected to be settled or recovered.

The existence of deferred tax liability is strong evidence that a deferred tax asset from the same tax authority will be recoverable.



Example: Offset of deferred tax liabilities and assets

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 is probable that it will be recovered in the foreseeable future.

5.2 Disclosure

This section does not include the IAS 12 disclosure requirements in respect of those aspects of deferred taxation which are not examinable at this level.

Components of tax expense (income)

The major components of tax expense (income) must be disclosed separately.

Components of tax expense (income) may include:

- current tax expense (income);
- any adjustments recognised in the period for current tax of prior periods;
- the amount of deferred tax expense (income) relating to the origination and reversal of temporary differences;
- the amount of deferred tax expense (income) relating to changes in tax rates or the imposition of new taxes;
- the amount of the benefit arising from a previously unrecognised tax loss, tax credit or temporary difference of a prior period that is used to reduce current tax expense;
- deferred tax expense arising from the write-down, or reversal of a previous write-down, of a deferred tax asset;
- the amount of tax expense (income) relating to those changes in accounting policies and errors that are included in profit or loss in accordance with IAS 8, because they cannot be accounted for retrospectively.

Q	

llustration: Note to the statement of profit or loss	
Taxation expense	Ħ
Current tax	129,000
Adjustment for over estimate of tax in prior year	(5,000)
Deferred taxation	
Arising during the period	20,000
Due to change in tax rate	(5,000)
	15,000
	172,000



Example: Change in rate

31 December 2013

Profits were taxed at 30%.

A Plc recognised a deferred tax liability of ₩30,000 (it had temporary differences of ₩100,000).

31 December 2014

The tax rate changed to 25% during the year.

At the year- end A PIc carried out the following deferred tax calculation:

	Carrying amount	Tax base	Temporary difference
	Ħ	Ħ	₩
Non-current assets	1,000,000	820,000	180,000
Deferred tax at 25%			45,000

The movement on the deferred tax liability would be shown as follows:

		Ħ
Deferred taxation b/f		30,000
Statement of profit or loss: Rate change (5/30 \times 30,0	00)	(5,000)
Deferred taxation b/f restated		25,000
Statement of profit or loss (balancing figure – due to t origination of temporary differences in the period)	he	20,000
Deferred taxation balance at the end of the year (work	king)	45,000
Journal:	Debit	Credit
Income statement (tax expense)		5,000
Income statement (tax expense)	20,000	1
Deferred tax liability		15,000

Tax reconciliation

The following must also be disclosed:

- an explanation of the relationship between tax expense (income) and accounting profit in either or both of the following forms:
 - a numerical reconciliation between tax expense (income) and the product of accounting profit multiplied by the applicable tax rate(s), disclosing also the basis on which the applicable tax rate(s) is (are) computed; or
 - a numerical reconciliation between the average effective tax rate and the applicable tax rate, disclosing also the basis on which the applicable tax rate is computed;
- an explanation of changes in the applicable tax rate(s) compared to the previous accounting period;

A major theme in this chapter is that the different rules followed to calculate accounting profit and taxable profit lead to distortion of the relationship that exists

between profit before tax in the financial statements, the tax rate and the current tax expense for the period. Accounting for deferred tax corrects this distortion so that after accounting for deferred tax the tax expense (current and deferred tax) was equal to the tax rate \times the accounting profit before tax.

This is not the case if there are permanent differences. The above reconciliations show the effect of permanent differences.



Example: Tax reconciliations

B Plc had an accounting profit before tax of ₩500,000.

This contained income of ₩20,000 which is not taxable.

Accounting depreciation in the year was №100,000 and tax allowable depreciation was №150,000. This means that a temporary difference of №50,000 originated in the year.

ne year.	
B Plc's taxation computation is as follows:	Ħ
Accounting profit	500,000
Add back inadmissible deductions	
Depreciation	100,000
Deduct admissible deduction	
Tax allowable depreciation	150,000
Income not taxed	20,000
	(170,000)
Taxable profit	430,000
Tax at 30%	129,000
Tax expense	Ħ
Current tax	129,000
Deferred taxation (30% × ₩50,000)	15,000
Tax expense	144,000
Tax reconciliation (in absolute numbers)	Ħ
Accounting profit	500,000
Applicable tax rate	30%
Accounting profit $ imes$ the applicable tax rate	150,000
Tax effect of untaxed income (30% of ₦20,000)	(6,000)
Tax expense	144,000
Tax reconciliation (in percentages)	
Applicable tax rate	30.0%
Tax effect of untaxed income (6,000/500,000)	(1.2%)
Effective tax rate (144,000/500,000)	28.8%

Other disclosures

An entity must disclose the amount of income tax consequences of dividends to shareholders of the entity that were proposed or declared before the financial statements were authorised for issue, but are not recognised as a liability in the financial statements;

An entity must disclose the amount of a deferred tax asset and the nature of the evidence supporting its recognition, when:

- the utilisation of the deferred tax asset is dependent on future taxable profits in excess of the profits arising from the reversal of existing taxable temporary differences; and
- □ the entity has suffered a loss in either the current or preceding period in the tax jurisdiction to which the deferred tax asset relates.

6 CHAPTER REVIEW

Chapter review

Before moving on to the next chapter check that you now know how to:

- Account for current tax
- Define temporary differences
- Identify temporary differences that cause deferred tax liabilities and deferred tax assets
- Determine the amount of deferred tax to be recognised in respect of temporary differences identified
- Apply the disclosure requirements of IAS12

1

2

Practice questions

XYZ Limited had an accounting profit before tax of \$90,000 for the year ended 31^{st} December 2013. The tax rate is 30%.

The following balances and information are relevant as at 31st December 2013.

Non-current assets	N	N	
Property	63,000		1
Plant and machinery	100,000	90,000	2
Assets held under finance lease	80,000		3
Receivables:			
Trade receivables	73,000		4
Interest receivable	1,000		5
Payables			
Fine	10,000		
Finance lease obligation	85,867		3
Interest payable	3,300		5

Note 1: The property cost the company ₩70,000 at the start of the year. It is being depreciated on a 10% straight line basis for accounting purposes.

The company's tax advisers have said that the company can claim \$42,000 accelerated depreciation as a taxable expense in this year's tax computation.

Note 2: The balances in respect of plant and machinery are after providing for accounting depreciation of \$12,000 and tax allowable depreciation of \$10,000 respectively.

Note 3: The asset held under the finance lease was acquired during the period.

The tax code does not distinguish between finance leases and operating leases. Rental expense for leases is tax deductible. The annual rental for the asset is ₩28,800 and was paid on 31st December 2014.

Note 4: The receivables figure is shown net of an allowance for doubtful balances of ₦7,000. This is the first year that such an allowance has been recognised. A deduction for debts is only allowed for tax purposes when the debtor enters liquidation.

Note 5: Interest income is taxed and interest expense is allowable on a cash basis. There were no opening balances on interest receivable and interest payable.

- a. Prepare a tax computation and calculate the current tax expense.
- b. Calculate the deferred tax liability required as at 31 December 2013.
- c. Show the movement on the deferred tax account for the year ended 31 December 2013 given that the opening balance was ₩3,600 Cr.
- d. Prepare a note showing the components of the tax expense for the period.
- e. Prepare a reconciliation between the tax expense and the product of the accounting profit multiplied by the applicable rate.

SOLUTIONS TO PRACTICE QUESTIONS

olution: Tax computation for the year ended 31 Dece	mber 2013		1 a
	₩	N	
Accounting profit		90,000	
Add back inadmissible expenses			
Depreciation on property	7,000		
Depreciation of plant and machinery	12,000		
Depreciation of asset held under finance lease	20,000		
Finance charge re finance lease	14,667		
Increase in provision for doubtful debts	7,000		
Interest payable accrual	3,300		
Fine	10,000	73,967	
Less admissible deductions		_	
Interest income	1,000		
Tax allowable depreciation on property	42,000		
Tax allowable depreciation on plant and			
machinery	10,000		
Lease rentals	28,800	(81,800)	
		82,167	_
Tax 30%		24,650	_

olution: Deferred tax liability as 31 De	cember 2013			1
	Carrying value	Tax base	Temporary difference	
	ħ	₩	Ħ	
Property	63,000	28,000	35,000	
Plant and machinery	100,000	90,000	10,000	
Assets held under finance lease	80,000	nil	80,000]
Finance lease obligation	(85,867)	nil	(85,867)	
	(5,867)	nil	(5,867)	-
Trade receivables	73,000	80,000	(7,000)	
Interest receivable	1,000	nil	1,000	
Fine	(10,000)	(10,000)	_	
Interest payable	(3,300)	nil	(3,300)	
			29,833	-
Deferred tax @ 30%			8,950	-
		Temporary differences	Deferred tax @ 30%	
Deferred tax liabilities		46,000	13,800	
Deferred tax assets		(16,167)	(4,850)	
			8,950	-

Solution: Movement on the deferred tax account for the year ended 31 December 2013.		1c
	N	
Deferred tax as at 1st January 2014	3,600	
Statement of profit or loss (balancing figure)	5,350	
Deferred tax as at 31st December 2014	8,950	

Solution: Components of tax expense for the year ended 31 December 2013.	
Ħ	
24,650	
5,350	
30,000	-
	₩ 24,650 5,350

Solutions: Tax reconciliation for the year ended 31 December 2013.		1e
	#	
Accounting profit	90,000	
Tax at the applicable rate (30%)	27,000	
Tax effects of expenses that are not deductible in determining taxable profit		
Fines	3,000	
Tax expense	30,000	_

Skills level Financial reporting



IAS 7: Statements of cash flows

Contents

- 1 Statements of cash flows: Introduction
- 2 Statements of cash flows: Format
- 3 Cash flows from operating activities: The indirect method
- 4 Indirect method: Adjustments for working capital
- 5 Cash flows from operating activities: The direct method
- 6 Cash flows from investing activities
- 7 Cash flows from financing activities
- 8 Chapter review

INTRODUCTION

Purpose

In this element the accounting from the foundation level is taken up a level into financial accounting in the context of more complex events and transactions with a greater emphasis on compliance with regulations including International Accounting Standards and generally accepted accounting practices in the private sectors.

Students will be expected to demonstrate an understanding of and competence in financial statement analysis and basic analysis of choices in accounting treatments.

Competencies

2	Preparing separate financial statements
2(b)	Identify and state the laws, regulations accounting standards and other requirements that govern the production of financial statements by such entities.
2(c)	Draft and compile financial statements, or extracts from them, of an entity in accordance with its chosen policies and in accordance with IFRS and local law.

IAS 7 is an examinable document.

Exam context

This chapter explains how to prepare a statement of cash flow.

By the end of this chapter you will be able to:

- Prepare extracts from a statement of cash flow
- Prepare a statement of cash flow

1 STATEMENTS OF CASH FLOWS: INTRODUCTION

Section overview

- Purpose of statements of cash flows
- Statements of cash flows
- The sections of a statement of cash flows
- Cash flows from operating activities
- Cash flows from investing activities
- Cash flows from financing activities
- Gross or net

1.1 Purpose of statements of cash flows

IAS 1 states that a statement of cash flows is a part of a complete set of the financial statements of an entity. It provides information about:

- □ the cash flows of the entity during the reporting period, and
- □ the changes in cash and cash equivalents during the period.

IAS 7: Statements of cash flows sets out the benefits of cash flow information to users of financial statements.

- A statement of cash flows provides information that helps users to evaluate changes in the net assets of an entity and in its financial structure (including its liquidity and solvency).
- It provides information that helps users to assess the ability of the entity to affect the amount and timing of its cash flows in order to adapt to changing circumstances and unexpected opportunities.
- It is useful in assessing the ability of the entity to generate cash and cash equivalents.
- □ It helps users of accounts to compare the performance of different entities because unlike profits, comparisons of cash flows are not affected by the different accounting policies used by different entities.
- Historical cash flows are often a fairly reliable indicator of the amount, timing and certainty of **future** cash flows.

1.2 Statements of cash flows

A statement of cash flows provides information about where a business obtained its cash during the financial period, and how it made use of its cash.

A statement of cash flows groups inflows and outflows of cash under three broad headings:

- □ cash from operating activities
- cash used in (or obtained from) investing activities
- □ cash paid or received in financing activities.

It also shows whether there was an increase or a decrease in the amount of cash held by the entity between the beginning and the end of the period.



Illustration:

Cash from operating activities	X/(X)
Cash used in (or obtained from) investing activities	X/(X)
Cash paid or received in financing activities.	X/(X)
Net cash inflow (or outflow) during the period	X/(X)
Cash and cash equivalents at the beginning of the period	X/(X)
Cash and cash equivalents at the end of the period	X/(X)

A statement of cash flows reports the change in the amount of cash and cash equivalents held by the entity during the financial period.

Cash and cash equivalents

Definiti

Definition: Cash, cash equivalents and cash flows

Cash comprises cash on hand and demand deposits.

Cash equivalents are short-term, highly liquid investments that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value.

Cash flows are inflows and outflows of cash and cash equivalents.

For the purpose of a statement of cash flows, cash and cash equivalents are treated as being the same thing. This means that cash flows between cash and cash equivalent balances are not shown in the statement of cash flows. These components are part of the cash management of an entity rather than part of its operating, investing and financing activities.

Cash and cash equivalents are held in order to meet short-term cash commitments, rather than for investment purposes or other purposes.

Examples of cash equivalents are:

- a bank deposit where some notice of withdrawal is required
- short-term investments with a maturity of three months or less from the date of acquisition (e.g. government bills).

Bank borrowings are generally considered to be financing activities. In that case they would be held outside cash and cash equivalents and movements on the bank borrowings would be shown under financing activities as a cash inflow if borrowing increase or as a cash outflow if borrowings fell.

Sometimes, bank overdrafts which are repayable on demand form an integral part of an entity's cash management. In these circumstances, bank overdrafts are included as a component of cash and cash equivalents.

Sundry disclosures

An entity must disclose the components of cash and cash equivalents and present a reconciliation of the amounts in its statement of cash flows with the equivalent items reported in the statement of financial position.

Any significant cash and cash equivalent balances held by the entity that are not available for use by the group must be disclosed together with a commentary by management. This might be the case when a group of companies has a subsidiary whose dividend payments are subject to a debt covenant or exchange control regulations which would prevent payment of a dividend to the parent company.

Comment on technique

Theoretically this could be done by analysing every entry in and out of the cash account(s) over the course of a period. However, the cash account is often the busiest account in the general ledger with potentially many thousands of entries. Documents that summarise the transactions are needed.

These documents already exist! They are the other financial statements (statement of financial position and statement of comprehensive income).



Illustration:

A business might buy 100 new non-current assets over the year. There would be 100 different entries for these in the cash account.

However, it should be easy to estimate the additions figure from comparing the opening and closing balances for non-current assets and isolating any other causes of movement.

For example if we know that property plant and equipment has increased by \$100,000 and that the only other cause of movement was depreciation of \$15,000 then additions must have been \$115,000.

A lot of the numbers in cash flow statements are derived from comparing opening and closing positions of line items in the statement of financial position. Other causes of movement can then be identified leaving the cash double entry as a balancing figure.

1.3 The sections of a statement of cash flows

The content and format of statements of cash flows are specified by IAS 7 **Statements of cash flows**. IAS 7 does not specify what the **exact** format of a statement of cash flows should be, but it provides suggested layouts in an appendix.

Entities are required by IAS 7 to report cash flows for the period under three headings:

- cash flows from operating activities
- □ cash flows from investing activities
- □ cash flows from financing activities.

All cash flows (except for changes from cash to cash equivalents or from cash equivalents to cash) can be included in one of these three categories.

Together, the cash flows arising from these three categories of activity explain the increase or decrease in cash and cash equivalents during the financial period.

The cash flows for each category might be positive or negative. The total of the cash flows for all three categories together explains the overall increase or decrease in cash and cash equivalents during the period.

A single transaction might include more than one type of cash flow. For example a cash repayment of a loan might include both interest and capital. In this case the interest element might be classified as an operating activity and the capital element as a financing activity.

1.4 Cash flows from operating activities

Operating activities are the normal trading activities of the entity. Cash flows from operating activities are the cash inflows or cash outflows arising in normal trading activities.

Operating activities normally provide an operating profit before tax. However, profit is not the same as cash flow, and the cash flows from operating activities are different from profit.

A statement of cash flows normally makes a distinction between:

- **cash generated from operations**, which is the cash from sales less the cash payments for operating costs, and
- net cash from operating activities, which is the cash generated from operations, less interest payments and tax paid on profits.

Cash flows from operating activities are primarily derived from the principal revenue-producing activities of the entity. Therefore, they generally result from the transactions and other events that enter into the determination of profit or loss.

Examples of cash flows from operating activities are:

- □ cash receipts from the sale of goods and the rendering of services;
- **c**ash receipts from royalties, fees, commissions and other revenue;
- cash payments to suppliers for goods and services;
- □ cash payments to and on behalf of employees;
- cash receipts and cash payments of an insurance entity for premiums and claims, annuities and other policy benefits;
- cash payments or refunds of income taxes unless they can be specifically identified with financing and investing activities; and
- cash receipts and payments from contracts held for dealing or trading purposes.

Some transactions result in the recognition of a gain or loss profit or loss (e.g. sale of an item of plant). However, the cash flows relating to such transactions are cash flows from investing activities.

Cash payments to manufacture or acquire assets held for rental to others and subsequently held for sale are cash flows from operating activities. The cash receipts from rents and subsequent sales of such assets are also cash flows from operating activities.

The amount of cash flows arising from operating activities is a key indicator of the extent to which the operations of the entity have generated sufficient cash flows to function without recourse to external sources of financing. In addition, it forms a basis for forecasting future operating cash flows.

1.5 Cash flows from investing activities

The second section of a statement of cash flows shows cash flows from investing activities. Investing activities are defined by IAS 7 as 'the acquisition and disposal of long-term assets and other investments not included in cash equivalents'.

Cash flows from investing activities might also include cash received from investments, such as interest or dividends received.

The separate disclosure of cash flows arising from investing activities is important because the cash flows represent the extent to which expenditures have been made for resources intended to generate future income and cash flows.

Examples of cash flows arising from investing activities are:

- cash payments to acquire property, plant and equipment, intangibles and other long-term assets (including those relating to capitalised development costs and self-constructed tangible assets);
- cash receipts from sales of property, plant and equipment, intangibles and other long-term assets;
- cash payments to acquire equity or debt instruments;
- cash receipts from sales of equity or debt instruments of other entities;
- cash advances and loans made to other parties (other than advances and loans made by a financial institution which would be an operating activity);
- cash receipts from the repayment of advances and loans made to other parties (other than advances and loans of a financial institution);

1.6 Cash flow from financing activities

The third section of the statement of cash flows shows the cash flows from financing activities. These activities are defined by IAS 7 as 'activities that resulting changes in the size and composition of the contributed equity and borrowings of the entity.'

Examples of cash flows arising from financing activities are:

- cash proceeds from issuing shares or other equity instruments;
- cash payments to owners to acquire or redeem the entity's shares;
- cash proceeds from issuing debentures, loans, notes, bonds, mortgages and other short-term or long-term borrowings;
- □ cash repayments of amounts borrowed; and
- cash payments by a lessee for the reduction of the outstanding liability relating to a finance lease.

The separate disclosure of cash flows arising from financing activities is important because it is useful in predicting claims on future cash flows by providers of capital to the entity.

1.7 Gross or net

Generally, major classes of cash flows arising from investing and financing activities are reported gross. That is to say that cash receipts and cash payments are shown separately even if from and to the same party.

However, cash flows arising from the following activities may be reported on a net basis:

- cash receipts and payments on behalf of customers when the cash flows reflect the activities of the customer rather than those of the entity (for example if rent is collected on behalf of and paid on to owners of properties); and
- cash receipts and payments for items in which the turnover is quick, the amounts are large, and the maturities are short (e.g. payments made by credit card companies on behalf of their customers and receipts from those customers.

It is unlikely that you will see this in a question.

2 STATEMENT OF CASH FLOWS: FORMAT

Section overview

- Format
- The indirect method
- The direct method

2.1 Format

Г

IAS 7 does not include a format that must be followed. However it gives illustrative examples of formats that meet the requirements in the standard.

This section provides examples of these.



Illustration: Statement of cash flows		
	Ħ	Ħ
Net cash flow from operating activities		75,300
Cash flows from investing activities:		
Acquisition of shares (debentures, etc.)	(5,000)	
Purchase of property, plant and machinery	(35,000)	
Proceeds from sale of non-current assets	6,000	
Interest received/dividends received	1,500	_
Net cash used in investing activities		(32,500)
Cash flows from financing activities:		
Proceeds from issue of shares	30,000	
Proceeds from new loan	10,000	
Repayment of loan	(17,000)	
Dividends paid to shareholders	(25,000)	_
Net cash used in financing activities		(2,000)
Net increase/decrease in cash/cash equivalents		40,800
Cash/cash equivalents at the beginning of the year		5,000
Cash/cash equivalents at the end of the year		45,800

Operating cash flows

IAS 7 permits two methods of presenting the cash flows from operating activities:

- the direct method, and
- □ the indirect method.

For clarity, what this means is that there are two approaches to arriving at the figure of **#75,300** in the above example.

IAS 7 allows entities to use either method of presentation. It encourages entities to use the direct method. However, the indirect method is used more in practice.

The two methods differ only in the way that they present the cash flows for cash generated from operations. In all other respects, the figures in the statement of cash flows using the direct method are identical to the figures in a statement using the indirect method – cash flows from investing activities and financing activities are presented in exactly the same way.

2.2 The indirect method

The indirect method identifies the cash flows from operating activities by adjusting the profit before tax figure. It arrives at the cash from operating activities figure indirectly by reconciling a profit figure to a cash figure.

The adjustments remove the impact of accruals and non-cash items and also relocate some figures to other positions in the statement of cash flows.

The following illustration shows how the net cash flow from operating activities figure seen in the previous example was arrived at using the indirect method.



Illustration:		
Statement of cash flows: indirect method	Ħ	₩
Cash flows from operating activities		
Profit before taxation	80,000	
Adjustments for:		
Depreciation and amortisation charges	20,000	
Interest charges in the statement of comprehensive income	2,300	
Gains on disposal of non-current assets	(6,000)	
Losses on disposal of non-current assets	4,500	
	100,800	
Increase in trade and other receivables	(7,000)	
Decrease in inventories	2,000	
Increase in trade payables	3,000	
Cash generated from operations	98,800	
Taxation paid (tax on profits)	(21,000)	
Interest charges paid	(2,500)	
Net cash flow from operating activities		75,300

2.3 The direct method

The direct method calculates the cash flow from operating activities by calculating cash received from customers, cash paid to suppliers and so on.

The following illustration shows how the net cash flow from operating activities figure seen in the previous example was arrived at using the direct method.



Illustration:

Statement of cash flows: direct method	N
Cash flows from operating activities	
Cash receipts from customers	348,800
Cash payments to suppliers	(70,000)
Cash payments to employees	(150,000)
Cash paid for other operating expenses	(30,000)
Cash generated from operations	98,800
Taxation paid (tax on profits)	(21,000)
Interest charges paid	(2,500)
Net cash flow from operating activities	75,300

The figures in the two statements are identical from 'Cash generated from operations' down to the end. The only differences are in the presentation of the cash flows that produced the 'Cash generated from operations'.

3 CASH FLOWS FROM OPERATING ACTIVITIES: THE INDIRECT METHOD

Section overview

- Profit before taxation
- Non-cash items
- Accruals based figures Interest
- Accruals based figures Taxation
- Accruals based figures Dividends
- Presentation of interest, taxation and dividends cash flows

3.1 Profit before taxation

The starting point for the statement of cash flows for a company is the operating profit after deducting interest but before taxation.

This profit figure is adjusted to calculate the amount of cash received by the business or the amount of cash paid out as a consequence of its trading operations.

The adjustments are to remove the effect of:

- □ Non-cash items, for example:
 - Depreciation and amortisation (depreciation of intangible non-current assets);
 - Profit or loss on disposal of non-current assets; and
- Accruals based figures, for example:
 - Interest expense or income;
 - Movement on working capital items (receivables, payables and inventory).

3.2 Non-cash items

Depreciation and amortisation

Depreciation charges and amortisation charges are not cash flows. They are expenses in the income statement, but do not represent payments of cash.

In order to obtain a figure for cash flow from the figure for profit, charges for depreciation and amortisation must therefore be added back to the profit figure.

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 effect of the gain or loss on disposal (a non-cash item) from the operating profit is removed by:

- deducting gain on disposal; and
- adding back losses on disposal.

The relevant cash flow is the net cash received from the sale. This is included in cash flows from investing activities as the net cash flows received from the disposal of non-current assets.



Example:

A company disposed of an item of equipment for 40,000. The equipment had originally cost 60,000 and the accumulated depreciation charged up to the date of disposal was 32,000.

	Ħ
Cost	60,000
Accumulated depreciation	32,000
Carrying value at date of disposal	28,000
Cash proceeds from sale	40,000
Gain on disposal	12,000

In the statement of cash flows, the gain on disposal of \$12,000 is deducted as an adjustment to the operating profit.

The cash proceeds of N40,000 is included as a cash inflow under the heading: 'Cash flows from investing activities'.



Practice question

A company made a loss on the disposal of a company motor vehicle of \$8,000.

The vehicle originally cost \$50,000 and at the date of disposal, accumulated depreciation on the vehicle was \$20,000.

What are the items that should be included for the disposal of the vehicle in the statement of cash flows for the year:

- a) in the adjustments to get from operating profit to cash flow from operations?
- b) under the heading: 'Cash flows from investing activities'?

1

3.3 Accruals based figures - Interest

The accruals concept is applied in accounting.

Interest charge in the income statement is an accrual based figure. It is added back to profit and the actual cash interest paid is deducted further down the cash flow statements.

The final items in the operating cash flows part of a statement of cash flows are the amount of interest paid and the amount of tax paid (see later).

This figure must be calculated as follows:



Illustration:

Ħ
Х
Х
X
(X)
<u> </u>

Take a few minutes to make sure that you are happy about this. The same approach is used to calculate other figures.

The interest liability at the start of the year and the interest charge during the year is the most the business would pay. If the business had paid nothing it would owe this figure. The difference between this amount and the liability at the end of the year must be the amount that the business has paid.



Example: Interest paid

A company had liabilities in its statement of financial position at the beginning and at the end of 2013, as follows:

	Interest (₦)
Beginning of 2013	4,000
End of 2013	22,000
During the year, interest charges in the income	e statement were ₦22,000.
The interest payment for inclusion in the state	ement of cash flows can be
calculated as follows:	
calculated as follows:	Ħ
calculated as follows: Liability at the start of the year	
	Ħ
Liability at the start of the year	N 4,000
Liability at the start of the year Charge for the year	N 4,000 22,000

Note that this approach would work to find the cash paid in respect of any liability in respect of which expense was recognised in the statement of profit or loss.

It would not matter if you did not know anything about the type of liability as long as you are told that there is a movement and you are given the amount recognised in the statement of profit or loss. For example, instead of the above example being about interest it could be about warranty provision, gratuity, retirement benefit, health insurance, bonus pool, and so on.

3.4 Accruals based figures - Taxation

The tax paid is the last figure in the operating cash flow calculation.

There is no adjustment to profit in respect of tax. This is because the profit figure that we start with is profit before tax; therefore tax is not included in it to be adjusted!

However, there is a tax payment and this must be recognised as a cash flow. It is calculated in the same way as shown above.



Example: Taxation paid

A company had liabilities in its statement of financial position at the beginning and at the end of 2013, as follows:

	Taxation (₦)
Beginning of 2013	53,000
End of 2013	61,000
During the year, taxation on profits was $\$77,00$	0.
The tax payment (cash flows) for inclusion in th can be calculated as follows:	e statement of cash flows
•••	e statement of cash flows ₦
can be calculated as follows:	N
can be calculated as follows: Taxation liability at the start of the year	N 53,000
can be calculated as follows: Taxation liability at the start of the year Charge for the year	N 53,000 77,000

Deferred taxation

A question might include deferred taxation. You have not covered this yet but it can still be dealt with here as its impact on a statement of cash flows at this level is quite straightforward.

A deferred tax balance might be an asset or a liability. Deferred tax liability is more common (in practice and in questions) so this discussion will be about liabilities.

A deferred tax liability is an amount that a company expects to pay in the future. Therefore it has had no cash effect to date. Any movement on the deferred tax liability will be due to a double entry to tax expense in the profit or loss section of the statement of comprehensive income. (There are double entries to other comprehensive income and directly to equity but these are outside the scope of your syllabus).

There are two possible courses of action in dealing with deferred tax. Either:

- □ ignore it entirely and work with numbers that exclude the deferred tax (in effect this was what happened in the example above where there was no information about deferred tax); or
- include it in every tax balance in the working.

The second approach is usually used.



Example: Deferred tax

A company had liabilities in its statement of financial position at the beginning and at the end of 2013, as follows:

	Taxation (₦)	Deferred taxation (₦)
Beginning of 2013	53,000	20,000
End of 2013	61,000	30,000

The tax expense for the year in the statement of profit or loss was \$87,000. This was made up of the current tax expense of \$77,000 and the deferred tax of \$10,000.

The tax payment (cash flows) for inclusion in the statement of cash flows can be calculated as follows:

		Ħ
Liability at the start of the year	(53,000 + 20,000)	73,000
Charge for the year	(77,000 + 10,000)	87,000
Total amount payable in the year		160,000
Liability at the end of the year	(61,000 + 30,000)	(91,000)
Cash paid		69,000

3.5 Accruals based figures – Dividends

A question might require the calculation of cash paid out as dividends in the year.

This is calculated in the usual way remembering that the dividend charge is a debit in the statement of changes in equity.



Illustration:	
	Ħ
Dividend liability at the beginning of the year	Х
Dividend charge for the year	Х
Total amount of dividend payable in the year	X
Dividend liability at the end of the year	(X)
Dividend paid in the year (cash)	X

e

Example: Dividend paid	
A company had liabilities in its statement of financia at the end of 2013, as follows:	l position at the beginning an
	Dividends (₦)
Beginning of 2013	65,000
End of 2013	71,000
The company had share capital of ₦1,000,000.	
The directors recommended a dividend of 20 ⁰ December 2013.	% (2012: 18%) on 25 th
The company AGM is held in March each year.	
The dividend payment (cash flows) for inclusion flows can be calculated as follows:	in the statement of cash
	In the statement of cash
flows can be calculated as follows:	N
flows can be calculated as follows: Dividend liability at the start of the year	₩ 65,000
flows can be calculated as follows: Dividend liability at the start of the year Dividend in the year (18% of 1,000,000)	₩ 65,000 180,000

3.6 Presentation of interest, taxation and dividends cash flows

IAS 7 allows some variations in the way that cash flows for interest and dividends are presented in a statement of cash flows, although the following should be shown separately:

- □ interest received
- dividends received
- interest paid
- dividends paid.

Interest payments

IAS 7 states that there is no consensus about how to treat interest payments by an entity, other than a financial institution such as a bank. Interest payments may be classified as either:

- an operating cash flow, because they are deducted when calculating operating profit before taxation, or
- a financing cash flow, because they are costs of obtaining finance.

In examples of statements of cash flows in the appendix to IAS 7, interest paid is shown as a separate line item within cash flows from operating activities. This approach is therefore used here.

Interest and dividends received

Interest received and dividends received may be classified as either:

- an operating cash flow, because they are added when calculating operating profit before taxation, or
- an investing cash flow, because they represent returns on investment.

In examples of statements of cash flows in the appendix to IAS 7, interest received and dividend received are shown as separate items within cash flows from investing activities. This approach is therefore used here.

Dividends paid

IAS 7 allows dividend payments to be treated as either:

- a financing cash flow because they are a cost of obtaining financial resources, or
- a component of the cash flows from operating activities, in order to assist users to determine the ability of the entity to pay dividends out of its operating cash flows.

In examples of statements of cash flows in the appendix to IAS 7, dividends paid are shown as a line item within cash flows from financing activities. This approach is therefore used here.

Taxes on profits

Cash flows arising from taxation on income should normally be classified as a cash flow from operating activities (unless the tax payments or refunds can be specifically associated with an investing or financing activity).

The examples of statements of cash flows in this chapter therefore show both interest paid and tax paid as cash flow items, to get from the figure for cash generated from operations to the figure for 'net cash from operating activities'.

4 INDIRECT METHOD: ADJUSTMENTS FOR WORKING CAPITAL

Section overview

- Working capital adjustments: Introduction
- Working capital
- Changes in trade and other receivables
- Possible complication: Allowances for doubtful debts
- Changes in inventory
- Changes in trade payables
- Lack of detail

4.1 Working capital adjustments: Introduction



Definition

Working capital is current assets less current liabilities.

The previous section showed that taxation and interest cash flows can be calculated by using a figure from the statement of comprehensive income and adjusting it by the movement on the equivalent balances in the statement of financial position.

This section shows how this approach is extended to identify the cash generated from operations by making adjustments for the movements between the start and end of the year for elements of working capital, namely:

- □ trade receivables and prepayments;
- inventories; and
- □ trade payables and accruals.

Assuming that the calculation of the cash flow from operating activities starts with a profit (rather than a loss) the adjustments are as follows:

Balance	Increase in balance from start to the end of the year	Decrease in balance from start to the end of the year
Receivables	Subtract from profit before tax	Add back to profit before tax
Inventory	Subtract from profit before tax	Add back to profit before tax
Payables	Add back to profit before tax	Subtract from profit before tax

These are known as the working capital adjustments and are explained in more detail in the rest of this section.

4.2 Working capital

Working capital is made up of the following balances:



Illustration:	
	Ħ
Inventory	X
Trade and other receivables	X
Cash	Х
Trade payables	(X)
Working capital	X

Trade and other receivables include any prepayments.

Trade payables include accrued expenses, provided the accrued expenses do not relate to other items dealt with separately in the statement of cash flows, in particular:

- accrued interest charges; and
- □ taxation payable.

Interest charges and payments for interest are presented separately in the statement of cash flows, and so accrued interest charges should be excluded from the calculation of changes in trade payables and accruals.

Similarly, taxation payable is dealt with separately; therefore taxation payable is excluded from the calculation of working capital changes.

Accrued interest and accrued tax payable must therefore be deducted from the total amount for accruals, and the net accruals (after making these deductions) should be included with trade payables.

Changes in working capital and the effect on cash flow

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 more than the operating profit, by the amount of the reduction.

This important point will be explained with several simple examples.

4.3 Changes in trade and other receivables

Sales revenue in a period differs from the amount of cash received from sales by the amount of the increase or decrease in receivables during the period.

When trade and other receivables go up during the year, cash flows from operations are less than operating profit by the amount of the increase.

When trade and other receivables go down during the year, cash flows from operations are more than operating profit by the amount of the reduction.

In a statement of cash flows presented using the indirect method, the adjustment for receivables is therefore:

- subtract the increase in receivables during the period (the amount by which closing receivables exceed opening receivables); or
- add the reduction in receivables during the period (the amount by which opening receivables exceed closing receivables).

Prepayments in the opening and closing statement of financial position should be included in the total amount of receivables.



Example: trade and other receivables

A company had receivables at the beginning of the year of 46,000 and at the end of the year receivables were 49,000.

During the year, sales were \$50,000 in total. Purchases were \$30,000, all paid in cash.

The company holds no inventories. The profit before tax for the year was \$20,000 (\$50,000 - \$30,000).

The cash flow from operations is calculated as follows:

	Ħ
Profit before tax	20,000
Adjustments for increase in receivables (9,000 – 6,000)	(3,000)
	17,000

Proof

Cash flow from operations can be calculated as follows:

	Ħ
Receivables at the beginning of the year	6,000
Sales in the year	50,000
	56,000
Receivables at end of the year	(9,000)
Cash received	47,000
Cash paid (purchases)	(30,000)
Cash flow from operations	17,000

4.4 Possible complication: Allowances for doubtful debts

A question might provide information on the allowance for doubtful debts at the start and end of the year.

There are two ways of dealing with this:

- Adjust the profit for the movement on the allowance as a non-cash item and adjust the profit figure for the movement in receivables using the gross amounts (i.e. the balances before any deduction of the allowance for doubtful debts); or
- Make no adjustments for the movement on receivables as a non-cash item adjust the profit figure for the movement in receivables using the net amounts (i.e. the balances after the deduction of the allowance for doubtful debts).

Example: Allowance for doubtful debts		
The following information is available:		
	2012 (N m)	2013 (₦m)
Receivables	5,000	7,100
Allowance for doubtful debts	(500)	(600)
Net-amount	4,500	6,500
	¥m o	
Profit before taxation	10,000	10,000
Adjustments for non- cash items:		
Increase in allowance for doubtful debts	100	_
	10,100	10,000
Increase in receivables:		
Gross amounts: (7,100 – 5,000)	(2,100)	
Net amounts: (6,500 – 4,500)		(2,000)
	8,000	8,000

4.5 Changes in inventory

Purchases in a period differ from the cost of sales by the amount of the increase or decrease in inventories during the period.

If all purchases were paid for in cash, this means that cash payments and the cost of sales (and profit) would differ by the amount of the increase or decrease in inventories.

When the value of inventory goes up between the beginning and end of the year, cash flows from operations are less than operating profit by the amount of the increase.

When the value of inventory goes down between the beginning and end of the year, cash flows from operations are more than operating profit by the amount of the reduction.

In a statement of cash flows presented using the indirect method, the adjustment for inventories is therefore:

- subtract the increase in inventories during the period (the amount by which closing inventory exceeds opening inventory); or
- add the reduction in inventories during the period (the amount by which opening inventory exceeds closing inventory).



Example: inventory

A company had inventory at the beginning of the year of \$5,000 and at the end of the year the inventory was valued at \$3,000.

During the year, sales were \$50,000 and there were no receivables at the beginning or end of the year.

Purchases were ₩28,000, all paid in cash.

The operating profit for the year was ₩20,000, calculated as follows:

	Ħ
Sales	50,000
Opening inventory	5,000
Purchases in the year (all paid in cash)	28,000
	33,000
Closing inventory	(3,000)
Cost of sales	(30,000)
Profit before tax	20,000

0

Example (continued)

	₩
Profit before tax	20,000
Adjustments for:	
decrease in inventory (5,000 – 3,000)	2,000
	22,000
read. The each flow from an eventions is calculated as follows:	
roof: The cash flow from operations is calculated as follows:	₩
roof: The cash flow from operations is calculated as follows: Cash from sales in the year	N 50,000

4.6 Changes in trade payables

Payments for purchases in a period differ from purchases by the amount of increase or decrease in trade payables during the period.

When trade payables go up between the beginning and end of the year, cash flows from operations are more than operating profit by the amount of the increase.

When trade payables go down between the beginning and end of the year, cash flows from operations are less than operating profit by the amount of the reduction.

In a statement of cash flows presented using the indirect method, the adjustment for trade payables is therefore:

- □ add the increase in trade payables during the period (the amount by which closing trade payables exceed opening trade payables);or
- subtract the reduction in trade payables during the period (the amount by which opening trade payables exceed closing trade payables).

Accruals in the opening and closing statement of financial position should be included in the total amount of trade payables.

However, deduct interest payable and tax payable from opening and closing payables, if the total for payables includes these items.

Example: trade payables

A company had no inventory and no receivables at the beginning and end of the year. All its sales are for cash, and sales in the year were \$50,000.

Its purchases are all on credit. During the year, its purchases were ₩30,000.

Trade payables at the beginning of the year were 44,000 and trade payables at the end of the year were 6,500.

The operating profit for the year was $\cancel{20,000}$ ($\cancel{50,000}$ – $\cancel{30,000}$)

	N
Profit before tax	20,000
Adjustments for:	
Increase in payables (6,500 – 4,000)	2,500
	22,500
Proof: The cash flow from operations is calculated as follows:	
	Ħ
Trade payables at the beginning of the year	4,000
Purchases in the year	30,000
	34,000
Trade payables at the end of the year	(6,500)
Cash paid to suppliers	27,500
Cash from sales	(50,000)
Cash flow from operations	22,500

The cash flow is 32,500 more than the operating profit, because trade payables were increased during the year by 32,500.

Example:

A company made an operating profit before tax of ₩16,000 in the year just ended. Depreciation charges were ₩15,000.

There was a gain of \$5,000 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	₩9,000	₩3,000	₩4,000
End of the year	₦6,000	₩5,000	₩6,500

Taxation paid was ₦4,800.

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		
	N	Ħ
Cash flows from operating activities		
Profit before taxation	16,000	
Adjustments for:		
Depreciation and amortisation charges	15,000	
Gains on disposal of non-current assets	(5,000)	
	26,000	
Decrease in trade and other receivables	3,000	
Increase in inventories	(2,000)	
Increase in trade payables	2,500	
Cash generated from operations	29,500	
Taxation paid (tax on profits)	(4,800)	
Net cash flow from operating activities		24,700



Practice question

During 2013, a company made a profit before taxation of \$60,000. Depreciation charges were \$25,000 and there was a gain on the disposal of a machine of \$14,000.

2

Interest charges and payments of interest in the year were the same amount, \$10,000.

Taxation payments were ₦17,000.

Values of working capital items at the beginning and end of the year were:

	Receivables	Inventory	Trade payables	
Beginning of the year	₩32,000	₦49,000	₩ 17,000	
End of the year	₦27,000	₩53,000	₩11,000	
Calculate the net cash from operating activities, as it would be shown in a statement of cash flows (indirect method).				

4.7 Lack of detail

A question might not provide all the detail needed to split out working capital into all of its component parts. If this is the case the adjustment must be made using whatever totals are available in the question.



Example:

A company made an operating profit before tax of №16,000 in the year just ended.

Depreciation charges were ₦15,000.

There was a gain of \$5,000 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:

	Current assets	Trade payables
Beginning of the year	₩12,000	₩4,000
End of the year	₩11,000	₩6,500

Taxation paid was ₦4,800.

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		
	₩	Ħ
Cash flows from operating activities		
Profit before taxation	16,000	
Adjustments for:		
Depreciation and amortisation charges	15,000	
Gains on disposal of non-current assets	(5,000)	
	26,000	
Decrease in current assets	1,000	
Increase in trade payables	2,500	
Cash generated from operations	29,500	
Taxation paid (tax on profits)	(4,800)	
Net cash flow from operating activities		24,700

CASH FLOWS FROM OPERATING ACTIVITIES: THE DIRECT METHOD 5

Section overview

- Cash from sales
- Cash paid for materials
- Cash paid for wages and salaries
- Cash paid for other expenses

5.1 Cash from sales

The format for the direct method of presenting a statement of cash flows is as follows:



Illustration:	
Statement of cash flows: direct method Cash flows from operating activities	Ħ
Cash receipts from customers	348,800
Cash payments to suppliers	(70,000)
Cash payments to employees	(150,000)
Cash paid for other operating expenses	(30,000)
Cash generated from operations	98,800
Taxation paid (tax on profits)	(21,000)
Interest charges paid	(2,500)
Net cash flow from operating activities	75,300

The task is therefore to establish the amounts for cash receipts and cash payments. In an examination, you might be expected to calculate any of these cash flows from figures in the opening and closing statements of financial position, and the statement of comprehensive income.

The cash receipts from sales during a financial period can be calculated as follows:



Illustration:			
			Ħ
Trade receivables at the	ne beginnin	g of the year	Х
Sales in the year			Х
			X
Trade receivables at the	ne end of th	e year	(X)
Cash from sales during	g the year		Х
A T account could also b	e used to ca	Iculate the cash receipt	
	Rec	eivables	
Balance b/f	Х		
Sales	Х	Cash (balancing figure)	х
		Balance c/f	х
	Х		X

5.2 Cash paid for materials

To calculate the amount of cash paid to suppliers, you might need to calculate first the amount of material purchases during the period.

Illustration: Calculation of purchases in the year	
	Ħ
Closing inventory at the end of the year	Х
Cost of sales	X
	Х
Opening inventory at the beginning of the year	(X)
Purchases in the year	<u> </u>

Having calculated purchases from the cost of sales, the amount of cash payments for purchases may be calculated from purchases and opening and closing trade payables.



ustration:			
			Ħ
Trade payables at the be	eginning	of the year	Х
Purchases in the year (a	s above)		Х
			Х
Trade payables at the er	nd of the	year	(X)
Cash paid for materials			х
A T account could also be ι	used to ca	Iculate the cash paid	
A T account could also be ι		Ilculate the cash paid ayables	
Α T account could also be ι		-	x
A T account could also be u Cash (balancing figure)		ayables	x
	Pa	ayables Balance b/f	

Note that if the business had paid for goods in advance at the start or end of the year they would have an opening or closing receivable but this situation would be quite unusual.

5.3 Cash paid for wages and salaries

Cash payments for wages and salaries can be calculated in a similar way.

ustration:			
			Ħ
Accrued wages and sala	ries at th	e beginning of the year	Х
Wages and salaries exp	enses in	the year	Х
			X
Accrued wages and sala	ries at th	e end of the year	(X)
Cash paid for wages and	d salaries		X
A T account could also be u		•	
A T account could also be u		ayables	v
	Pa	ayables Balance b/f	X
A T account could also be u Cash (balancing figure)		ayables	X X
	Pa	ayables Balance b/f	

If wages and salaries had been paid in advance the business would have a receivable and the workings would change to the following.

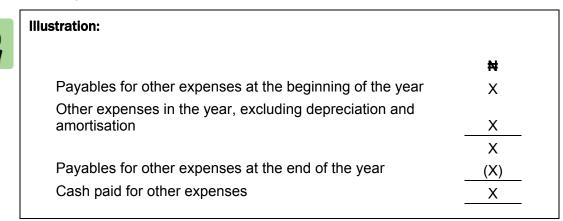


Illustration:			
			Ħ
Wages and salaries pai year	id in advanc	e at the beginning of the	(X)
Wages and salaries exp	penses in th	e year	X
			Х
Wages and salaries pai	id in advanc	e at the end of the year	<u> </u>
Cash paid for wages ar	nd salaries		X
A T account could also be	used to cald	culate the cash paid	
	Pay	ables	
Balance b/f	Х		
Cash (balancing figure)	Х	Purchases	X
		Balance c/f	Х
	Х		X
		-	

5.4 Cash paid for other expenses

Other expenses in the statement of comprehensive income usually include depreciation charges, which are not cash flows. Depreciation charges should therefore be excluded from other expenses when calculating cash payments.

Cash payments for other expenses can be calculated as follows.



Payables for other expenses should exclude accrued wages and salaries, accrued interest charges and taxation payable.



Example:

The following information has been extracted from the financial statements of Hopper Company for the year ended 31 December 2013.

	Ħ
Sales	1,280,000
Cost of sales	(400,000)
Gross profit	880,000
Wages and salaries	(290,000)
Other expenses (including depreciation ₩25,000)	(350,000)
	240,000
Interest charges	(50,000)
Profit before tax	190,000
Tax on profit	(40,000)
Profit after tax	150,000

Extracts from the statement of financial position:

	At 1 January 2013	At 31 December 2013
	N	N
Trade receivables	233,000	219,000
Inventory	118,000	124,000
Trade payables	102,000	125,000
Accrued wages and salaries	8,000	5,000
Accrued interest charges	30,000	45,000
Tax payable	52,000	43,000

Required

Present the cash flows from operating activities as they would be presented in a statement of cash flows using:

- a) the direct method; and
- b) the indirect method.



Answer: Direct method	
Statement of cash flows: direct method	N
Cash flows from operating activities	
Cash receipts from customers(W1)	1,294,000
Cash payments to suppliers(W3)	(383,000)
Cash payments to employees(W4)	(293,000)
Cash paid for other operating expenses	(325,000)
Cash generated from operations	293,000
Taxation paid (tax on profits)(W5)	(49,000)
Interest charges paid(W5)	(35,000)
Net cash flow from operating activities	209,000
Workings	
(W1) Cash from sales	Ħ
Trade receivables at 1 January 2013	233,000
Sales in the year	1,280,000
	1,513,000
Trade receivables at 31 December 2013	(219,000)
Cash from sales during the year	1,294,000
(W2) Purchases	N
Closing inventory at 31 December 2013	124,000
Cost of sales	400,000
	524,000
Opening inventory at 1 January 2013	(118,000)
Purchases in the year	406,000
(W3) Cash paid for materials supplies	₩
Trade payables at 1 January 2013	102,000
Purchases in the year (W2)	406,000
	508,000
Trade payables at 31 December 2013	(125,000)
Cash paid for materials	383,000

(W4) Cash paid for wages and salaries	N	:
Accrued wages and salaries at 1 January 2013	٤	8,000
Wages and salaries expenses in the year	290	0,000
	298	3,000
Accrued wages and salaries at 31 December 20	13 (5	5,000)
Cash paid for wages and salaries	293	3,000
(W5) Interest and tax payments	Tax	Interest
(W5) Interest and tax payments	Tax N	Interest N
(W5) Interest and tax payments Liability at the beginning of the year		
	₩	N 30,000
Liability at the beginning of the year	₩ 52,000	Ħ
Liability at the beginning of the year	₩ 52,000 40,000	₩ 30,000 50,000



Answer: Indirect method	
Statement of cash flows: indirect method	₩
Cash flows from operating activities	
Profit before taxation	190,000
Adjustments for:	
Depreciation and amortisation charges	25,000
Interest charges in the statement of comprehensive income	50,000
	265,000
Decrease in receivables (233,000 – 219,000)	14,000
Increase in inventories (124,000 – 118,000)	(6,000)
Increase in trade payables	20,000
(125,000 + 5,000) - (102,000 + 8,000)	
Cash generated from operations	293,000
Taxation paid	(49,000)
Interest charges paid	(35,000)
Net cash flow from operating activities	209,000

6 CASH FLOWS FROM INVESTING ACTIVITIES

Section overview

- Cash paid for the purchase of property, plant and equipment
- Cash from disposals of property, plant and equipment
- Cash paid for the purchase of investments and cash received from the sale of investments
- Non-cash purchases

6.1 Cash paid for the purchase of property plant and equipment

This is the second part of a statement of cash flows, after cash flows from operating activities.

The most important items in this part of the statement are cash paid to purchase non-current assets and cash received from the sale or disposal of non-current assets but it also includes interest received and dividends received on investments.

It is useful to remember the following relationship:



Illustration: Movement on non-current assets

N
Х
(X)
(X)
Х
X/(X)
X

When there are no disposals or revaluations during the year

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 as follows:



Illustration:	
Using cost:	Ħ
Non-current assets at the beginning of the year at cost	Х
Additions to non-current assets (balancing figure)	X
Non-current assets at the end of the year at cost	X
Alternatively carrying amount (NBV) can be used	Ħ
Non-current assets at the beginning of the year at NBV	Х
Depreciation	(X)
	Х
Additions to non-current assets (balancing figure)	X
Non-current assets at the end of the year at NBV	(X)



Example: Cash paid for property, plant and equipment

The plant and equipment of PM Company at the beginning and the end of its financial year were as follows:

	At cost	Accumulated depreciation	Net book value
	N	Ħ	Ħ
Beginning of the year	180,000	(30,000)	150,000
End of the year	240,000	(50,000)	190,000

There were no disposals of plant and equipment during the year.

The cash paid for plant and equipment in the year (additions) may be calculated in either of the following ways.

	Cost	or	NBV	
Balance at the start of the year	180,000		150,000	
Less: Depreciation charge for the year (50,000 – 30,000)			(20,000)	
Additions (balancing figure)			130,000	_
	60,000		60,000	
Balance at the start of the year	240,000		190,000	-

Note that in the above example it is assumed that the purchases have been made for cash. This might not be the case. If the purchases are on credit the figure must be adjusted for any amounts outstanding at the year end.



Example: Cash paid for property, plant and equipment

PM company has purchased various items of property, plant and equipment on credit during the year. The total purchased was \$60,000.

The statements of financial position of PM company at the beginning and end of 2013 include the following information:

Payables:	2012 (N m)	2013 (N m)
Suppliers of non-current assets	4,000	12,000

The cash paid to buy property, plant and equipment in the year can be calculated as follows:

	₩m
Additions	60,000
Less: increase in payables that relate to these items	(8,000)
Cash paid in the year	52,000

This can be thought of as the payment of the 44,000 owed at the start and a payment of 48,000 towards this year's purchases.

If the payables had decreased the movement would be added to the additions figure to find the cash outflow.



Example: Cash paid for property, plant and equipment

PM company has purchased various items of property, plant and equipment on credit during the year. The total purchased was \$60,000.

The statements of financial position of PM company at the beginning and end of 2013 include the following information:

Payables:	2012 (N m)	2013 (N m)
Suppliers of non-current assets	14,000	4,000

The cash paid to buy property, plant and equipment in the year can be calculated as follows:

	₩m
Additions	60,000
Plus: decrease in payables that relate to these items	10,000
Cash paid in the year	70,000

This can be thought of as the payment of the \$14,000 owed at the start and a payment of \$56,000 towards this year's purchases.

When there are disposals during the year

When there are disposals of non-current assets during the year, the purchases of non-current assets may be calculated as follows:

lustration: Movement on non-current assets	
	社
Assets at cost at the beginning of the year	х
Disposals during the year (cost)	(X)
	X
Additions to non-current assets (balancing figure)	Х
Assets at cost at the end of the year	X
Alternatively carrying amount (NBV) can be used	*
Non-current assets at the beginning of the year at NBV	Х
Depreciation	(X)
Disposals during the year (NBV)	(X)
	X
Additions to non-current assets (balancing figure)	Х
Non-current assets at the end of the year at NBV	(X)



Example: Cash paid for property, plant and equipment with disposals

The motor vehicles of PM Company at the beginning and the end of its financial year were as follows:

	At cost	Accumulated depreciation	Carrying amount
	₩	N	₩
Beginning of the year	150,000	(105,000)	45,000
End of the year	180,000	(88,000)	92,000

During the year a vehicle was disposed of for a gain of \$3,000. The original cost of this asset was \$60,000. Accumulated depreciation on the asset was \$45,000.

Additions may be calculated as follows:

	Cost	NBV
Balance at the start of the year	150,000	45,000
Disposals during the year:		
At cost	(60,000)	
At carrying amount: (60,000 – 45,000)		(15,000)
Depreciation (88,000 - (105,000 - 45,000)		(28,000)
	90,000	2,000
Additions (balancing figure)	90,000	90,000
Balance at the end of the year	180,000	92,000

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.

	Ħ
At cost or valuation, at the beginning of the year	Х
Disposals during the year (cost)	(X)
Upward/(downward) revaluation during the year	X/(X)
	X
Additions to non-current assets (balancing figure)	Х
At cost or valuation, at the end of the year	X
Alternatively carrying amount (NBV) can be used	*
Non-current assets at the beginning of the year at NBV	Х
Depreciation	(X)
Disposals during the year (NBV)	(X)
Upward/(downward) revaluation during the year	X/(X)
	Х
Additions to non-current assets (balancing figure)	Х
Non-current assets at the end of the year at NBV	(X)



Example:

The statements of financial position of Grand Company at the beginning and end of 2013 include the following information:

Property, plant and equipment	2012 2013	
	Ħ	Ħ
At cost/re-valued amount	1,400,000	1,900,000
Accumulated depreciation	350,000	375,000
Carrying value	1,050,000	1,525,000

During the year, some property was revalued upwards by 200,000. An item of equipment was disposed of during the year at a profit of 25,000. This equipment had an original cost of 260,000 and accumulated depreciation of 240,000 at the date of disposal.

Depreciation charged in the year was ₩265,000.



Example (continued)

Additions may be calculated as follows:

	Cost	NBV
	₩	₩
Balance at the start of the year	1,400,000	1,050,000
Disposals during the year:		
At cost	(260,000)	
At carrying amount: (260,000 – 240,000)		(20,000)
Depreciation		(265,000)
Revaluation	200,000	200,000
	1,340,000	965,000
Additions (balancing figure)	560,000	560,000
Balance at the end of the year	1,900,000	1,525,000

The revaluation recognised in the year can be found by comparing the opening and closing balances on the revaluation surplus account. There might also be revaluation double entry recognised as a gain or loss in other comprehensive income. You need to total revaluation recognised in the year so you may have to add or net both amounts.

Revaluation accounting is explained in detail in chapter 7.

When there are other additions during the year

The above example showed the need to take revalution into account when reconciling the opening and closing balances on non-current assets so as to find the additions figure as a balancing amount.

This applies to other additions too:

- Transfers from capital work in progress
 - These are assets constructed by a company for its own use.
 - During the course of construction costs are accumulated in a capital work in progress account and these are transferred into the relevant category of non-current asset on completion.
 - The cash consequence of capital work in progress is estimated as a separate exercise.
 - Transfers into the relevant category of non-current asset on completion show as an addition and so must be taken into account when trying to estimate the cash additions.
- Assets acquired under finance leases. (finance leases are covered in detail in chapter 9).
 - A finance lease is capitalised on the statement of financial position as an assets and as a liability.
 - The asset side of the entry will show as an addition into non-current assets and so must be taken into account when trying to estimate the cash additions.
 - The liability is a form of loan. Movements on the liability represent new amounts borrowed (additions to non-current assets) and repayments of capital.



Example:

The statements of financial position of Grand Company at the beginning and end of 2013 include the following information:

Property, plant and equipment	2012	2013
	Ħ	Ħ
At cost/re-valued amount	1,400,000	1,900,000
Accumulated depreciation	350,000	375,000
Carrying value	1,050,000	1,525,000
Capital work in progress	600,000	620,000
Finance lease liability	300,000	410,000

During the year:

Property was revalued upwards by ₩200,000.

An item of equipment was disposed of at a profit of \$25,000. This equipment had an original cost of \$260,000 and accumulated depreciation of \$240,000 at the date of disposal.

Depreciation charged in the year was \$265,000.

The company capitalised \$200,000 as capital work in progress and repaid \$50,000 of the finance lease loan.



Example (continued)

Additions may be calculated as follows:

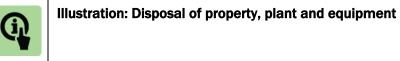
	Cost	NBV
	Ħ	N
Balance at the start of the year	1,400,000	1,050,000
Disposals during the year:		
At cost	(260,000)	
At carrying amount: (260,000 – 240,000)		(20,000)
Depreciation		(265,000)
Revaluation	200,000	200,000
Additions – new assets under finance leases (W)	160,000	160,000
Additions – Transfer from capital WIP (W)	180,000	180,000
	1,680,000	1,305,000
Additions (balancing figure)	220,000	220,000
Balance at the end of the year	1,900,000	1,525,000
		_,0_0,000
Workings		
Additions – new assets under finance leases	(W)	₩
Liability at the start of the year		300,000
Less: repayments		(50,000)
	-	250,000
New loan – other side of entry to property, pl	ant and	
equipment (balancing figure)	-	160,000
		410,000
Capital work in progress		
Balance at the start of the year		600,000
New WIP capitalised		200,000
	-	800,000
Transfer to property, plant and equipment (ba	alancing	,
figure)		(180,000)
Balance at the end of the year	-	620,000
	-	



6.2 Cash from disposals of property plant and equipment

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.



	4
At cost (or re-valued amount at the time of disposal)	Х
Accumulated depreciation, at the time of disposal	(X)
Net book value/carrying amount at the time of disposal	Х
Gain or (loss) on disposal	Х
Net disposal value (= assumed cash flow)	Х

If there is a gain on disposal, the net cash from the disposal is more than the net book value.

If there is a loss on disposal the net cash from the disposal is less than the net book value.



Example:

During an accounting period, an entity disposed of some equipment and made a gain on disposal of \Re 6,000.

The equipment originally cost \$70,000 and at the time of its disposal, the accumulated depreciation on the equipment was \$56,000.

What was the amount of cash obtained from the disposal of the asset?

Disposal of equipment	Ħ
At cost	70,000
Accumulated depreciation, at the time of disposal	(56,000)
Net book value/carrying amount at the time of disposal	14,000
Gain on disposal	6,000
Net disposal value (assumed cash flow)	20,000

Note that in the above example it is assumed that the cash received for the disposal has been received. This might not be the case. If the disposal was on credit the figure must be adjusted for any amounts outstanding at the year end.

3

2

Practice question

At 1 January 2013, the property, plant and equipment in the statement of financial position of NC Company amounted to \$329,000 at cost or valuation.

At the end of the year, the property, plant and equipment was $\$381,\!000$ at cost or valuation.

During the year, a non-current asset that cost 40,000 (and has not been re-valued) was disposed of at a loss of 44,000. The accumulated depreciation on this asset at the time of disposal was 21,000.

Another non-current asset was re-valued upwards during the year from \$67,000 (cost) to \$102,000.

Calculate the following amounts, for inclusion in the cash flows from investing activities section of the company's statement of cash flows for 2013:

a) Purchases of property, plant and equipment

b) Proceeds from the sale of non-current assets

Cash paid for the purchase of investments and cash received from the sale 6.3 of investments

A statement of cash flows should include the net cash paid to buy investments in the period and the cash received from the sale of investment in the period.

It is useful to remember the following relationship:

- -



Г

ustration: Movement on investments	
	Ħ
Carrying amount at the start of the year	Х
Disposals	(X)
Additions	Х
Revaluation	X/(X)
Carrying amount at the end of the year	X

The issues to be considered in calculating cash paid for investments or cash received on the sale of investments are very similar to those for the purchase and sale of property, plant and equipment except for the absence of depreciation.

The statements of financial position of Grand 2013 include the following information:	Company at the	e beginning and en
	2012 (N m)	2013 (N m)
Non-current asset investments	1,000	1,500
Additional information:		
The investments were revalued upwards of gain of ₦150m has been recognised.	luring the year.	A revalution
Investments sold for ₦250m resulted in a as the difference between sale proceeds a date of sale) of ₦50m	•	•
The cash paid to buy investments in the p balancing figure as follows:	eriod can be ca	Iculated as a
	₩m	
Investments at the start of the year (given) 1 ,000	
Disposal (carrying amount of investments sold = ₦250m – ₦50m)	(200)	
Revalution gains (given	150	
	950	
Additions (as balancing figure):	550	
Investments at the end of the year (given)	1,500	

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6.4 Non-cash purchases

IAS 7 states that investing and financing transactions that do not require the use of cash must be excluded from the statement of cash flows, but that details of these transactions should be disclosed somewhere in the financial statements, possibly as a note to the financial statements.

An example of a non-cash transaction is the acquisition of non-current assets under a finance lease arrangement. The assets are included in the financial statements at cost, but the lessee has not paid the purchase price.

IAS 7 therefore suggests that there should be a disclosure, in a note to the financial statements, of the total amount of property, plant and equipment acquired during the period, and the cash payments that were made to acquire them. These two amounts are different, because some of the non-current assets might have been acquired under finance lease arrangements.



Illustration

An example of a note to the financial statements is as follows.

During the period, the company acquired property, plant and equipment with an aggregate cost of \$250,000, of which \$60,000 was acquired by means of finance leases. Cash payments of \$190,000 were made to purchase property, plant and equipment.

In this example, ₩190,000 would appear as a cash outflow in the statement of cash flows in the section for cash flows from investing activities for the period.

The 190,000 is the amount of cash actually paid for purchases of property, plant and equipment in the period.

The cash payments under the terms of the finance leases are not included in this part of the statement of cash flows. The treatment of finance lease payments is explained later.

7 CASH FLOWS FROM FINANCING ACTIVITIES

Section overview

- Examples of cash flows from financing activities
- Cash from new share issues
- Cash from new loans/cash used to repay loans
- Dividend payments to equity shareholders
- Repayments on finance leases

7.1 Examples of cash flows from financing activities

Examples of cash flows from financing activities are listed below:

Cash payments	Cash receipts
Cash payments to redeem/buy back shares	Cash proceeds from issuing shares
Cash payments to repay a loan or redeem bonds	Cash proceeds from a loan or issue of bonds
Cash payments to a lessor under a finance lease agreement that represent a reduction in the remaining finance lease obligation (= a reduction in the creditors for finance leases)	

As explained earlier, payments of dividends are also usually included within cash flows from financing activities, in this part of the statement of cash flows. (Some entities may also include interest payments in this section, instead of including them in the section for cash flows from operating activities.)

••

7.2 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.



Illustration:

	P	
Share capital + Share premium at the end of the year	Х	
Share capital + Share premium at the beginning of the year	Х	
Cash obtained from issuing new shares in the year	Х	



Example:

The statements of financial position of Company P at 1 January and 31 December included the following items:

	1 January 2013	31 December 2013
	Ħ	Ħ
Equity shares	600,000	750,000
Share premium	800,000	1,100,000

The cash obtained from issuing shares during the year is calculated as follows.

	Ħ
Share capital + Share premium at the end of 2013	1,850,000
Share capital + Share premium at the beginning of 2013	(1,400,000)
Cash obtained from issuing new shares in 2013	450,000

The above example assumes that the only cause of movement on the share capital and share premium account was an issue of shares for cash. A question may provide information about a non-cash movement (e.g. a bonus issue or an issue of shares in exchange for shares in another company). All non-cash movements would need to be taken into account when calculating the cash movement.



Example:

The statements of financial position of Company P at 1 January and 31 December included the following items:

	1 January 2013	31 December 2013
	N	N
Equity shares	600,000	750,000
Share premium	800,000	1,100,000

There was a 1 for 6 bonus issue during the year funded out of retained earnings. The bonus issue was followed later in the year by a rights issue to raise cash for the purchase of new plan.

(The information about the bonus issue means that for every 6 shares held at the start of the year one new share was issued. Therefore, the share capital changed from \$600,000 to \$700,000. The double entry to achieve this was Dr Retained earnings and Cr Share capital).

The cash obtained from issuing shares during the year is calculated as follows.

	Ħ
Share capital + Share premium at the end of 2013	1,850,000
Share capital + Share premium at the beginning of 2013	(1,400,000)
Bonus issue (600,000 $ imes$ $^7/_6$)	(100,000)
Cash obtained from issuing new shares in 2013	350,000

If a bonus issue is funded out of share premium it can be ignored because the balances on the two accounts are added together so the total would not be affected.

7.3 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, loan notes or bonds repayable within one year (current liability) to the loans, loan notes or bonds repayable after more than one year (non-current liability) to get the total figure for loans, loan notes or bonds.



Illustration:

	Ħ
Loans at end of year (current and non-current liabilities)	Х
Loans at beginning of year (current and non-current liabilities)	Х
Cash inflow or outflow	Х

Note: The same calculation can be applied to bonds or loan notes that the company might have issued. Bonds and loan notes are long-term debt.



Example:

The statements of financial position of Company Q at 1 January and 31 December included the following items:

	1 January 2013	31 December 2013
	N	N
Loans repayable within 12 months	760,000	400,000
Loans repayable after 12 months	1,400,000	1,650,000

The cash flows relating to loans during the year are calculated as follows.

	N
Loans outstanding at the end of 2013	2,050,000
Loans outstanding at the beginning of 2013	2,160,000
= Net loan repayments during the year (= cash outflow)	110,000

7.4 Dividend payments to equity shareholders

These should be the final dividend payment from the previous year and the interim dividend payment for the current year. The dividend payments during the year are shown in the statement of changes in equity (SOCIE).

You might be expected to calculate dividend payments from figures for retained earnings and the profit after tax for the year.

If there have been no transfers to the retained earnings reserve from the revaluation reserve in the year, the equity dividend payments can be calculated as follows:



Illustration:

	#
Retained earnings reserve at the beginning of the year	Х
Profit for the year after tax	Х
Increase in the retained earnings reserve	Х
Retained earnings reserve at the end of the year	(X)
Equity dividend payments	Х



Example:

From the following information, calculate the cash flows from investing activities for Company X in 2013.

	Beginning of 2013	End of 2013
	Ħ	Ħ
Share capital (ordinary shares)	400,000	500,000
Share premium	275,000	615,000
Retained earnings	390,000	570,000
	1,065,000	1,685,000
Loans repayable after more than 12 months	600,000	520,000
Loans repayable within 12 months or less	80,000	55,000

The company made a profit of ₩420,000 for the year after taxation.

Required

Calculate for 2013, for inclusion in the statement of cash flows:

- (a) the cash from issuing new shares
- (b) the cash flows received or paid for loans
- (c) the payment of dividend to ordinary shareholders.

A
′ '€

Answer

Workings		
Proceeds from new issue of shares		N
Share capital and share premium:		
At the end of the year (500,000 + 615,000)	1	L, 115,000
At the beginning of the year (400,000 + 275,000)		675,000
Proceeds from new issue of shares during the year	r	440,000
Repayment of loans		Ħ
Loans repayable:		
At the end of the year (520,000 + 55,000)		575,000
At the beginning of the year (600,000 + 80,000)		680,000
Repayment of loans during the year		105,000
Payment of dividends		N
Retained earnings at the beginning of the year		390,000
Profit after taxation for the year		420,000
	_	810,000
Retained earnings at the end of the year		570,000
Dividends paid during the year	_	240,000
Cash flows from financing activities can now be pres	sented as fol	lows.
Cash flows from financing activities	₩	₩
Proceeds from issue of shares	440,000	
Repayment of loans	(105,000)	
Dividends paid to shareholders	(240,000)	
Net cash from financing activities		95,000

7.5 Repayments on finance leases

When non-current assets are acquired under a finance lease, the lessee makes payments under the lease agreement. For accounting purposes, payments under finance leases are treated:

- partly as interest payments, and
- □ partly as repayment of the lease finance.

For the purposes of the statement of cash flows:

- □ The interest element in the lease payments is treated as an interest payment. It is included either as a cash flow from operating activities or a cash flow from financing activities
- □ The repayment of the lease liability is treated as a repayment of a debt, and is included as a cash flow from financing activities.

If interest payments are treated as a cash flow from financing activities, the full amount of lease payments is included in this part of the statement of cash flows.

8 CHAPTER REVIEW

Chapter review

Before moving on to the next chapter check that you now know how to:

- Prepare extracts from a statement of cash flow
- Prepare a statement of cash flow

1

SOLUTIONS TO PRACTICE QUESTIONS

Solutions

- (a) In the adjustments to get from the operating profit to the cash flow from operations, the loss on disposal of \$8,000 should be added.
- (b) Under the heading 'Cash flows from investing activities', the sale price of the vehicle of \aleph 22,000 should be included as a cash inflow.

Workings:

Original cost of vehicle	50,000
Accumulated depreciation at date of disposal	(20,000)
Net book value at the time of disposal	30,000
Loss on disposal	(8,000)
Therefore net sales proceeds	22,000

Solutions 2 ₩ 60,000 Profit before taxation Adjustments for: Depreciation 25,000 Interest charges 10,000 Gain on disposal of non-current asset (14,000)81,000 Reduction in trade and other receivables 5,000 Increase in inventories (4,000) **Reduction in trade payables** (6,000)76,000 **Taxation paid** (17,000)Interest charges paid (10,000)49,000 Cash flows from operating activities

Solutions	
Property, plant and equipment purchases	Ħ
At cost or valuation at the end of the year	381,000
At cost or valuation at the beginning of the year	329,000
	52,000
Add: Cost of assets disposed of in the year	40,000
Subtract: Asset revaluation during the year (102,000 – 67,000)	(35,000)
Purchases during the year	57,000
Disposal of equipment	Ħ
At cost	40,000
Accumulated depreciation, at the time of disposal	(21,000)
Net book value/carrying amount at the time of disposal	19,000
Loss on disposal	4,000
Net disposal value (= assumed cash flow)	15,000

Skills level Financial reporting



Accounting for financial instruments

Contents

- 1 GAAP for financial instruments
- 2 Accounting for share issues
- 3 Recognition and measurement
- 4 IAS 32: Presentation
- 5 IFRS 7: Disclosure
- 6 Chapter review

INTRODUCTION

Purpose

In this element the accounting from the foundation level is taken up a level into financial accounting in the context of more complex events and transactions with a greater emphasis on compliance with regulations including International Accounting Standards and generally accepted accounting practices in the private sectors.

Students will be expected to demonstrate an understanding of and competence in financial statement analysis and basic analysis of choices in accounting treatments.

Competencies

2	Preparing separate financial statements
2(b)	Identify and state the laws, regulations accounting standards and other requirements that govern the production of financial statements by such entities.
2(c)	Draft and compile financial statements, or extracts from them, of an entity in accordance with its chosen policies and in accordance with IFRS and local

IAS 32, IAS 39 and IFRS 7 are examinable documents.

Exam context

This chapter explains the basic rules on the recognition, measurement, presentation and disclosure of financial instruments.

By the end of this chapter you will be able to:

law.

- Define financial asset and financial liability
- Explain fair value and amortised cost
- Apply the correct accounting treatment for each of the four categories of financial asset identified by IAS 39
- Account for financial liabilities in accordance with IAS 39
- Distinguish between debt and equity
- Apply split accounting in the books of the issue on the initial recognition of a convertible bond
- Explain the IFRS 7 disclosures in respect of financial instruments in overview

1 GAAP FOR FINANCIAL INSTRUMENTS

Section overview

- Background
- Definitions
- Derivatives

1.1 Background

The rules on financial instruments are set out in four accounting standards:

- □ IAS 32: Financial instruments: Presentation
- □ IAS 39: Financial instruments: Recognition and measurement
- □ IFRS 7: Financial instruments: Disclosure
- □ IFRS 9: Financial Instruments

IFRS 9 is not an examinable document in this syllabus but is mentioned for completeness.

IAS 39 and IFRS 9

The IASB inherited IAS 39 from its predecessor body. The IASB has received many complaints about IAS 39 from interested parties that the requirements in IAS 39 were difficult to understand, apply and interpret. These interested parties urged the IASB to develop a new standard for the financial reporting of financial instruments that is principle-based and less complex.

The IASB have been engaged on a project to replace IAS 39. This project was divided into several phases and as each phase is completed the relevant portions of IAS 39 are deleted and replaced by new chapters in IFRS 9. IFRS 9 will ultimately replace IAS 39 in its entirety.

The new rules in IFRS 9 are not compulsory until 2018 but can be adopted earlier in some jurisdictions.

This means that in practice many companies in the world are still applying the rules in IAS 39.

1.2 Definitions

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.

A financial asset is any asset that is:

- cash;
- An equity instrument of another entity;
- A contractual right:
 - to receive cash or another financial asset from another entity; or
 - to exchange financial assets or financial liabilities with another entity

A **financial liability** is any liability that is a contractual obligation:

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

Financial instruments include:

- Cash
- Shares
- Loans
- Debentures
- Accounts receivable or accounts payable; and
- Financial derivatives and commodity derivatives.

1.3 Derivatives

A derivative is a financial instrument with all three of the following characteristics:

- Let the second s
- Lt requires no or little initial investment; and
- Lt is settled at a future date

Categories of derivatives

Derivatives can be classified into two broad categories:

- □ Forward arrangements (commit parties to a course of action)
 - forward contracts
 - futures
 - swaps
- Options (gives the option buyer a choice over whether or not to exercise his rights under the contract)

A company can enter into a transaction involving a derivative for one of two reasons:

- To speculate, and hope to make a profit from favourable movements in Rates or prices; or
- □ to hedge against exposure to a particular risk

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.



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.

The company 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.

Hedging and hedge accounting are covered in later papers. This section has largely been included for completeness.

2 ACCOUNTING FOR SHARE ISSUES

Section overview

- Issue of equity shares
- Bonus issues

2.1 Issue of equity shares

This topic is not covered by the rules on financial instruments but is dealt with by company law. It is included in this chapter for convenience.

When an entity issues new ordinary shares:

- □ The issued shares become a part of equity, and
- □ The entity receives cash from the issue, or possibly assets other than cash (for which a carrying value is determined).

The issue price of new equity shares is usually higher than their face value or nominal value. The difference between the nominal value of the shares and their issue price is accounted for as share premium, and credited to a share premium reserve. (This reserve is a part of equity).

Illustration: Share issue double entry		
	Debit	Credit
Bank (cash received)	Х	
Share capital (nominal value of shares issued)		Х
Share premium (with the excess of the issue price of the shares over their nominal value)		x

Transaction costs of issuing new equity shares for cash should be debited directly to equity.

The costs of the issue, net of related tax benefit, are set against the share premium account. (If there is no share premium on the issue of the new shares, issue costs should be deducted from retained earnings).



Example: Share issue

A company issues 200,000 shares of ₩25 each at a price of ₩250 per share. Issue costs are ₩3,000,000.

The share issue would be accounted for as follows:

	Dr (₦000)	Cr (₦000)
Cash (200,000 × 250)	50,000	
Share capital (200,000 × 25)		5,000
Share premium (200,000 × 250 – 25)		45,000
Share premium		3,000
Cash	3,000	

2.2 Bonus issues

When an entity issues new ordinary shares:

A bonus issue of shares (also called a scrip issue or a capitalisation issue) is an issue of new shares to existing shareholders, in proportion to their existing shareholding, for no consideration. In other words, the new shares are issued 'free of charge' to existing shareholders.

The new shares are created by converting an equity balance from the statement of financial position into ordinary share capital.



Illustration: Share issue double entry			
	Debit	Credit	
Equity reserve	х		
Share capital (nominal value of shares issued)		Х	

3 RECOGNITION AND MEASUREMENT

Section overview

- Recognition of financial instruments
- Initial measurement
- Categories of financial asset
- Categories of financial liability
- Subsequent measurement
- Subsequent measurement at fair value
- Subsequent measurement at amortised cost

3.1 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. Usually an asset or liability is recognised when there is a probable inflow or outflow of economic benefits.

IAS 39 defines four classes of financial asset and two classes of financial liability into which financial assets and financial liabilities must be allocated to one of these classes on initial recognition.

The categories of financial assets and liabilities do not affect the initial measurement of the assets and liabilities. However, they do affect the method of accounting after initial recognition.

3.2 Initial measurement

A financial instrument should be measured initially at its fair value. This is usually the fair value of the consideration given or received.

In the case of many derivatives the fair value on initial recognition is often zero. It may seem odd to recognise a zero amount but this is done so that any gain or loss that might arise between the date of initial recognition and the reporting date is recognised in accordance with the rules in IAS 39.

Transaction costs (for example, a dealer's fee) might be incurred on initial recognition of a financial instrument. The accounting treatment of these fees depends on the subsequent accounting treatment applied to the financial asset or financial liability in question.

Transaction costs are expensed immediately in the statement of profit or loss if the financial asset or financial liability is subsequently measured at fair value with gains and losses recognised in the statement of profit or loss.

Otherwise the transaction cost is capitalised as part of the carrying amount of the financial asset or financial liability on initial recognition.

3.3 Categories of financial asset

On initial recognition, financial assets are classified into one of four categories. This categorisation is very important as it determines the subsequent measurement of the financial asset.

The four categories are:

(1) Financial assets at fair value through profit or loss.

This includes financial assets that are held for trading.

Derivatives that are assets must be included in this category unless held in hedging relationships that qualify for hedge accounting.

An entity can choose to treat other financial instruments as 'at fair value through profit or loss', provided that they meet certain criteria.

(2) **Held to maturity investments**. These are financial assets with fixed payments and a fixed maturity that the entity 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).

(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.

3.4 Categories of financial liability

On initial recognition, financial liabilities are classified into one of two categories. This categorisation determines the subsequent measurement of the financial asset.

There are two categories of financial liabilities:

- (1) **Financial liabilities at fair value through profit or loss**. These include derivatives that are liabilities held in hedging relationships that qualify for hedge accounting.
- (2) **Financial liabilities measured at amortised cost**. This category is for all remaining financial liabilities.

3.5 Subsequent measurement

After initial recognition financial assets (financial liabilities) are measured either at:

- □ Fair value; or
- Amortised cost.

The measurement methods to be applied to each category of financial asset are summarised as follows:

Category of financial asset	Measurement method at subsequent reporting dates
Financial assets at fair	Fair value.
value through profit or loss	Gain or loss recognised in the statement of proft or loss
Held to maturity financial assets	Amortised cost
Loans and receivables	Amortised cost
Available-for-sale financial	Fair value.
assets	Gain or loss recognised in other comprehensive income and accumulated in a spearate equity reserve.

The measurement methods to be applied to each category of financial liabilities are summarised as follows:

Category of financial asset	Measurement method at subsequent reporting dates
Liabilities at fair value	Fair value.
through profit or loss	Gain or loss recognised in the statement of proft or loss
Liabilities measured at amortised cost	Amortised cost

Valuation at amortised cost is explained later.

3.6 Subsequent measurement at fair value

Definition



Definition

Fair value is 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 (i.e. it is an exit price).

Fair value measurement looks at the asset (liability) from the point of view of a market participant. The fair value must take into account all factors that a market participant would consider relevant to the value.

A quoted price in an active market provides the most reliable evidence of fair value and must be used to measure fair value whenever available.

IFRS 13 Fair value measurement provides more detailed guidance. It is only mentioned here for completeness as it is not an examinable document in this paper.

Accounting treatments

The accounting treatment for financial assets at fair value through profit or loss is evident in the name of the category.

All financial assets in this category are remeasured to the fair value at each reporting date with all gains and losses recognised in the statement of profit or loss. They are said to be *marked to market*.

The accounting treatment of an available for sale financial asset (AFS financial asset) is more complicated. All financial assets in this category are remeasured to the fair value at each reporting date with all gains and losses recognised in other comprehensive income and taken to a separate reserve in equity.

When an AFS financial asset is sold the cumulative gain or loss previously recognised for this asset is reclassified from other comprehensive income to profit or loss.



Illustration: AFS asset			
Recognition of a gain	Dr	Cr	
AFS asset	Х		
Other comprehensive income		Х	
The gain recognised in other com reserves as a credit balance.	prehensive inc	ome is accu	mulated in
On sale of the AFS asset			
Other comprehensive income	Х		
Statement of profit or loss		Х	
The debit recognised in other con previously recognised credit bala	•		-

Companies need systems which are able to track gains and losses on individual AFS financial assets so that when an asset is sold, the appropriate amount can be reclassified.



Example: AFS asset

A company purchased a financial asset for ₩30,000 plus 1% transaction costs on 1 April 20X6. It classified this asset as available for sale.

At the end of the financial year (31 December 20X6) the investment was N40,000.

On 11 January 20X7 the asset was sold for ₩50,000.

The following double entries are necessary:

1 April 20X6: Initial recognition	Dr (₦)	Cr (₦)
AFS financial asset	30,300	
Cash		30,300
Being: Initial recognition of an AFS financial asse	t	
(At cost plus transaction cost = ₩30,000 + (1% o	f ₦30,000))	
31 December 20X6: Subsequent measurement	Dr (₦)	Cr (₦)
AFS financial asset (₦40,000 - ₦30,300)	9,700	
Other comprehensive income		9,700
Being: Re-measurement of AFS financial asset to	fair value.	
1 January 20X7: Disposal	Dr (₦)	Cr (₦)
Cash	50,000	
AFS financial asset		40,000
Statement of profit or loss		10,000
Being: Recognition of profit on disposal of an AFS	6 financial as	set.
	Dr (₦)	Cr (₦)
Other comprehensive income	9,700	
Statement of profit or loss		9,700
Being: Reclassification adjustment arising on dis financial asset.	posal of an A	AFS

3.7 Subsequent measurement at amortised cost

Held to maturity investments, loans and receivables and many financial liabilities 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); less
- □ Interest actually received (cash received).

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); less
- □ Interest actually paid (cash paid).



	Financial asset	Financial liability
Amount at initial recognition	Х	Х
Plus: Interest recognised at the effective ate:		
as income	Х	
as expense		Х
.ess: repayments	(X)	(X)
Amortised cost	x	Х

Interest expense is measured using the effective rate. This is the rate that matches the amount loaned (borrowed) with the discounted future cash flows received (paid).

The effective rate is the discount rate that, when applied to the future interest and redemption cash flows, gives an amount equal to the amount initially recognised for the financial asset or financial liability. Thus it results in a net present value of zero. It is the IRR of all cash flows associated with lending or borrowing.

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

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.



Example: Amortised cost

A company issues a bond (borrows).

The bond has an issue value of 11 million and pays a coupon rate of 5% interest for two years, then 7% interest for two years (this is known as a stepped bond).

Interest is paid annually on the anniversary of the bond issue.

The bond will be redeemed at par after four years.

The effective rate for this bond is 5.942%

The amortised cost of the liability at the end of each year is calculated by constructing an amortisation table as follows:

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

The bond is initially recorded at cost (1,000,000) and by the end of year 1 it has an amortised cost of 1,009,424.

The difference is due to the difference in the interest expense recognised in the statement of profit or loss (\$59,424) and the interest actually paid (\$50,000).

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

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2



Practice question

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

Terms:

Nominal value	₩50 million
Coupon rate	10%
Term to maturity	3 years
Purchase price	₩48 million
Effective rate	11.67%

Calculate the amortised cost of the bond and show the interest income for each year to maturity.



Practice question

A company issues 10 million of 6% bonds at a price of 100.50 for each 100 nominal value with issue costs of 50,000.

The bonds are redeemable after four years for ₩10,444,000.

The effective annual interest rate for this financial instrument is 7%.

Calculate the amortised cost of the bond and show the interest income for each year to maturity.

4 IAS 32: PRESENTATION

Section overview

- Liability or equity?
- Preference shares: debt or equity?
- Compound instruments
- Transactions in own equity
- Offsetting

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 statement of profit or loss.
- Distributions to equity holders are debited to equity and shown in the statement of changes in equity.

4.2 Preference shares: debt or equity?

Preference shares are shares that are entitled to a payment of their dividend, usually a fixed amount each year, before the ordinary shareholders can be paid any dividend or that rank ahead of ordinary shares for any distribution of net assets in the event of a winding up of the company.

Preference shares include the following types:

- Redeemable preference shares are those that the entity has an obligation to buy back (or the right to buy back) at a future date.
- □ Irredeemable (perpetual) preference shares are those that will not be bought back at any time in the future.

convertible preference shares are those that are convertible at a future date into another financial instrument, usually into ordinary equity shares of the entity.

Classification of preference shares

Depending on their characteristics, preference shares issued by a company might be classified as:

- equity; or
- a financial liability of the company; or
- a compound financial instrument containing elements of both financial liability and equity.

IAS 32 states (in a guidance note) that the key factor for classifying preference shares is the extent to which the entity is obliged to make future payments to the preference shareholders.

- Redeemable preference shares. Since the entity will be required to redeem the shares, there is a future obligation. The redemption element of the shares is a financial liability.
- □ Irredeemable non-cumulative preference shares should be treated as equity, because the entity has no obligation to the shareholders that the shareholders have any right to enforce.

4.3 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.

When convertible bonds are issued they are shown in the statement of financial position partly as debt finance and partly as equity finance. The question is how to determine the amount of the issue price that is debt and the amount that is equity.

The method to use is to calculate the equity element as the residual after determining the present value of the debt element:

- □ The present value of the interest payments and the redemption value of the convertible is found using a market interest rate for similar debt finance which is not convertible (normally a higher interest rate as there is no conversion element).
- Compare this present value to the proceeds of the bond issue to find the residual equity element.
- 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.

Comment on the measurement of the debt element

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 the following example is 8%.



Example: Convertible bond

A company issues ₩10 million of 6% convertible bonds at par on 1 January 20X1.

The bonds are redeemable at par after four years or can be converted at any time up to that date into shares with a nominal value of \$2,000,000.

The market rate of interest for similar debt which is not convertible is 8%.

The bonds should be recorded in the statement of financial position at the date of issue as follows:

Step 1: Measure the liability component first by discounting the interest payments and the amount that would be paid on redemption (if not converted) at the prevailing market interest rate of 8%.

31 December	Cash flow	DF (8%)	N
20X1 to 20X4 Interest: 10,000,000 × 6%	600,000	3.312	1,987,200
20X4: Repayment of principle	10,000,000	0.735	7,350,000
Value of debt element			9,337,200
Step 2: Compare the value of the raised. The difference is the equ		he cash	
Total proceeds			10,000,000
Value of equity element (residua	l)		662,800
The initial double entry to recogr	nise the bond would	l be as follo	ows:
	Dr	Cr	
Cash	10,000,000		
Liability		9,337	,200
Equity		662	,800

The liability component is measured at amortised cost in the usual way at each subsequent reporting date.

Example (con convertible be	•	quent measuren	nent of the deb	ot element of the
			Cash flow	
	Amortised	Interest at	(interest	Amortised
	cost at start of the year	effective rate (8%)	actually paid at 6%)	cost at year end
20X1	9,337,200	746,976	(600,000)	9,484,176
20X2	9,484,176	758,734	(600,000)	9,642,910
20X3	9,642,910	771,433	(600,000)	9,814,343
20X4	9,814,343	785,557	(600,000)	10,000,000

Note that the final interest expense of \$785,557 includes a rounding adjustment of \$510).

There is no guidance on the subsequent accounting treatment of the equity element. One approach would be to retain it as a separate component of equity and then release it to retained earnings when the bond is paid or converted.



If the bond is repaid

Example (continued): Double entry on repayment or conversion of the bond.

At 31 December 20X4 the bond will either be paid or converted. Possible double entries in each case are as follows:

	Dr	Cr
Liability	10,000,000	
Cash		10,000,000
and:		
Equity component	662,800	
Retained earnings		662,800
If the bond is converted:		
	Dr	Cr
Liability	10,000,000	
Share capital		2,000,000
Share premium		8,000,000
and:		
Equity component	662,800	
Retained earnings		662,800

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A company issued a convertible bond for ₩2,000,000 on 1 January 20X5.

The bond is to be redeemed on 31 December 20X7 (3 years after issue). The bond holders can take cash or shares with a nominal value of \$1,200,000 on this date.

The bond pays interest at 5% but the market rate of interest for similar risk bonds without the conversion feature was 9% at the date of issue.

- a) Calculate the liability and equity components of the bond on initial recognition.
- b) Construct the necessary journal on initial recognition.
- c) Construct an amortisation table to show how the liability component would be measured over the life of the bond.
- d) Construct the journal to reflect the possible conversion of the bonds to shares on 31 December 20X7.

4.4 Transactions in own equity

Practice question

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.

4.5 Offsetting

Offsetting an asset and a liability and presenting a net amount on the face of the statement of financial position can result in a loss of information to the users. IAS 1 prohibits offset unless required or permitted by an IFRS.

The idea is that offset should only be allowed if it reflects the substance of the transactions or balances.

IAS 32 adds more detail to this guidance in respect of offsetting financial assets and liabilities.

IAS 32 requires the presentation of financial assets and financial liabilities in a way that reflects the company's future cash flows from collecting the cash from the asset and paying the cash on the liability. It limits a company's ability to offset a financial asset and a financial liability to those instances when the cash flows will occur at the same time.

The IAS 32 rule is that a financial asset and a financial liability must be offset and shown net in the statement of financial position when and only when an entity:

- currently has a legal right to set off the amounts; and
- □ intends either to settle the amounts net, or to realise (sell) the asset and settle the liability simultaneously.

In order for a legal right of set off to be current it must not be contingent on a future event. Furthermore it must be legally enforceable in all of the following circumstances:

- □ the normal course of business;
- □ the event of default;
- □ the event of insolvency or bankruptcy of the entity and all of the counterparties

Note: The existence of 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 are usually reported separately in the statement of financial position, and not 'netted off' against each other.

Many companies adopting IFRS for the first time find that they have net amounts in the statement of financial position under their old GAAP that have to be shown as a separate financial asset and financial liability under IFRS. The net position is described as being "grossed up".

5 IFRS 7: DISCLOSURE

Section overview

- Objectives of IFRS 7
- Statement of financial position disclosures
- Statement of profit or loss disclosures
- Risk disclosures

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.

5.2 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
- □ Financial assets at amortised cost
- 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.

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 Statement of profit or loss disclosures

An entity must disclose the following items either in the statement of profit or loss 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 through other comprehensive income 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.

5.4 Risk disclosures

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.

6 CHAPTER REVIEW

Chapter review

Before moving on to the next chapter check that you now know how to:

- Define financial asset and financial liability
- Explain fair value and amortised cost
- Apply the correct accounting treatment for each of the four categories of financial asset identified by IAS 39
- Account for financial liabilities in accordance with IAS 39
- Distinguish between debt and equity
- Apply split accounting in the books of the issue on the initial recognition of a convertible bond
- Explain the IFRS 7 disclosures in respect of financial instruments in overview

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SOLUTIONS TO PRACTICE QUESTIONS

Solution

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	

Solution

The initial liability is ($100 \text{ million} \times 100.50/100$) – 50,000 = 10,000,000.

	Liability at start of year	Finance charge at 7%	Interest paid	Liability at end of year
	₩	₩	₩	₩
Year 1	10,000,000	700,000	(600,000)	10,100,000
Year 2	10,100,000	707,000	(600,000)	10,207,000
Year 3	10,207,000	714,490	(600,000)	10,321,490
Year 4	10,321,490	722,510	(600,000)	10,444,000
		2,844,000	2,400,000	

The final interest payment of ₩722,510 contains a rounding adjustment of ₩6.

Note that the difference between the interest charged and the interest paid is because the final payment of the redemption proceeds has not been shown. This contains a redemption premium of \$444,000 which has already been recognised as an expense by the year end.

Sol	ution				
a)	Split of liab	pility and equity or	n initial recognition		
	31st Decei	mber	Cash (*	Discount factor 9%	
	20X5 - inte	erest	100,000	0 0.9174	91,743
	20X6 - inte	erest	100,000	0 0.8417	84,168
	20X7 - inte	erest	100,00	0 0.7722	77,218
	20X7 - prin	cipal	2,000,000	0 0.7722	1,544,367
	Fair value	of bond			1,797,496
	Value of ec	quity (balance)			202,504
	Proceeds f	rom issue of bond			2,000,000
b)	Journal on	initial recognition		Dr (₦)	Cr (₦)
	Cash			2,000,0	000
	Liability				1,797,496
	Equity				202,504
C)	Amortisati	on table			
		Liability at start of year	Finance charge at 9%	Interest paid	Liability at end of year
		N	N	₩	Ħ
	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
d)	Journal on	conversion to sha	res	Ħ	N
	Bond			2,000,000	
	Equity - opt	tion proceeds		202,504	
	Share ca	pital			1,200,000
	Share pro	emium			1,002,504

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Skills level Financial reporting



Presentation and disclosure: Sundry standards

Contents

- 1 IAS 24: Related party disclosures
- 2 IFRS 8: Operating segments
- 3 Chapter review

INTRODUCTION

Purpose

In this element the accounting from the foundation level is taken up a level into financial accounting in the context of more complex events and transactions with a greater emphasis on compliance with regulations including International Accounting Standards and generally accepted accounting practices in the private sectors.

Students will be expected to demonstrate an understanding of and competence in financial statement analysis and basic analysis of choices in accounting treatments.

Competencies

2	Preparing separate financial statements
2(b)	Identify and state the laws, regulations accounting standards and other requirements that govern the production of financial statements by such entities.
2(c)	Draft and compile financial statements, or extracts from them, of an entity in accordance with its chosen policies and in accordance with IFRS and local

IAS 24 and IFRS 8 are examinable documents.

law.

Exam context

This chapter explains the nature and importance of information provided about related parties and about operating segments.

By the end of this chapter you will be able to:

- Explain the objective of IAS 24 in setting out rules on disclosure of related party relationships and transactions
- Define and identify related parties
- Prepare related party disclosures based on a scenario
- Explain why the information provided by IFRS 8 is useful to users of financial statements
- Define and identify operating segments
- Prepare operating segment disclosure notes based on a simple scenario

1 IAS 24: RELATED PARTY DISCLOSURES

Section overview

- Impact on the financial statements
- The objective of IAS 24
- Definitions
- Disclosure requirements

1.1 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; or
- A parent company may make supplies to a subsidiary that was not performing well, on more favourable terms than it would to other companies. This would boost the apparent profitability of that subsidiary above what it would be earning without this favourable treatment..

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.

1.2 The objective of IAS 24

The objective of IAS 24 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.

1.3 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.
- Let 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;
- U 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: Related party transactions

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) Abuja Holdings Plc holds a controlling interest in Bauchi Construction Ltd and Calabar Imports Ltd. Enugu Logistics Ltd is a wholly owned subsidiary of Bauchi Construction Ltd.
- (b) Jos Shippers Ltd holds 75% of the voting capital of Kaduna Haulage Ltd and 40% of the voting capital of Lafia Transport Ltd.
- (c) Gablong and Akachi (who are husband and wife) are the directors and majority shareholders of Lokoja Electricals Ltd. The company makes purchases from Owo Electrical Factors Ltd, a company jointly controlled by Akachi and their daughter, Princess. Princess is a director of Owo Electrical Factors Ltd but holds no share in Lokoja Electricals Ltd.



Answer

(a) Abuja Holdings Plc (AH Plc)

Abuja Holdings Plc is related to both Bauchi Construction Ltd and Calabar Imports Ltd (both subsidiaries) because of its controlling interest.

Bauchi Construction Ltd and Calabar Imports Ltd are related because they are under the common control of Abuja Holdings Plc.

Enugu Logistics Ltd is related to Bauchi Construction Ltd because of its subsidiary status.

Enugu Logistics Ltd is also related to Abuja Holdings Plc as it is indirectly controlled by Abuja Holdings Plc through Abuja Holdings Plc's holding of Bauchi Construction Ltd.

(b) Jos Shippers Ltd

Jos Shippers Ltd is related to Kaduna Haulage Ltd because of the subsidiary status of Kaduna Haulage Ltd.

As an associate of Jos Shippers Ltd, Lafia Transport Ltd is also a related party

Kaduna Haulage Ltd and Lafia Transport Ltd are not related. Although they are both owned by Jos Shippers Ltd, there is no common control because Jos Shippers Ltd only has a 40% stake in Lafia Transport Ltd.

(c) Lokoja Electricals Ltd

Gablong and Akachi are both related to Lokoja Electricals Ltd, because they are key management of the entity

Princess could be considered to be close family to Gablong and Akachi, 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).

Owo Electrical Factors Ltd is related to Lokoja Electricals Ltd as it is jointly controlled by a member of the key management of Lokoja Electricals Ltd. Therefore any business dealings between the two entities will need to be disclosed.

1.4 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.



Illustration: Disclosure note

An example of a note to the financial statements for related party transactions of a large quoted company is shown below:

Trading transactions

		Purchases rom related parties	Amounts owed by related parties	Amounts owed to related parties
	₩m	₩m	₩m	N×m
Associates		48		17
Joint ventures	57	14	12	
lon-trading transa	actions			
	Loans to related parties	Loans from related parties	5	
	₩m	₩m		
Associates		11		
Joint ventures	33			

2 IFRS 8: OPERATING SEGMENTS

Section overview

- Scope of IFRS 8
- Operating segments

2.1 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 might be involved in different industries, or the same industry, but in different geographical areas. Each of these segments might have different rates of profitability, different growth prospects and different levels of risk.

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.'

2.2 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;
- Let 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; or
- 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; or
- □ 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 ₦m	Furniture sales ₦m	Veneer sales N m	Waste sales ₦m	Other sales N m	Total N 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); and
- 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.

3 CHAPTER REVIEW

Chapter review

Before moving on to the next chapter check that you are able to:

- Explain the objective of IAS 24 in setting out rules on disclosure of related party relationships and transactions
- Define and identify related parties
- Prepare related party disclosures based on a scenario
- Explain why the information provided by IFRS 8 is useful to users of financial statements
- Define and identify operating segments
- Prepare operating segment disclosure notes based on a simple scenario

Skills level Financial reporting



IAS 33: Earnings per share

Contents

- 1 P/E ratio and earnings per share
- 2 Calculating basic EPS
- 3 Diluted EPS
- 4 IAS 33: Presentation and disclosure requirements
- 5 Earnings per share as a performance measure
- 6 Chapter review

INTRODUCTION

Purpose

In this element the accounting from the foundation level is taken up a level into financial accounting in the context of more complex events and transactions with a greater emphasis on compliance with regulations including International Accounting Standards and generally accepted accounting practices in the private sectors.

Students will be expected to demonstrate an understanding of and competence in financial statement analysis and basic analysis of choices in accounting treatments.

Competencies

2	Preparing separate financial statements
2(b)	Identify and state the laws, regulations accounting standards and other requirements that govern the production of financial statements by such entities.
2(c)	Draft and compile financial statements, or extracts from them, of an entity in accordance with its chosen policies and in accordance with IFRS and local law.

IAS 33 is an examinable document.

Exam context

This chapter explains how to calculate earnings per share

By the end of this chapter you will be able to:

- Explain why a standard calculation of earnings per share is important
- Calculate basic earnings per share
- Calculate diluted earnings per share

1 P/E RATIO AND EARNINGS PER SHARE (EPS)

Section overview

- Earnings per share
- IAS 33: Earnings per share

1.1 The need for a standard on earnings per share

Earnings per share

Earnings are profits available for equity (ordinary shareholders). Earnings per share (EPS) is a measure of the amount of earnings in a financial period for each equity share.

As its name implies, EPS is calculated as reported earnings divided by the number of ordinary shares in issue.

The price/earnings ratio

The price/earnings ratio (P/E ratio) is a key stock market ratio. It is a measure of the company's current share price (market price) in relation to the EPS. The P/E ratio is calculated as follows:



Formula: Price earnings ratio

P/E ratio

= Market value of share

Earnings per share

The P/E ratio can be used by investors to assess whether the shares of a company appear expensive or cheap. A high P/E ratio usually indicates that the stock market expects strong performance from the company in the future and investors are therefore prepared to pay a high multiple of historical earnings to buy the shares.

EPS is used by investors as a measure of the performance of companies in which they invest – or might possibly invest. Investors are usually interested in changes in a company's EPS over time – trends – and also in the size of EPS relative to the current market price of the company's shares.

EPS should therefore be calculated by all companies in a standard way, so that investors can obtain a reliable comparison between the EPS and P/E ratios of different companies.

1.2 IAS 33: Earnings per share

The rules for calculating EPS are set out in IAS 33 Earnings per share

The concept of EPS is quite straightforward. It is simply the profit in the year divided by the number of ordinary shares in that year.

IAS 33 specifies the profit figure that should be used and explains how to calculate the appropriate number of shares when there have been changes in share capital during the period under review.

IAS 33 also describes the concept of dilution which is caused by the existence of potential ordinary shares.

Each of these issues is dealt with in later sections.

Objective of IAS 33

The objective of IAS 33 is to set out principles for:

- the calculation of EPS; and
- Let the presentation of EPS in the financial statements.

The purpose of standardising the calculation and presentation of EPS is to make it easier for the users of financial statements to compare the performance of:

- different entities in the same reporting period; and
- □ the same entity for different reporting periods over time.

Scope of IAS 33

IAS 33 applies only to **publicly-traded entities** or those which are about to be publicly traded. A publicly-traded entity is an entity whose shares are traded by the investing public, for example on a stock exchange.

Most publicly-traded entities prepare consolidated financial statements as well as individual financial statements. When this is the case, IAS 33 requires disclosure only of EPS based on the figures in the consolidated financial statements.

Definition

Definition



An ordinary share is an equity instrument that is subordinate to all other classes of equity instruments.

The ordinary shares used in the EPS calculation are those entitled to the residual profits of the entity, after dividends relating to all other shares have been paid. As stated earlier, if you are given an examination question on this topic, preference shares are not ordinary shares because they give more rights to their holders than ordinary shares.

Preference shares and EPS

Preference shares are not ordinary shares. Since EPS is a measure of earnings per ordinary share in a financial year, preference shares are excluded from the number of shares.

The dividends paid to preference shareholders must therefore be excluded from the total earnings for the period. A broad definition of 'earnings' is therefore profit after tax less preference dividends paid.

Basic and diluted earnings per share

IAS 33 requires entities to calculate:

- □ the basic earnings per share on its continuing operations
- □ the diluted earnings per share on its continuing operations.

Additional requirements apply to earnings relating to discontinued operations.

Diluted EPS and basic EPS will usually differ when there are potential ordinary shares in existence.



Definition

A potential ordinary share is a financial instrument or other contract that may entitle its holder to ordinary shares at some time in the future.

IAS 33 gives the following examples of potential ordinary shares:

- financial liabilities or equity instruments that are convertible into new ordinary shares at some time in the future (convertible debentures, convertible preference shares);
- share options and warrants. Options and warrants are financial instruments that give the holder the right (but not the obligation) to purchase new ordinary shares at some time in the future, at a fixed price;
- shares that will be issued if certain contractual conditions are met, such as contractual conditions relating to the purchase of a business.

The chapter explains the calculation of basic EPS and then the calculation of diluted EPS.

2 CALCULATING BASIC EPS

Section overview

- Basic EPS
- Total earnings
- Changes in the number of shares during a period
- Issue of shares at full market price
- Bonus issues of shares
- Rights issues of shares

2.1 Basic EPS

Basic earnings per share is calculated by dividing the profit or loss on *continuing operations* by the weighted average number of ordinary shares in issue during the period.

The calculation of the basic EPS is as follows:



Formula: Basic EPS

Net profit (or loss) attributable to ordinary shareholders during a period

weighted average number of shares in issue during the period

As you can see above IAS 33 gives guidance on:

- the earnings figure that must be used being the net profit (or loss) attributable to ordinary shareholders during a period (commonly referred to as *total earnings*); and
- the number of shares to be used in the calculation being the weighted average number of shares in issue during the period. Changes in share capital during a period must be taken into account in arriving at this number. IAS 33 provides guidance on how to do this.

2.2 Total earnings

The total earnings figure is the profit or loss from continuing operations after deducting tax and preference dividends (and in the case of consolidated financial statements, after excluding the earnings attributable to non-controlling interests or minority interests). Total earnings include any income from associates (i.e. any share of profits or losses of associates).

When there is a net loss, total earnings, and therefore, the EPS are negative.

Earnings from discontinued operations are dealt with separately. An EPS from any **discontinued operations** must also be disclosed, but this does not have to be disclosed on the face of the statement of profit or loss. Instead, it may be shown in a note to the financial statements.

Preference shares

Preference shares must be classified as equity or liability in accordance with the rules in IAS 32: *Financial Instruments: Presentation.*

If a class of preference shares is classified as equity, any dividend relating to that share is recognised in equity. Any such dividend must be deducted from the profit or loss from continuing operations as stated above.

If a class of preference shares is classified as liability, any dividend relating to that share is recognised as borrowing cost in the statement of profit or loss. It is already deducted from the profit or loss from continuing operations and no further adjustment need be made.



Example: Basic EPS

In the year ended 31 December Year 1, Entity G made profit after tax of \$3,500,000.

Of this, \$3,000,000 was from continuing operations and \$500,000 from discontinued operations.

It paid ordinary dividends of \$150,000 and preference dividends of \$65,000. The preference shares were correctly classified as liabilities in accordance with IAS 32.

Entity G had 1 million ordinary shares in issue throughout the year.

Entity G's basic EPS for the year ended 31 December Year 1 is calculated as follows:

EPS	=	Net profit (or loss) attributable to ordinary shareholders during a period
		weighted average number of shares in issue during the period
	=	₩3,000,000 = ₩3 per share 1,000,000 = ₩3 per share



Example: Basic EPS

EPS

In the year ended 31 December Year 1, Entity G made profit after tax of 33,500,000.

Of this, \$3,000,000 was from continuing operations and \$500,000 from discontinued operations.

It paid ordinary dividends of ₩150,000 and preference dividends of ₩65,000.

The preference shares were correctly classified as equity in accordance with IAS 32.

Entity G had 1 million ordinary shares in issue throughout the year.

Entity G's basic EPS for the year ended 31 December Year 1 is calculated as follows:

Net profit (or loss) attributable to ordinary shareholders during a = period

weighted average number of shares in issue during the period

 $\frac{3,000,000 - 165,000}{1,000,000} = 12.94 \text{ per share}$

Cumulative preference shares

There is a further complication concerning preference shares. Some preference shares are cumulative preference shares. This means that if a company fails to declare a preference dividend in a period the holders are entitled to receive the missed dividend sometime in the future. In other words, their right to receive a dividend accumulates when a dividend is not declared. If there are cumulative preference shares in issue the dividend must be deducted from profit or loss from continuing operations regardless of whether the dividend has been declared or not.



Example: Cumulative preference shares

In the year ended 31 December Year 1, Entity G made profit after tax from continuing operations of \$3,500,000.

Entity G has 1,000,000 10% preference share capital in issue. (This would entitle investors to receive a dividend of 100,000 10% of 1,000,000) if declared).

Entity G had 1 million ordinary shares in issue throughout the year.

Entity G's basic EPS for the year ended 31 December Year 1 is calculated as follows:

		Net profit (or loss) attributable to ordinary shareholders during a
EPS	=	period
		weighted even a work or of choses in issue during the nexied

weighted average number of shares in issue during the period

<u>₩3,500,000 - ₩100,000</u> = ₩3.4 p

₩3.4 per share

2.3 Changes in the number of shares during a period

IAS 33 gives guidance on how to incorporate changes in share capital during a period into the calculation of the weighted average of shares that must be used in the EPS calculation.

There are different ways in which the number of shares may change:

- Issues for full consideration (issue (or redemption) of shares at a full market price).
- Issues for no consideration (issue (or redemption) of shares with no change in net assets), for example:
 - Bonus issues
 - Share splits (where one share is split into several others)
 - Reverse share splits
 - Bonus elements in other issues (see later discussion on rights issues)
- Rights issues (issue of shares for consideration but at less than the full market price of the share).

IAS 33 gives guidance on each of these.

Overall approach

At this point we will provide an overall approach designed to enable you to deal with complicated situations where there has been more than one capital change in the period.

Step 1: Write down the number of shares at the start of the year.

Step 2: Write down the date of the first capital change and the number of shares in existence after that capital change. Repeat this step until all capital changes have been dealt.

Step 3: Multiply each number of shares by the fraction of the year that it was in existence.

Step 4: Add up the results from step 4 to give the weighted average number of shares.

Note: If any capital change is due to or contains a bonus issue multiply each preceding number of shares by the bonus fraction.

This will not make much sense to you at first but it will become clear as you study later examples.



Example: Time apportionment to find weighted average

On 1 January a company had 5,000,000 ordinary shares in issue.

On 1 April, 1,000,000 new shares were issued.

On 1 July an extra 1,000,000 shares came into existence

On 1 November 500,000 more shares were issued.

(All issues were at full market price – the implication of this will be explained in more detail in the next section).

The weighted average number of shares is calculated as follows.

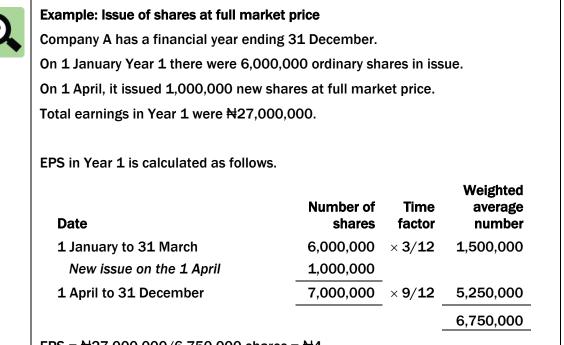
Date	Number of shares	Time factor	Weighted average number
1 January to 31 March	5,000,000	× 3/12	1,250,000
New issue on the 1 April	1,000,000		
1 April to 30 June	6,000,000	× 3/12	1,500,000
New issue on the 1 July	1,000,000		
1 July to 31 October	7,000,000	× 4/12	2,333,333
New issue on the 1 November	500,000		
1 November until 31 December	7,500,000	× 2/12	1,250,000
		-	6,333,333

2.4 Issue of shares at full market price

The consideration received is available to boost earnings. Therefore, the shares are included from the date of issue to ensure consistency between the numerator (top) and denominator (bottom) of the EPS calculation.

As explained above, the starting point for the weighted average number of shares is the number of shares in issue at the beginning of the period. This is then adjusted for any shares issued during the period and a time weighting factor must then be applied to each figure.

There is no adjustment to comparatives resulting from an issue at full price.



EPS = ₩27,000,000/6,750,000 shares = ₩4



Practice question

Company B has a financial year ending 31 December.

On 1 January Year 3, there were 9,000,000 ordinary shares in issue.

On 1 May, Company B issued 1,200,000 new shares at full market price.

On 1 October, it issued a further 1,800,000 shares, also at full market price.

Total earnings in Year 3 were ₩36,900,000.

Calculate the EPS for the year to 31 December Year 3.

1

2.5 Bonus issues of shares

A bonus issue of shares (also called a scrip issue or a capitalisation issue) is an issue of new shares to existing shareholders, in proportion to their existing shareholding, for no consideration. In other words, the new shares are issued 'free of charge' to existing shareholders.

The new shares are created by converting equity reserves in the statement of financial position, often some or all of the share premium account, into ordinary share capital.

No cash is raised from a bonus issue, therefore is no earnings boost from the issue. Bonus issued shares are treated as if they have always been in issue.

The new number of shares (i.e. the number of shares after the bonus issue) can be found by multiplying the number of shares before the bonus issue by the bonus issue fraction.

The bonus issue fraction is



Formula: Bonus issue fraction

Number of shares in holding after the bonus issue

Number of shares in holding before the bonus issue



Example: Bonus fraction

A company has 4,000,000 shares in issue.

It made a 1 for 4 bonus issue

The bonus fraction is

Number of shares in holding after the bonus issue

Number of shares in holding before the bonus issue

$$\frac{4+1}{4} = \frac{5}{4}$$

Number of shares in issue after the bonus issue:

 $4,000,000 \times 5/4 = 5,000,000$

The above example is very straightforward but it illustrates an approach of wider applicability.

	Example: Bonus issue						
e	Company C has a 31 December financial year end.						
•	On 1 January Year 5 it has 4,000,000 shares in issue.						
	On 1 July Year 5 it made a 1 for 4 bonus issue.						
	The financial results for Company C in Year 4 and Year 5 were as follows.						
	Year 5 Year 4						
	Total earnings		₩20,000,0	000 N a	20,000,000		
	There were no share issues in	Year 4.					
	Basic EPS in Year 4 was: ₩20	,000,000/4,00	0,000 shar	es = N 5 pe	er share.		
	could be calculated for the Year 5 financial statements as follows, by taking as the number of shares for the current period and the previous period the total number of shares after the bonus issue.						
	The weighted average numb explained earlier) is calculate		the curren	it year (usi	ing the method		
	Date	Number of shares	Time factor	Bonus fraction	Weighted average number		
	1 January to 30 June	4,000,000	× 6/12	× 5/4	2,500,000		
	Bonus issue on 1 July	1,000,000					
	1 July to 31 December	5,000,000	× 6/12		2,500,000		
					5,000,000		
	Remember that if a capital change is due to a bonus issue each preceding must be multiplied by the bonus fraction. This must be done so that the new shares issued are not time apportioned.						
	The new shares are include be included in the period(s	ed from 1 July to			•••••••••••••••••••••••••••••••••••••••		
	There is a much easier way example. It is simply the nu this only works if the bonus such cases do it this way b	umber in issue a s issue is the on	at the end o Ily capital c	of the year. hange in a	However, year. In		

Basic EPS in Year 5 is: ₩20,000,000/5,000,000 shares = ₩4 per share.

period you must use the longer method shown above.

In the above example nothing changed between Year 4 and Year 5 except for the number of shares yet the EPS figures calculate indicate a deterioration from \$5 per share to \$4 per share.

Comparatives

There is no time apportionment for a bonus issue. This means that all comparative figures must be restated into the same terms to take account of the bonus. Unless a suitable adjustment is made to the EPS calculation, the comparison of EPS in the current year (after the bonus issue) with EPS in the previous year (before the bonus issue) would be misleading.

In order to ensure that the EPS in the year of the bonus issue is comparable with the previous year's EPS, IAS 33 requires that the weighted average number of shares should be calculated as if the bonus shares had always been in issue.

This means that:

- the current period's shares are adjusted as if the bonus shares were issued on the first day of the year; and
- □ the comparative EPS for the previous year is restated on the same basis.

The restatement of the comparatives is easily achieved by multiplying it by the inverse of the bonus fraction.



Example (continued): Bonus issue – restatement of comparatives

Company C made a 1 for 4 bonus issue in Year 5. .

Basic EPS in Year 4 was: $\frac{1}{20,000,000/4,000,000}$ shares = $\frac{1}{5}$ per share. This is restated by multiplying it by the inverse of the bonus fraction as follows: $\frac{1}{5}$ per share $\frac{1}{5} = \frac{1}{5}$ per share

The figures presented in Company C's Year 5 accounts would be:

	Year 5	Year 4
Earnings per share	₩4	₩4



Practice question

Company D has a 31 December year end and had 2,000,000 ordinary shares in issue on 1 January Year 2.

On 31 March Year 2, it issued 500,000 ordinary shares, at full market price.

On 1 July Year 2, Company D made a 1 for 2 bonus issue.

In Year 1, the EPS had been calculated as 330 per share.

In Year 2, total earnings were ₩85,500,000.

Calculate the EPS for the year to 31 December Year 2, and the comparative EPS figure for Year 1.

2

2.6 Rights issues of shares

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. This means that they include a bonus element which must be taken into account in the calculation of the weighted average number of shares. Also note that any comparatives must be restated by multiplying them be the inverse of the rights issue bonus fraction.

The rights issue bonus fraction is calculated as follows:



Formula: Rights issue bonus issue fraction

Actual cum rights price

Theoretical ex 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.

The calculation of the theoretical ex rights price looks a little complicated at first but it is always done this way. This is demonstrated in the following example.



Example:

Company E had 3,600,000 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 40 per share. (After the rights issue, there will be 1 new share for every 4 shares previously in issue).

The share price just before the rights issue was \$50.

Total earnings in the financial year to 31 December Year 2 were \$25,125,000. The reported EPS in Year 1 was \$6.4.

EPS for the year to 31 December Year 2 and the adjusted EPS for Year 1 for comparative purposes are calculated as follows:

Theoretical ex-rights price	N				
4 existing shares have a 'cu	200				
1 new share is issued for				40	
5 shares after the issue hav Therefore, the theoretical ex-ri	240				
Rights issue bonus fraction:	0	,			
Actual cum rights price/Theore	etical ex rights	price = 50)/48.		
Weighted average number of	shares				
	Weighted average				
Date	Number of shares	Time factor	Rights fraction	number of shares	
1 January to 31 May	3,600,000	× 5/12		1,562,500	
Rights issue on 1 June	900,000	-,	<i>y</i> 10	_,_,_,_,_,	
1 June to 31 December	4,500,000	× 7/12		2,625,000	
			. <u> </u>	4,187,500	
Calculation of EPS					
EPS Year 2 = ₦25,125,000/4,187,500 = ₦6 per share					
Comparative EPS in Year $1 = \frac{86.4 \times (\frac{848}{150})}{1000} = \frac{86.14}{100}$ per share					

3

2

Practice question

Company F 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 \aleph 20 per share.

The market price of the shares prior to the rights issue was \$50.

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 \$17,468,750. In Year 6 EPS had been reported as \$3.5.

Required

Calculate the EPS for the year to 31 December Year 7, and the adjusted EPS for Year 6 for comparative purposes.

3 DILUTED EPS

Section overview

- The meaning of dilution
- IAS 33 and diluted EPS
- Diluted EPS: convertible preference shares and convertible bonds
- Diluted EPS: options and warrants
- Potential ordinary shares that are not dilutive

3.1 The meaning of dilution

'Dilution' means 'watering down' or 'reduction in strength'.

An entity might have potential ordinary shares in issue. There is a possibility that these will become actual ordinary shares at some time in the future.

For example, if an entity has issued some convertible bonds or convertible preference shares, these might be converted into ordinary shares at some time in the future.

Similarly, holders of share options or warrants might exercise their right at a future date to subscribe for new shares at a fixed price.

If potential shares become actual ordinary shares, the earnings figure will be shared with a larger number of ordinary shares. This would dilute the EPS.

3.2 IAS 33 and diluted EPS

IAS 33 requires publicly-traded companies to calculate a diluted EPS in addition to their basic EPS for the current year (with a comparative diluted EPS for the previous year), allowing for the effects of all dilutive potential ordinary shares.

Potential ordinary shares might not dilute the EPS. The diluted EPS calculation only includes potential ordinary shares that would be dilutive. Note: potential ordinary shares are 'dilutive' when there might have been a reduction or 'dilution' in EPS if they had been actual ordinary shares during the financial period.

Diluted EPS is calculated by adjusting the earnings and number of shares figures used in the basic EPS calculation.

Earnings is adjusted to remove the effect of dividends or interest that have been recognised during the year for the potential ordinary shares, and for any other income or expense that would alter as a result of the conversion of the potential ordinary shares into actual ordinary shares.

The main items of dividend or interest to adjust for are dividends on convertible preference shares and interest on convertible debentures (convertible bonds). The dividend or interest reduces total earnings. However, if they had already been converted into ordinary shares (and the calculation of diluted EPS is based on this assumption) the dividends or interest would not have been payable. Total earnings would therefore have been higher. To calculate the diluted EPS, total earnings are adjusted to allow for this.

The weighted average number of shares must also be adjusted. The method of making this adjustment is different for:

- convertible bonds or convertible preference shares; and
- □ share options or warrants.

3.3 Diluted EPS: convertible preference shares and convertible bonds

When there are convertible bonds or convertible preference shares, diluted EPS is calculated as follows, by making adjustments to total earnings and the number of shares in issue used in the basic EPS calculation.

Total earnings

Total earnings are adjusted because the entity would not have to pay the dividend or interest on the convertible securities.

- For **convertible preference shares**, add back the preference dividend paid in the year. Total earnings will be increased by the preference dividend saved.
- □ For **convertible bonds**, add back the interest charge on the bonds in the year less the tax relief relating to that interest. Total earnings will increase by the interest saved less tax.

Number of shares

The weighted average number of shares is increased, by adding the maximum number of new shares that would be created if all the potential ordinary shares were converted into actual ordinary shares.

The additional number of shares is normally calculated on the assumption that they were in issue at the beginning of the year.



Example: Diluted EPS (convertible bonds)

Company G has 12,000,000 ordinary shares and ₩4,000,000 5% convertible bonds in issue.

As at 31 December Year 2, there have been no new issues of shares or bonds for several years.

The bonds are convertible into ordinary shares in Year 3 or Year 4, at the following rates:

At 30 shares for every ₩100 of bonds if converted at 31 December Year 3

At 25 shares for every ₩100 of bonds if converted at 31 December Year 4

Total earnings for the year to 31 December Year 2 were ₩36,000,000.

Tax is payable at a rate of 30% on profits.

The basic EPS and diluted EPS for Year 2 are calculated as follows: **Basic EPS:**

Year to 31 December Year 2: ₩36,000,000/12 million = ₩3 per share **Diluted EPS:**

	Number of shares	Earnings (₦)	EPS (₦)
Basic EPS figures	12,000,000	36,000,000	3
Dilution: Number of shares 4,000,000 × 30/100	1,200,000		
Add back interest: 5% × ₦4,000,000 Less tax at 30%		200,000 (60,000)	
Adjusted figures	13,200,000	36,140,000	2.74

Diluted EPS: ₩36,140,000/13.2 million = ₩2.74 per share

Note: The number of potential shares is calculated using the conversion rate of 30 shares for every №100 of bonds, because this conversion rate produces more new shares than the other conversion rate, 25 shares for every №100 of bonds.

New issue of convertibles in the year

If new convertibles are issued during the course of the year, the additional number of shares and the earnings adjustment are included only from the time that the convertibles were issued.

Example: Diluted EPS (New issue of convertibles in the year)

Company H has 10,000,000 ordinary shares in issue.

There has been no new issue of shares for several years. However, the company issued 32,000,000 of convertible 6% bonds on 1 April Year 5.

These are convertible into ordinary shares at the following rates:

On 31 March Year 10	25 shares for every ₩100 of bonds
On 31 March Year 11	20 shares for every ₩100 of bonds

Tax is at the rate of 30%.

In the financial year to 31 December Year 5 total earnings were ₩40,870,000.

The Year 5 basic EPS and diluted EPS are calculated as follows:

Basic EPS

Year 5 = ₩40,870,000/10,000,000 = ₩4.087 per share

Diluted EPS:

Basic EPS figures	Number of shares 10,000,000	Earnings (₦) 40,870,000	EPS (N) 4.087		
Dilution: Number of shares 2 million × 25/100 × 9/12	375,000				
Add back interest: 6% × ₦2,000,000 × 9/12 Less tax at 30%		90,000 (27,000)			
Adjusted figures	10,375,000	40,933,000	3.94		
Diluted EPS: ₩40,933,000/10.375 million = ₩3.94 per share					

3.4 Diluted EPS: options and warrants

A different situation applies with share options and share warrants.

Options (warrants) are contracts issued by a company which allow the holder of the option to buy shares off the company at some time in the future at a preagreed price.

If the option holder exercises this right the number of shares would increase and the company would receive the cash paid for the shares and this would be available to invest in the business and in turn this would be expected to boost its earnings. However, it is impossible to predict how total earnings will be affected when the cash is eventually received.

This presents a problem. Including the shares in the diluted EPS calculation without adjusting the earnings would be inconsistent but it is not possible to adjust the earnings.

IAS 33 solves this problem in quite a neat way. The amount that would be received on exercise of the options is treated as cash received from selling shares at full price with the remaining shares having been given away. The shares sold at full price are not considered to be dilutive as any cash would be invested to earn the same return as earned in the period. It is only the free shares that are dilutive.

The following steps must be taken:

Step 1: Calculate the cash that would be received if the options are exercised.

Step 2: Calculate the number of shares that could be sold at full market price to raise the same amount of cash. (Divide the figure from step 1 by the average share price in the period).

Step 3: Identify the number of shares that will be issued if all the options are exercised.

Step 4: Subtract the number of shares in step 2 from the number at step 3. These shares are treated as having been given away for free and is added to the existing number of shares in issue, to obtain the total shares for calculating the diluted EPS.

Exan	nple: Dilut	ed EPS (options)				
Com	pany J ha	d total earnings dur	ing Year 3 of ₩2	25,000,0	000.	
It has	s 5,000,0	00 ordinary shares i	in issue.			
		tanding share optic e, at an exercise pri			which ca	n be exercise
The a	average m	arket price of share	es in Company J	J during `	Year 3 wa	s N 40.
The d	diluted EP	S for Year 3 may be	calculated as f	follows:		
S	tep 1:	Cash proceeds from options	n exercise of th	e		
		400,000			₩10,000	0,000
S	tep 2:	Divide by the average share price in the period			₩40	
S	tep 3	Shares issued at fu Number of shares	250,000			
		the option			400	0,000
S	tep 4	Shares issued for f	ree		150	0,000
D	iluted EPS	6 calculation				
			Number of shares	Earni	ngs (₦)	EPS (₦)
Ba	asic EPS fi	gures	5,000,000	25,00	0,000	5
	ilution:					
N	umber of s	shares	150,000			
_	djusted fig	ures	5,150,000	25,00	0,000	4.85

Options are only included in the diluted EPS calculation if the average share price in the year is greater than the exercise price of the option. If this were not the case the option would not be exercised. (Nobody would pay an exercise price of \$100 for something worth only \$80).

- When the exercise price of the option is less than the share price they are said to be *in the money*.
- When the exercise price of the option is more than the share price they are said to be *out of the money*.

In the money options are always dilutive. Out of the money options are always not dilutive (or antidilutive as IAS 33 describes them).

3.5 Potential ordinary shares that are not dilutive

Only dilutive potential ordinary shares are included in the dilutive EPS calculation.

When there are several types of potential ordinary share in issue, they should be ranked in order of dilution, with the most dilutive potential ordinary shares ranked first. In order to carry out the ranking the earnings per incremental share is found for each potential ordinary share. This is the earnings adjustment that would be necessary divided by the number of shares that would come into being if the share were included in the calculation of diluted EPS.

Note that in the money options always rank first as they increase the number of shares in the calculation without affecting the earnings.

A diluted EPS should then be calculated in stages, taking in one potential ordinary share at a time, to establish whether any of them are not dilutive.

The following example illustrates the technique.



Example: Order of dilution

The following information relates to Company K for the year ended 31 December Year 5.

Number of ordinary shares in issue	5,000,000
Number of orunnary shares in issue	5,000,000
Reported earnings in the year	₩15,000,000
Average market price of shares during the year	₩80
Potential ordinary shares:	
Options	600,000 options, with an exercise price of ₦60
4% convertible bond: ₦5,000,000	Each bond is convertible in Year 10 into ordinary shares at the rate of 40 new shares for every ₩100 of bonds
100,000 7% convertible preference shares of ₦10 each	Each preference share is convertible in Year 9 into ordinary shares at the rate of 1 ordinary share for every 20 preference shares
Tax rate = 30%	

Diluted EPS for the year to 31 December Year 5 can be calculated as follows.

0

Example (continued): Order of dilution

If all the options are exercised, the cash received will be $600,000 \times 160 = 136,000,000$.

This would purchase 450,000 shares (\$36,000,000/\$80) at the average market price in Year 5.

The dilutive increase in the number of shares would therefore be (600,000 - 450,000) = 150,000.

	Increase in earnings.	Increase in number of shares	Earnings per incremental share	Ranking
	₩		Ħ	
Options	0	150,000	0.00	1 st
Convertible bonds				
4% × ₦5,000,000	200,000			
less tax 30%	(60,000)			
	140,000			
₩5,000,000 × 40/100		2,000,000		
-	140,000	2,000,000	0.07	2 nd
Preference shares				
7% × ₩1,000,000	70,000			
100,000 × 1/20		5,000		
(7% × ₦1,000,000)	70,000	5,000	14.0	3 rd

Diluted EPS is calculated as follows (taking these three dilutive potential ordinary shares in order of their ranking):

	Earnings	Number of shares	EPS	
	N		N	
As reported, basic EPS	15,000,000	5,000,000	3.000	
Options	0	150,000		
Diluted EPS, options only	15,000,000	5,150,000	2.913	Dilutive
Convertible bonds	140,000	2,000,000		
Diluted EPS, options and convertible bonds	15,140,000	7,150,000	2.12	Dilutive
Convertible preference shares	70,000	5,000		
Diluted EPS, options and all convertibles	15,210,000	7,155,000	2.13	Not dilutive

The convertible preference shares are not dilutive, and the reported diluted EPS should be \$2.12 (and not \$2.13).

4 IAS 33: PRESENTATION AND DISCLOSURE REQUIREMENTS

Section overview

- Presentation requirements
- Disclosure requirements
- Alternative measures of earnings per share

4.1 Presentation requirements

An entity should present in the statement of profit or loss:

- the basic EPS and
- the diluted EPS
- for the profit or loss from **continuing operations**.

For consolidated accounts, this is the EPS and diluted EPS attributable to the owners of the parent company.

The basic EPS and diluted EPS should be presented with equal prominence for all the periods presented (the current year and the previous year). These figures are presented at the end of the statement of profit or loss.

If the entity presents a separate statement of profit or loss:

- Let the EPS and diluted EPS should be shown in this statement, and
- not in the statement of profit or loss and other comprehensive income.

If there is a **discontinued operation**, the basic EPS and diluted EPS from discontinued operation should be shown either on the face of the statement of profit or loss or in a note to the financial statements.

The basic and the diluted EPS should be presented, even if it is a negative figure (= even if it is a loss per share).

4.2 Disclosure requirements

IAS 33 also requires disclosure in a note to the financial statements of the following:

- □ The total amounts used as the numerators (= total earnings figures) to calculate the basic EPS and diluted EPS, and a reconciliation of these numerator figures to the profit or loss for the period
- □ The total amounts used in the denominators (= weighted average number of shares) to calculate the basic EPS and diluted EPS, and a reconciliation of these two denominator figures to each other.

4.3 Alternative measures of earnings per share

IAS 33 allows an entity to disclose an alternative measure of EPS in addition to the EPS calculated in accordance with IAS 33. For example, EPS could be calculated after adjusting earnings for large and unusual items.

If an alternative EPS figure is presented, IAS 33 states that:

- a reconciliation must be shown between the earnings figure used in the alternative measure and the amounts shown in the statement of profit or loss
- □ the alternative EPS must use the same weighted average number of shares as the IAS 33 calculation
- basic and diluted EPS should both be disclosed with equal prominence, and
- □ the alternative figure must only be shown in the notes, **not** on the face of the statement of profit or loss.

5 EARNINGS PER SHARE AS A PERFORMANCE MEASURE

Section overview

- Earnings per share and trends
- Limitations of earnings per share

5.1 Earnings per share and trends

Investors and their advisers pay close attention to an entity's net profit for the period. However, profit for the period can include large and unusual items and also the results of discontinued operations. This may make it volatile: liable to fluctuate rapidly up and down. Users can then find it difficult to assess trends in the profit figure or to use the current year's profit to predict an entity's performance in future years.

The trend (improvement or deterioration) in an entity's published EPS figure can sometimes be a more reliable indicator of future performance. There are a number of reasons for this.

- □ The standard version of both basic and diluted EPS is based on profit from continuing operations. This means that the results of discontinued operations (which may distort total profit) are excluded.
- An entity may also choose to present one or more alternative versions of EPS. These normally exclude large or unusual items so that EPS is based on 'normal' recurring earnings.
- EPS measures an entity's performance from the viewpoint of investors. It shows the amount of earnings available to each ordinary shareholder. This means that EPS takes the effect of preference dividends (if any) into account. It also takes share issues into account.
- Diluted EPS can provide an 'early warning' of any changes to an investor's potential return on their investment due to future share issues.

5.2 Limitations of earnings per share

EPS is probably the single most important indicator of an entity's performance. It is a very useful measure when it is used as the starting point for a more detailed analysis of an entity's performance.

However, EPS can have serious limitations:

- Not all entities use the same accounting policies. It may not always be possible to make meaningful comparisons between the EPS of different entities.
- EPS does not take account of inflation, so that growth in EPS over time might be misleading.
- EPS measures an entity's profitability, but this is only part of an entity's overall performance. An entity's cash flow can be just as important as its profit (and more essential to its immediate survival). Changes in the value of assets (holding gains) can also be an important part of performance for some entities.

Diluted EPS is often described as an 'early warning' to investors that the return on their investment may fall sometime in the future. However, diluted EPS is based on current earnings, not forecast earnings. This means that it may not be a reliable predictor of future EPS.

One of the main problems with EPS can be the way that it is used by investors and others. Users often rely on EPS as the main or only measure of an entity's performance. Management know this and try to make EPS appear as high as possible. They may attempt to manipulate the figure by using 'creative accounting'. They may also make decisions which increase EPS in the short term but which damage the entity in the longer term.

The problem is mitigated in a number of ways.

- Rules in IFRS require disclosure of significant accounting policies and the standardisation of the calculation of IFRS. This means that users have access to information about the basis of the calculation of the EPS figure.
- □ It is difficult to imagine that a company would publish EPS information prepared by anyone other than a qualified accountant. Users can take comfort from the fact that members of ICAN are governed by a strict ethical code which, if followed, would prevent the use of creative accounting techniques. Members of other institutes are bound by ethical requirements.
- □ The problem could be further mitigated by educating users not to rely on this single measure. Note that investment professionals would not base advice and decisions on a single measure.

6 CHAPTER REVIEW

Chapter review

Before moving on to the next chapter check that you now know how to:

- Explain why a standard calculation of earnings per share is important
- Calculate basic earnings per share
- Calculate diluted earnings per share

SOLUTIONS TO PRACTICE QUESTIONS

Solution			1
Date	Number of shares	Time factor	Weighted average number
1 January to 30 April	9,000,000	× 4/12	3,000,000
New issue on 1 May	1,200,000		
1 May to 30 September	10,200,000	× 5/12	4,250,000
New issue on 1 October	1,800,000		
1 October to 31 December	12,000,000	× 3/12	3,000,000
			10,250,000

EPS = ₩36,900,000/10,250,000 = ₩3.6

Notes

- (1) The first new share issue is in May, after 4 months. Therefore the number of shares at the beginning of the year is given a time factor of $\times 4/12$.
- (2) There are 5 months between the two share issues, therefore the time factor to apply to the number of shares after the first issue is $\times 5/12$.
- (3) The total number of shares in issue from 1 October to the end of the year (three months) is 12,000,000. These are given a time weighting of × 3/12.

Solution				
The weighted average number of sha	res in Year 2 is	calculate	d as follow	S.
Date	Number of shares	Time factor	Bonus fraction	Weighted average number
1 January to 31 March Issue at full price on 31 March	2,000,000 500,000	× 3/12	× 3/2	750,000
1 April to 30 June Bonus issue on 1 July	2,500,000 1,250,000	× 3/12	× 3/2	937,500
1 July to 31 December	3,750,000	× 6/12		1,875,000
				3,562,500
EPS in Year 2 = ₦85,500,000/3,562	,500 = N 24 pe	r share.		
EPS in Year 2 = ₩85,500,000/3,562 The Year 1 EPS restated as: ₩30 × 2/	, •	r share.		

Solution				
After the rights issue, there will be 1	new share for	r every 2 s	hares previou	sly in issue
Theoretical ex-rights price				₩
2 existing shares have a ' 1 new share is issued for	cum rights' va	lue of	(2 × ₦50)) 100 20
3 shares after the issue h	ave a theoreti	cal value c	of	120
Theoretical ex-rights price = ₩120/3	8 = ₩40.			
Rights issue bonus fraction:				
Actual cum rights price/Theoretical	ex rights price	= 50/40		
Weighted average number of shares	6			
Date	Number of shares	Time factor	Rights fraction	Weighted average number of shares
1 January to 31 March Rights issue on 1 April	3,000,000 1,500,000	× 3/12	× 50/40	937,500
1 April to 31 July Issue at full price on 1 August	4,500,000 400,000	× 4/12		1,500,000
1 August to 31 December	4,900,000	× 5/12		2,041,667
				4,479,167
Calculation of EPS				
EPS Year 7 = ₩17,468,750/4,479,1	L67 = N 3.9 pe	r share		
EPS Year 6 = ₩ 35 × 40/50 = ₩2.				

Skills level Financial reporting



Consolidated accounts: Statements of financial position – Basic approach

Contents

- 1 The nature of a group and consolidated accounts
- 2 Consolidated statement of financial position
- 3 IFRS 3: Business combinations
- 3 Consolidation double entry
- 4 Chapter review

INTRODUCTION

Purpose

In this element the accounting from the foundation level is taken up a level into financial accounting in the context of more complex events and transactions with a greater emphasis on compliance with regulations including International Accounting Standards and generally accepted accounting practices in the private sectors.

Students will be expected to demonstrate an understanding of and competence in financial statement analysis and basic analysis of choices in accounting treatments.

Competencies

4	Preparing consolidated financial statements of simple group (parent and one subsidiary)
4(a)	Identify and state the circumstances in which entities are required to prepare and present statutory consolidated financial statements.
4(b)	Identify and state the laws, regulations accounting standards and other requirements that govern the production of consolidated financial statements by entities.
4(c)	Identify from data provided a subsidiary or associate in accordance with the international financial reporting framework and local law.
4(d)	Evaluate and calculate the figures to be included in consolidated financial statements in respect of an acquisition involving one subsidiary and associate,

4(e) continuing ownership but not including disposals of subsidiary and associate.4(e) Draft, compile and present the consolidated financial statements or extracts of them in accordance with selected accounting policies and the requirements of

Exam context

This chapter explains the issue underlying the need for group accounts and the process of consolidation.

By the end of this chapter you will be able to:

IFRS.

- Describe the concept of a group as a single economic unit
- Define using simple examples subsidiary, parent and control
- Describe situations when control is presumed to exist
- Identify and describe the circumstances in which an entity is required to prepare and present consolidated financial statements
- Prepare basic a consolidated statement of financial position including the calculation of goodwill, non-controlling interest and consolidated post acquisition reserves

1 THE NATURE OF A GROUP AND CONSOLIDATED ACCOUNTS

Section overview

- Group as a single economic entity
- A group of companies: parent and subsidiaries
- Situations where control exists
- Purpose and nature of consolidated financial statements
- The requirement to prepare consolidated accounts
- Sundry accounting issues

1.1 Group as a single economic entity



Illustration: Single economic entity

A Limited (a car manufacturer) buys 100% of B Limited (an automotive parts manufacturer).

The 100% ownership gives A Limited complete control over B Limited.

A Limited's business has changed as a result of buying B Limited.

It was a car manufacturer. Now it is a car manufacturer and a manufacturer of automotive parts.

The two parts of the business are operated by two separate legal entities (A Limited and B Limited). However, the two parts of the business are controlled by the management of A Limited.

In substance, the two separate legal entities are a single economic entity.

IFRS contains rules that require the preparation of a special form of financial statements (consolidated financial statements also known as group accounts) in circumstances like the one described above.

This chapter explains some of the rules contained in the following standards:

- □ IFRS 10: Consolidated financial statements
- □ IFRS 3: Business combinations.

1.2 A group of companies: parent and subsidiaries



Definitions: Group, parent and subsidiary

Group: A parent and its subsidiaries

Parent: An entity that controls one or more entities.

Subsidiary: An entity that is controlled by another entity.

IFRS 10, Appendix A

A group consists of a parent entity and one or more entities that it has control over. These are called subsidiaries.

The entity that ultimately controls all the entities in the group is called the parent.

Some parent companies have no assets at all except shares in the subsidiaries of the group. A parent whose main assets (or only assets) are shares in subsidiaries is sometimes called a **holding company**.

Control

An entity is a subsidiary of another entity if it is controlled by that other entity.



Definition: Control

An investor controls an investee when:

- a. it is exposed, or has rights, to variable returns from its involvement with the investee; and
- b. it has the ability to affect those returns through its power over the investee.

In other words an investor controls an investee, if and only if, it has all the following:

- power over the investee;
- exposure, or rights, to variable returns from its involvement with the investee; and
- ability to use its power over the investee to affect the amount of its returns

1.3 Situations where control exists

The above definition of control is quite complicated.

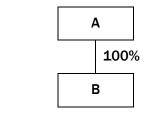
In practice, the vast majority of cases involve a company achieving control of another through buying a controlling interest in its shares.

Furthermore, in the vast majority of cases obtaining a controlling interest means buying shares which give the holder more than 50% of the voting rights in the other company.



Illustration: Wholly owned subsidiary

A owns 100% of B's voting share capital.



This 100% holding is described as a controlling interest and gives A complete control of B. B would be described as a wholly owned subsidiary.

A company does not have to own all of the shares in another company in order to control it.



Illustration: Partly owned subsidiary

A owns 80% of B's voting share capital.

Α	
80%	<i>6</i>
В	

This 80% holding is described as a controlling interest and gives A complete control of B.

B would be described as a partly owned subsidiary.

Other parties own the remaining 20% of the shares. They have an ownership interest in B but do not have control.

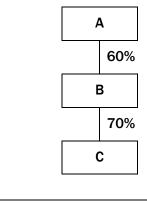
This is described as a non-controlling interest.

Non-controlling interest (NCI) is defined by IFRS 10 as: "the equity in a subsidiary not attributable ... to a parent."

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



Illustration:



A owns a controlling interest in B.

B owns a controlling interest in C.

Therefore, A controls C indirectly through its ownership of B.

C is described as being a sub-subsidiary of A.

Consolidation of sub-subsidiaries is not in this syllabus

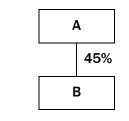
In certain circumstances, a company might control another company even if it owns shares which give it less than half of the voting rights. Such a company is said to have **de facto** control over the other company. (**De facto** is a Latin phrase which translates as **of fact**. It is used to mean **in reality** or to refer to a position held in fact if not by legal right).



Illustration: Wholly owned subsidiary

A owns 45% of B's voting share capital.

The other shares are held by a large number of unrelated investors none of whom individually own more than 1% of B.



This 45% holding probably gives A complete control of B.

It would be unlikely that a sufficient number of the other shareholders would vote together to stop A directing the company as it wishes.

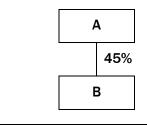
A company might control another company even if it owns shares which give it less than half of the voting rights because it has an agreement with other shareholders which allow it to exercise control.



Illustration: Wholly owned subsidiary

A owns 45% of B's voting share capital.

A further 10% is held by A's bank who have agreed to use their vote as directed by A.



This 45% holding together with its power to use the votes attached to the banks shares gives A complete control of B.

It was stated above but is worth emphasising that in the vast majority of cases control is achieved through the purchase of shares that give the holder more than 50% of the voting rights in a company.

1.4 Purpose and nature of consolidated financial statements

An investment in a company is usually included in the statement of financial position of the parent at cost. This does not reflect the substance of the situation. The directors have control of the net assets of the subsidiary and use these to generate profit.

To solve this problem IFRS requires that where a company holds a subsidiary it must prepare group accounts in addition to its own accounts.

The type of group accounts specified by IFRS are called consolidations.

The purpose of consolidated financial statements 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**.

In preparing consolidated financial statements:

- the assets and liabilities of the parent and its subsidiaries are combined in a single consolidated statement of financial position.
- the profits of the parent and its subsidiaries, and their other comprehensive income, are combined into a single in a consolidated statement of comprehensive income

In other words a lot of the numbers in the consolidated financial statements are constructed as a simple cross cast of the balance in the financial statements of the parent and its subsidiary (or subsidiaries).

(0

Example: Consolidated figures					
	Parent		Subsidiary		Consolidated
Property, plant and					
equipment	1,000	+	500	=	1,500
Inventory	500	+	800	=	1,300
Sales	2,000	+	1,000	=	3,000

It is not always as straightforward as this. Sometimes there is a need for adjustments in the cross cast. This will be explained later.

Note that the share capital and reserves for the consolidated balance sheet **are not** calculated simply by adding the capital and reserves of all the companies in the group!). This is explained later.

1.5 The requirement to prepare consolidated accounts

IFRS 10 states that, with certain exceptions, a parent must present consolidated financial statements in which it consolidates its investments in subsidiaries. In other words, a parent must prepare consolidated financial statements for the group as a whole.

Exception to this rule

There is an exception to this rule. This allows a parent that is itself a subsidiary not to prepare consolidated financial statements.

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 IFRS.

All subsidiaries

Consolidated financial statements must include **all** the subsidiaries of the parent (IFRS 10). There are no grounds for excluding a subsidiary from consolidation.

1.6 Sundry accounting issues

Common reporting date

IFRS 10 requires that the financial statements of the parent and its subsidiaries that are used to prepare the consolidated financial statements should all be prepared with the same reporting date (the same financial year-end date), unless it is impracticable to do so.

If it is impracticable for a subsidiary to prepare its financial statements with the same reporting date as its parent, adjustments must be made for the effects of significant transactions or events that occur between the dates of the subsidiary's and the parent's financial statements. In addition, the reporting date of the parent and the subsidiary must not differ by more than three months.

Uniform accounting policies

Since the consolidated accounts combine the assets, liabilities, income and expenses of all the entities in the group, it is important that the methods used for recognition and measurement of all these items should be the same for all the entities in the group.

IFRS 10 therefore states that consolidated financial statements must be prepared using uniform accounting policies. The policies used to prepare the financial statements in all the entities in the group must be the same.

2 CONSOLIDATED STATEMENT OF FINANCIAL POSITION

Section overview

- The basic approach
- Example 1: To illustrate the basics
- Pre- acquisition and post-acquisition profits
- Goodwill
- Non-controlling interest
- Suggested step by step approach

2.1 The basic approach

Definition

Consolidated financial statements: The financial statements of a group presented as those of a single economic entity.

The technique of consolidation involves combining the financial statements of the parent and its subsidiaries. We will first explain how to consolidate the statement of financial position. Consolidation of the statement of comprehensive income will be covered in chapter 6.

Question structure

There are often two major stages in answering consolidation questions:

- Stage 1 involves making adjustments to the financial statements of the parent and subsidiary to take account of information provided. This might involve correcting an accounting treatment that has been used in preparing the individual company accounts.
- **Stage 2** involves consolidating the correct figures that you have produced.

The early examples used to demonstrate the consolidation technique look only at step 2. It is assumed that the financial statements provided for the parent and its subsidiary are correct.

Approach in this section

This section will demonstrate the techniques used to consolidate the statements of financial position using a series of examples introducing complications one at a time.

The examples will be solved using an approach that you might safely use to answer exam questions. This approach is quick but it does not show how the double entry works. The double entry will be covered in section 3 of this chapter so that you are able to understand the flow of numbers in the consolidation and able to prepare journal entries if asked to do so. Note the following features in following examples:

- □ The asset in the parent's statement of financial position representing the cost of investment in the subsidiary disappears in the consolidation.
- Each consolidated asset and liability is constructed by adding together the balances from the statements of financial position of the parent and the subsidiary.
- □ The share capital (and share premium) in the consolidated statement of financial position is always just the share capital (and share premium) of the parent. That of the subsidiary disappears in the consolidation process.

Major workings

There are three major calculations to perform in preparing a consolidated statement of financial position:

- Calculation of goodwill
- Calculation of consolidated retained earnings
- Calculation of non-controlling interest

In order to calculate the above figures (all of which will be explained in the following pages) information about the net assets of the subsidiary at the date of acquisition and at the date of consolidation is needed.

This is constructed using facts about the equity balances (as net assets = equity).

	-	-
	At date of consolidation	At date of acquisition
Share capital	X	Х
Share premium	X	Х
Retained earnings*	X	Х
Net assets	X	Х

* Retained earnings are also known as unappropriated profits or accumulated profits.

You are not yet in a position to full understand this but all will be explained in the following pages.

2.2 Example 1 - To illustrate the basics



Example: Very basic example

 ${\sf P}$ acquired 100% of the equity shares of S on incorporation of S (i.e. when S was first established as a company).

The date of this transaction was 31 December 20X1 (this known as the date of acquisition).

The cost of this investment was ₩120,000.

S had net assets (total assets minus total liabilities) when it was first set up of 120,000.

The statements of financial position P and S as at 31 December 20X1 (the date of acquisition) were as follows.

	Р	S
	N	₩
Non-current assets:		
Property, plant and equipment	640,000	125,000
Investment in S	120,000	-
Current assets	140,000	20,000
	900,000	145,000
Equity		
Share capital	200,000	80,000
Share premium	250,000	40,000
Retained earnings	350,000	_
	800,000	120,000
Current liabilities	100,000	25,000
	900,000	145,000

A consolidated statement of financial position as at 31 December 20X1 can be prepared as follows:

Non-current assets: Property, plant and equipment Current assets	(640,000 + 125,000) (140,000 + 20,000)	₩ 765,000 160,000
		925,000
Equity		
Share capital	(parent company only)	200,000
Share premium	(parent company only)	250,000
Retained earnings		350,000
		800,000
Current liabilities	(100,000 + 25,000)	125,000
		925,000

Note: In practice, there is no reason to prepare a consolidated statement of financial position when a subsidiary is acquired. However, it is used here to illustrate the basic principles of consolidation, before going on to consider what happens after the subsidiary has been acquired.

Observations

The asset in the parent's statement of financial position representing the cost of investment in the subsidiary disappears in the consolidation.

Each consolidated asset and liability is constructed by adding together the balances from the statements of financial position of the parent and the subsidiary.

The share capital (and share premium) in the consolidated statement of financial position is always just the share capital (and share premium) of the parent. That of the subsidiary disappears in the consolidation process.

Closing comment

The cost of investment was the same as the net assets acquired (\$120,000). This is very rarely the case. Usually there is a difference. This difference is called goodwill. It will be explained later.

2.3 Pre- acquisition and post-acquisition profits

Subsidiaries are usually acquired after they have been in business for some time rather than when they were incorporated.

This means that the acquired subsidiary will have retained earnings at the date of the acquisition. These are called pre-acquisition profits.

Only profits earned by the subsidiary since the date of acquisition are included as retained earnings in the consolidated financial statements. These are called post-acquisition retained earnings.

Pre-acquisition profits of a subsidiary are not included as retained earnings in the consolidated financial statements.

The working for the consolidated retained earnings balance is as follows:

₩
Х
X
X

Other reserves

Sometimes a subsidiary has reserves other than retained earnings. The same basic rules apply.

Only that part of a subsidiary's reserve that arose after the acquisition date is included in the group accounts (and then only the parent's share of it).



Example: Consolidated statement of financial position with share of postacquisition profits of subsidiary

P acquired 100% of the share capital of S on 1 January 20X1 for ₩200,000.

The balance on the retained earnings account of S was ₩80,000 at this date.

The statements of financial position P and S as at 31 December 20X1 were as follows.

	Р	S
	Ħ	Ħ
Non-current assets:		
Property, plant and equipment	680,000	245,000
Investment in S	200,000	-
Current assets	175,000	90,000
	1,055,000	335,000
Equity		
Share capital	150,000	30,000
Share premium	280,000	90,000
Retained earnings	470,000	140,000
	900,000	260,000
Current liabilities	155,000	75,000
	1,055,000	335,000

A consolidated statement of financial position as at 31 December 20X1 can be prepared as follows:

P Group: Consolidated statement of financial position at 31 December 20X1

		N
Non-current assets:		
Property, plant and equipment	(680,000 + 245,000)	925,000
Current assets	(175,000 + 90,000)	265,000
		1,190,000
Equity		
Share capital	(parent company only)	150,000
Share premium	(parent company only)	280,000
Consolidated retained earnings	(see working)	530,000
-		960,000
Current liabilities	(155,000 + 75,000)	230,000
		1,190,000



Example (continued): Workings

et assets summary of S			
	At date of consolidation	At date of acquisition	Post acq ⁿ
Share capital	30,000	30,000	
Share premium	90,000	90,000	
Retained earnings	140,000	80,000	60,000
Net assets	140,000	200,000	_
			=
Consolidated retaine	d profits:	Ħ	
All of P's retained ea	rnings	470,000	
P's share of the post-	acquisition retained		
earnings of S (100%	of 60,000 (see above))	60,000	
		530,000	_
		550,000	_

Observations

The asset in the parent's statement of financial position representing the cost of investment in the subsidiary disappears in the consolidation.

Each consolidated asset and liability is constructed by adding together the balances from the statements of financial position of the parent and the subsidiary.

The share capital (and share premium) in the consolidated statement of financial position is always just the share capital (and share premium) of the parent. That of the subsidiary disappears in the consolidation process.

The consolidated retained profits is made up of the parent's retained profits plus the parent's share of the growth in the subsidiary's retained profits since the date of acquisition.

Closing comment

The cost of investment was the same as the net assets acquired (\$120,000). This is very rarely the case. Usually there is a difference. This difference is called goodwill. It will be explained later.

2.4 Goodwill

In each of the two previous examples the cost of investment was the same as the net assets of the subsidiary at the date of acquisition.

In effect what has happened in both examples is the cost of investment has been replaced by the net assets of the subsidiary as at the date of acquisition.

The net assets have grown since acquisition to become the net assets at consolidation. These have been included as part of the net assets of the group, but remember that the consolidated retained earnings includes the parent's share of post-acquisition retained earnings so everything balances.

Do not worry if this is not obvious to you. The double entry is explained in section 3 of this chapter.

In almost all cases the cost of investment will be different to the net assets purchased. The difference is called goodwill.



Definition: Goodwill

Goodwill: An asset representing the future economic benefits arising from other assets acquired in a business combination that are not individually identified and separately recognised.

When a parent buys a subsidiary the price it pays is not just for the assets in the statement of financial position. It will pay more than the value of the assets because it is buying the potential of the business to make profit.

The amount it pays in excess of the value of the assets is for the goodwill.

IFRS 3 Business combinations, sets out the calculation of goodwill as follows:



Illustration: Goodwill

N.B. All balances are as at the date of acquisition.

N
Х
Х
Х
Х
X

The above calculation compares the total value of the company represented by what the parent has paid for it and the non-controlling interest to the net assets acquired at the date of acquisition.

The guidance requires the *net of the acquisition date amounts of identifiable assets acquired and liabilities assumed (measured in accordance with IFRS 3*). This will be explained later.

The guidance also refers to non-controlling interest. This will be explained later but first we will present an example where there is no non-controlling interest.



Example: Consolidated statement of financial position with share of postacquisition profits and goodwill

P acquired 100% of S on 1 January 20X1 for ₩230,000.

The retained earnings of S were 100,000 at that date.

The statements of financial position P and S as at 31 December 20X1 were as follows:

	Р	S
	N	Ħ
Assets:		
Investment in S, at cost	230,000	-
Other assets	570,000	240,000
	800,000	240,000
Equity		
Share capital	200,000	50,000
Share premium	100,000	20,000
Retained earnings	440,000	125,000
	740,000	195,000
Current liabilities	60,000	45,000
	800,000	240,000

A consolidated statement of financial position as at 31 December 20X1 can be prepared as follows:

P Group: Consolidated statement of financial position at 31 December 20X1

	N
Assets	
Goodwill (see working)	60,000
Other assets (570 + 240)	810,000
Total assets	870,000
Equity	
Share capital (P only)	200,000
Share premium (P only)	100,000
Consolidated retained earnings (see working)	465,000
	765,000
Current liabilities (60 + 40)	105,000
Total equity and liabilities	870,000

0	
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Example (continued): Net assets summary of S

	At date of consolidation	At date of acquisition	Post acq ⁿ
Share capital	50,000	50,000	
Share premium	20,000	20,000	
Retained earnings	125,000	100,000	25,000
Net assets	195,000	170,000*	_
Goodwill		м	
Cost of investment		220.000	
	-+	230,000	
Non-controlling intere	St	nil	_
		230,000	
-	ion 100% of 170,000*	(170,000)	
(see above)		(170,000)	_
		60,000	=
Consolidated retained	l profits:	Ħ	
All of P's retained ear	nings	440,000	
P's share of the post- a	-	25.000	
earnings of 5 (100% (of 25,000 (see above))	25,000	_
		465,000	

Observations

The asset in the parent's statement of financial position representing the cost of investment in the subsidiary disappears in the consolidation. It is taken into the goodwill calculation.

Each consolidated asset and liability is constructed by adding together the balances from the statements of financial position of the parent and the subsidiary.

The share capital (and share premium) in the consolidated statement of financial position is always just the share capital (and share premium) of the parent. That of the subsidiary disappears in the consolidation process.

The consolidated retained profits is made up of the parent's retained profits plus the parent's share of the growth in the subsidiary's retained profits since the date of acquisition.

Accounting for goodwill

Goodwill is recognised as an asset in the consolidated financial statements.

It is not amortised but is tested for impairment on an annual basis.



Practice questions

Calculate the goodwill arising on acquisition in each of the following cases on the assumption that it is the parent company's policy to measure noncontrolling interest at acquisition as a proportionate share of net assets.

1

- A Ltd bought 60% of B Limited on 1 January 2005 for ₦766,000.
 At this date Y limited had net assets of ₦800,000.
- b) C Ltd bought 55% of D Limited several years ago for ₩1,000,000.
 At this date D limited had share capital of ₩500,000 and retained earnings of ₩750,000.
- c) E Ltd bought 90% of F Limited several years ago for ₩1,750,000.

At this date F limited had share capital of ₦100,000, share premium of ₦48,000, a revaluation reserve of ₦120,000 and retained earnings of ₦250,000.

 G Ltd bought 40% of H Limited several years ago for ₩1,000,000. Circumstances are such that this hoding gives E Ltd de facto control of H Limited.

At this date H limited had share capital of \$500,000 and retained earnings of \$750,000.

2.5 Non-controlling interest

When a parent entity acquires less than 100% of the equity shares in a subsidiary, the remainder of the shares in the subsidiary are held by other shareholders. These are called the non-controlling interest (NCI) in the subsidiary. The abbreviation *NCI* is used for non-controlling interests.

For example, P might acquire 60% of the shares in S.

- □ It has acquired 60% of the 'equity' ownership of S.
- □ The remaining 40% of the equity in S is owned by the non-controlling interest.

Non-controlling interest (NCI) is defined by IFRS 10 as: 'the equity in a subsidiary not attributable ... to a parent.'

All of the assets and liabilities of S are consolidated just as before. However, part of the net assets that have been consolidated belongs to the NCI. A figure for the NCI is recognised in equity to show their ownership interest in the net assets.

Measuring the NCI

The NCI at the reporting date made up as follows:



Illustration: Consolidated retained earnings	
	₩
NCI at the date of acquisition	X
NCI's share of the post-acquisition retained earnings of S	X
NCI's share of each other post-acquisition reserves of S (if any)	X
Consolidated retained earnings	Х

There are two ways of measuring the NCI at the date of acquisition.

- As a percentage of the net assets of the subsidiary at the date of acquisition; or
- At fair value as at the date of acquisition.

The first technique is the easier of the two because it allows for the use of a short cut. Also, it is far the more common in practice.

The different approaches will obviously result in a different figure for NCI but remember that the NCI at acquisition is also used in the goodwill calculation. This is affected also.



Example: Consolidated statement of financial position with share of post-acquisition profits, goodwill and NCI

P acquired 80% of S on 1 January 20X1 for ₩230,000.

The retained earnings of S were 100,000 at that date.

It is P's policy to recognise non-controlling interest at the date of acquisition as a proportionate share of net assets.

The statements of financial position P and S as at 31 December 20X1 were as follows

	Р	S
	Ħ	₩
Assets:		
Investment in S, at cost	230,000	-
Other assets	570,000	240,000
	800,000	240,000
Equity		
Share capital	200,000	50,000
Share premium	100,000	20,000
Retained earnings	440,000	125,000
	740,000	195,000
Current liabilities	60,000	45,000
	800,000	240,000

A consolidated statement of financial position as at 31 December 20X1 can be prepared as follows:

P Group: Consolidated statement of financial position at 31 December 20X1

	Ħ
Assets	
Goodwill (see working)	94,000
Other assets (570 + 240)	810,000
Total assets	904,000
Equity	
Share capital (P only)	200,000
Share premium (P only)	100,000
Consolidated retained earnings (see working)	460,000
	760,000
Non-controlling interest (see working)	39,000
	799,000
Current liabilities (60 + 40)	105,000
Total equity and liabilities	904,000



Example (continued): Net assets summary of S

	At date of consolidation	At date of acquisition	Post acq ⁿ
Share capital	50,000	50,000	
Share premium	20,000	20,000	
Retained earnings	125,000	100,000	25,000
Net assets	195,000*	170,000	_
Non-controlling intere	st		N
NCI's share of net ass $(20\% \times 170,000)$	sets at the date of acq		34,000
NCI's share of the pos S (20% of 25,000 (se	st-acquisition retained e above))	earnings of	5,000
NCI's share of net ass	sets at the date of con	solidation	39,000
Goodwill			N
Cost of investment		2	30,000
Non-controlling intere	est at acquisition		34,000
		2	64,000
Net assets at acquisit	tion (see above)	(1	70,000)
			94,000
Consolidated retained	d profits:		Ħ
All of P's retained ear	•	4	40,000
	acquisition retained e	arnings of S	-
(80% of 25,000 (see	-	•	20,000
		4	60,000

The NCI at the date of consolidation has been calculated as NCI share of net assets at acquisition plus the NCI share of profit since the date of acquisition.

NCI share of profit since the date of acquisition is the same as the NCI share of net assets since the date of acquisition.

Therefore the NCI at the date of consolidation is simply the NCI share of net assets at the date of consolidation.



Example (continued): Net assets summary of S					
	At date of consolidation	At date of acquisition	Post acq ⁿ		
Share capital	50,000	50,000			
Share premium	20,000	20,000			
Retained earnings	125,000	100,000	25,000		
Net assets	195,000*	170,000	-		
			-		
Non-controlling intere	Non-controlling interest				
NCI's share of net ass (20% \times 195,000*)	ets at the date of con		39,000		

This short cut is not available if the NCI at acquisition is measured at fair value.

NCI at fair value at the date of acquisition



Example: NCI at date of acquisition measured at fair value

Continuing the earlier example with the extra information that the fair value of the NCI at acquisition was 40,000.

Net assets summary of S

At date of consolidation	At date of acquisition	Post acq ⁿ
50,000	50,000	
20,000	20,000	
125,000	100,000	25,000
195,000	170,000	
	consolidation 50,000 20,000 125,000	consolidationacquisition50,00050,00020,00020,000125,000100,000

Figures under both methods are shown so that you can see the difference between the two.

		NCI as
	NCI at fair	share of
	value	net assets
Non-controlling interest	Ħ	*
NCI at the date of acquisition		
at fair value	40,000	
share of net assets (20% \times 170,000)		34,000
NCI's share of the post-acquisition retained earnings of S		
(20% of 25,000 (see above))	5,000	5,000
NCI's share of net assets at the date of		
consolidation	45,000	39,000
Goodwill	Ħ	₩
Cost of investment	230,000	230,000
Non-controlling interest at acquisition	40,000	34,000
	270,000	264,000
Net assets at acquisition (see above)	(170,000)	(170,000)
	100,000	94,000



Practice questions

Calculate the goodwill arising on acquisition in each of the following cases on the assumption that it is the parent company's policy to measure noncontrolling interest at acquisition at its fair value.

2

a) A Ltd bought 60% of B Limited on 1 January 2005 for ₦766,000.

At this date Y limited had net assets of ₩800,000 and the fair value of its non-controlling interest was ₩350,000.

b) C Ltd bought 55% of D Limited several years ago for ₩1,000,000.

At this date D limited had share capital of №500,000 and retained earnings of №750,000 and the fair value of its non-controlling interest was №600,000.

c) E Ltd bought 90% of F Limited several years ago for ₩1,750,000.

At this date F limited had share capital of \$100,000, share premium of \$48,000, a revaluation reserve of \$120,000 and retained earnings of \$250,000 and the fair value of its non-controlling interest was \$60,000.

2.6 Suggested step by step approach

To prepare a consolidated statement of financial position as at the acquisition date, the following steps should be taken.

Step 1. Establish the group share (parent company share) in the subsidiary and the percentage owned by non-controlling interests.

Step 2: Perform double entry to record any individual company adjustments that might be necessary. Mark these in the face of the question. The information can be lifted into workings later so that the marker can understand what you have done.

Step 3: Set out a pro-forma (skeleton) statement of financial position and fill in the easy numbers (for example those assets and liabilities that are a straight cross cast and the share capital)

Step 4. Calculate the net assets of the subsidiary S at the acquisition date and at the end of the reporting period

Step 5. Calculate the goodwill

Step 6. Calculate the non-controlling interest.

Step 7. Calculate consolidated retained earnings.

3

	0	`		
	6	ι.	0	
L		0	-	

Practice question

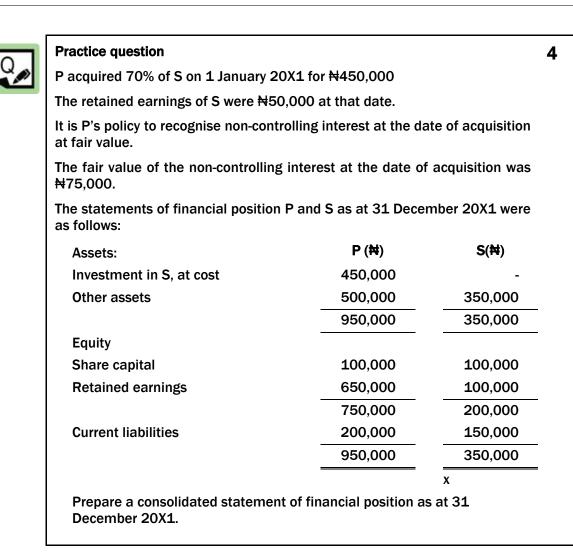
P acquired 70% of S on 1 January 20X1 for ₩450,000

The retained earnings of S were \$50,000 at that date.

It is P's policy to recognise non-controlling interest at the date of acquisition as a proportionate share of net assets.

The statements of financial position ${\bf P}$ and ${\bf S}$ as at 31 December 20X1 were as follows:

Assets:	P (\)	S(种)
Investment in S, at cost	450,000	-
Other assets	500,000	350,000
	950,000	350,000
Equity		
Share capital	100,000	100,000
Retained earnings	650,000	100,000
	750,000	200,000
Current liabilities	200,000	150,000
	950,000	350,000
		x
Prepare a consolidated statement of fin December 20X1.	nancial position as	s at 31



3 IFRS 3: BUSINESS COMBINATIONS

Section overview

- Introduction to IFRS 3
- Acquisition method
- Acquisition date amounts of assets acquired and liabilities assumed
- Accounting for goodwill

3.1 Introduction to IFRS 3

Objective of IFRS 3

The objective of IFRS 3 is to improve the relevance, reliability and comparability of information reported about business combinations and their effects.

It establishes principles and requirements for:

- □ the recognition and measurement of identifiable assets acquired, liabilities assumed and non-controlling interest in the acquiree;
- the recognition and measurement of goodwill (or a gain from a bargain purchase); and
- disclosures that enable users to evaluate the nature and financial effects of a business combination

3.2 Acquisition method

All business combinations are accounted for by the acquisition method which involves:

- identifying the acquirer;
- determining the acquisition date;
- recognising and measuring the identifiable assets acquired, the liabilities assumed and any non-controlling interest in the acquiree; and
- recognising and measuring goodwill or a gain from a bargain purchase

Identifying the acquirer

It might be difficult to identify an acquirer:

- □ The acquirer is usually the combining entity whose relative size is significantly greater than that of the other(s).
- In a business combination affected by transferring cash (other assets) or by incurring liabilities the acquirer is usually the entity that makes the transfer or incurs the liabilities.
- □ In a business combinations affected by exchange of equity interests the acquirer is usually the entity that issues equity.

Also note that the acquirer is usually the entity:

- whose owners have the largest portion of the voting rights in the combined entity;
- whose owners have the ability determine the composition of the governing body of the combined entity;
- whose (former) management dominates the management of the combined entity;
- □ that pays a premium over the pre-combination fair value of the equity interests of the others

Determining the acquisition date

Acquisition date is the date on which the acquirer effectively obtains control of the acquiree.

This generally the closing date (date of transfer of consideration and when net assets are acquired) but might be before or after this date depending on circumstances.

Goodwill

Goodwill was defined in an earlier section which explained that it is measured as follows:



Illustration: Goodwill

N.B. All balances are as at the date of acquisition.

	N
Consideration transferred (cost of the business combination)	Х
Non-controlling interest	Х
-	X
The net of the acquisition date amounts of identifiable assets acquired and liabilities assumed (measured in	
accordance with IFRS 3)	Х
 Goodwill recognised	X
—	

The section also explained that the non-controlling interest may be stated as either:

- a proportionate share of the identifiable assets acquired and liabilities assumed; or
- at fair value as at the date of acquisition

Issues to address:

IFRS 3 gives guidance on:

- □ cost of a business combination;
- recognition and measurement of identifiable assets and liabilities assumed; and
- accounting for goodwill.

Cost (consideration transferred)

Consideration transferred is measured at fair value which is the sum of acquisition-date fair values of:

- □ assets transferred by the acquirer;
- □ liabilities incurred by the acquirer to former owners of the acquiree; and
- equity interests issued by the acquirer (except for share-based payment awards exchanged for those held by the acquiree's employees – IFRS 2 applies)

If the consideration includes assets or liabilities of the acquirer carried at amounts that differ from their fair values at the acquisition date, these are revalued with gains and losses taken to P&L.

Consideration includes any asset or liability resulting from a contingent consideration arrangement:

- recognised at acquisition-date fair value; and
- classified as a liability or equity on the basis of guidance in IAS 32 or other applicable IFRSs.

A right to the return of previously transferred consideration is classified as an asset if specified conditions are met.

Acquisition-related costs

Acquisition-related costs (costs the acquirer incurs to effect a business combination) are recognised as expenses in the periods in which the costs are incurred and the services are received.

Costs of issuing debt or equity (perhaps to pay for the business combination) are not acquisition costs. These costs are accounted for in accordance with IAS 39 *Financial Instruments: Recognition and Measurement.*

3.3 Acquisition date amounts of assets acquired and liabilities assumed

The way that the following rules impact consolidation is shown in the next chapter.

Core principle

An acquirer of a business must recognise assets acquired and liabilities assumed at their acquisition date fair values and disclose information that enables users to evaluate the nature and financial effects of the acquisition.

To support this IFRS 3R sets out:

- a recognition principle;
- classification guidance; with
- a measurement principle.

There are specified exceptions to each of these.

Any asset acquired or liability assumed is subsequently measured in accordance with applicable IFRS. There are also exceptions to this rule.

Recognition principle

An acquirer must recognise (separately from goodwill), identifiable assets acquired, liabilities assumed and any non-controlling interest in the acquiree as of the acquisition date.

To qualify for recognition identifiable assets acquired and liabilities assumed must meet the definitions of assets and liabilities set out in *The Conceptual Framework* as at the acquisition date.

This might result in recognition of assets and liabilities not previously recognised by the acquiree.

Classification guidance

Identifiable assets acquired and liabilities assumed must be classified (designated) as necessary at the acquisition date so as to allow subsequent application of appropriate IFRS.

The classification is based on relevant circumstances as at the acquisition date with two exceptions:

- classification of a lease contract in accordance with IAS 17 *Leases*; and
- classification of a contract as an insurance contract in accordance with IFRS 4 *Insurance Contracts*.

Classification in these cases is based on circumstances at the inception of the contract or date of a later modification that would change the classification.

Measurement principle

Identifiable assets acquired and the liabilities assumed are measured at their acquisition date fair values.

Measurement period

Initial accounting for goodwill may be determined on a provisional basis and must be finalised by the end of a measurement period.

This ends as soon as the acquirer receives the information it was seeking about facts and circumstances that existed at the acquisition date but must not exceed one year from the acquisition date.

During the measurement period new information obtained about facts and circumstances that existed at the acquisition date might lead to the adjustment of provisional amounts or recognition of additional assets or liabilities with a corresponding change to goodwill.

Any adjustment restates the figures as if the accounting for the business combination had been completed at the acquisition date.

3.4 Accounting for goodwill

Positive goodwill - Excess of cost of combination over share of net assets

After initial recognition goodwill is measured at cost less any accumulated impairment losses.

- Goodwill acquired in a business combination is not amortised.
- It is tested for impairment annually, or more frequently if events or changes in circumstances indicate that it might be impaired, in accordance with IAS 36, Impairment of Assets.

Gain from a bargain purchase ("Negative goodwill")

A bargain purchase is a business combination in which the calculation of goodwill leads to a negative figure.

When this happens the acquirer must reassess whether it has correctly identified all of the assets acquired and all of the liabilities assumed and must recognise any additional assets or liabilities that are identified in that review.

The acquirer must then review the procedures used to measure the amounts this IFRS requires to be recognised at the acquisition date for all of the following:

- Let the identifiable assets acquired and liabilities assumed;
- the non-controlling interest in the acquiree (if any); and
- □ the consideration transferred.

Any amount remaining after applying the above requirements is recognised as a gain in profit or loss on the acquisition date.

4 CONSOLIDATION DOUBLE ENTRY

Section overview

- Introductory comment
- Calculating goodwill
- Calculating NCI
- Calculating consolidated retained earnings
- Tutorial note

4.1 Introductory comment

This section has been prepared for your wider professional education rather than for the exam. Treat it as a reference section that shows how the double entry of consolidation works.

We recommend that you do not answer questions using use "T accounts" as shown in this section but use schedules as shown in the earlier sections

Usually journals are prepared to process changes in the general ledger. This is not the case of the journals in this section. There is no general ledger for the group accounts. Consolidated financial statements are prepared from independent sets of financial statements which are extracted from separate general ledgers. Information from these independent financial statements is transferred to working papers where the consolidation is performed.

The journals described in this refer to adjustments made to numbers in those working papers.

The example used earlier at paragraph 2.5 of this chapter will be used to illustrate the double entry.

4.2 Calculating goodwill

The cost of investment account is renamed the cost of control account. This is the account used to calculate goodwill. P's share of net assets is compared with the cost of investment in this account by transferring in P's share of each of S's equity balances at the date of acquisition.

Q

Illustration: Double entry to calculate goodwill				
	Debit	Credit		
Share capital of S	40,000			
Cost of control (80% of 50,000)		40,000		
Share premium of S	16,000			
Cost of control (80% of 20,000)		16,000		
Retained earnings of S	80,000			
Cost of control (80% of 100,000)		80,000		

Being: Transfer of P's share of S's share capital, share premium and retained earnings to cost of control account as at the date of acquisition.

	Cost of contr	ol (goodwill)	
	₩		₩
Cost of investment	230,000	 P's share of S's share capital 	40,000
		2) P's share of S's share premium	16,000
		 P's share of S's retained earnings at 	
		acquisition	80,000
		Balance c/d	94,000
	230,000		230,000
Balance b/d	94,000	1	ļ.

The balance on the cost of control account is the goodwill figure.

This is only shown for background information. Do not use a "T account" but use a schedule as previously shown.

4.3 Calculating NCI

The NCI's share of net assets of S is constructed by transferring in their share of each of S's equity balances at the date of consolidation into an NCI account.

stration: Double entry to calculate NCI		
	Debit	Credit
Share capital of S	10,000	
Cost of control		10,000
Share premium of S	4,000	
Cost of control		4,000
Retained earnings of S	25,000	
Cost of control (20% of 125,000)		25,000

Being: Transfer of NCI's share of S's share capital, share premium and retained earnings to the non-controlling interest account

The balance on this account is the non-controlling interest

	Non-controll	ing interest	
	₩		₩
		4) NCI's share of S's share capital (20% of 50,000)	10,000
		5) NCI's share of S's share premium (20% of 20,000)	4,000
Balance b/d	39,000	6) NCI's share of S's retained earnings (20% of 125,000)	25,000
,	39,000		39,000
		Balance b/d	39,000

This is only shown for background information. Do not use a "T account" but use a schedule as previously shown.

4.4 Calculating consolidated retained earnings

P's share of S's retained earnings since the date of acquisition is credited to the P's retained earnings account.

	Illustration: Double entry to calculate consolidated retained earnings			
Y		Debit	Credit	
	Retained earnings of S	20,000		
	P's retained earnings		20,000	
	Being: Transfer of P's share of post-acq earnings. (80% of (125,000 – 100,000	-	o retained	

The balance on this account is the consolidated retained earnings.



Example (continued): Consolidated retained earnings account				
	Retained	earnings		
	₩		₩	
		P's balance	440,000	
		P's share of S's	20,000	
Balance b/d	460,000			
	460,000		460,000	
		Balance b/d	460,000	

This is only shown for background information. Do not use a "T account" but use a schedule as previously shown.

4.5 Tutorial note

The balances on S's share capital, share premium and retained earnings have all been removed elsewhere.



Example (continued): Other accounts

	Share cap	ital (of S)	
	₩		N
P's share at acquisition			
(to cost of control)	40,000	Balance b/d	50,000
S's share (to NCI)	10,000		
	50,000		50,000
	Share prem	nium (of S)	
	Ħ		N
P's share at acquisition			
(to cost of control)	16,000	Balance b/d	20,000
S's share (to NCI)	4,000		
	20,000		20,000
	Retained ear	nings (of S)	
	₩		₩
P's share at acquisition			
(to cost of control)	80,000	Balance b/d	125,000
P's share since			
acquisition (consolidated retained			
profits)	20,000		
S's share (to NCI)	25,000		
	125,000		125,000
	125,000		125,000

5 CHAPTER REVIEW

Chapter review

Before moving on to the next chapter check that you now know how to:

- Describe the concept of a group as a single economic unit
- Define using simple examples subsidiary, parent and control
- Describe situations when control is presumed to exist
- Identify and describe the circumstances in which an entity is required to prepare and present consolidated financial statements
- Prepare basic a consolidated statement of financial position including the calculation of goodwill, non-controlling interest and consolidated post acquisition reserves

SOLUTIONS TO PRACTICE QUESTIONS

Solu	itions	
a)	Goodwill	₩
	Cost of investment	766,000
	Non-controlling interest at acquisition (40 % of 800,000)	320,000
		1,086,000
	Net assets at acquisition	(800,000)
		286,000
b)	Net assets summary	
		At date of
		acquisition
	Share capital	500,000
	Retained earnings	750,000
	Net assets	1,250,000
	Goodwill	₩
	Cost of investment	1,000,000
	Non-controlling interest at acquisition (45 % of 1,250,000)	562,500
		1,562,500
	Net assets at acquisition	(1,250,000)
		312,500
C)	Net assets summary	
,	·	At date of
		acquisition
	Share capital	100,000
	Share premium	48,000
	Revaluation reserve	120,000
	Retained earnings	250,000
	Net assets	518,000
	Goodwill	Ħ
	Cost of investment	1,750,000
	Non-controlling interest at acquisition (10 % of 518,000)	51,800
		1,801,800
	Net assets at acquisition	(518,000)
		1,283,800

Solution (continued)				
d)	Net assets summary			
		At date of acquisition		
	Share capital	500,000		
	Retained earnings	750,000		
	Net assets	1,250,000		
	Goodwill	*		
	Cost of investment	1,000,000		
	Non-controlling interest at acquisition (60 % of 1,250,000)	750,000		
		1,750,000		
	Net assets at acquisition	(1,250,000)		
		500,000		

Solu	itions	2
a)	Goodwill	Ħ
	Cost of investment	766,000
	Non-controlling interest at acquisition (given)	350,000
		1,116,000
	Net assets at acquisition	(800,000)
		316,000
b)	Net assets summary	
		At date of
		acquisition
	Share capital	500,000
	Retained earnings	750,000
	Net assets	1,250,000
	Goodwill	Ħ
	Cost of investment	1,000,000
	Non-controlling interest at acquisition (given)	600,000
		1,600,000
	Net assets at acquisition	(1,250,000)
		350,000

olutions (continued)		
) Net assets summary		
		At date of acquisition
Share capital		100,000
Share premium		48,000
Revaluation reserve		120,000
Retained earnings		250,000
Net assets		518,000
Goodwill		Ħ
Cost of investment		1,750,000
Non-controlling interest a	t acquisition (given)	60,000
		1,810,000
Net assets at acquisition		(518,000)
		1,292,000

Solution				
P Group: Consolidated statement of financial position	at 31 December 20X1			
Assets	Ħ			
Goodwill (W3)	345,000			
Other assets (500 + 350)	850,000			
Total assets	1,195,000			
Equity				
Share capital (P only)	100,000			
Consolidated retained earnings (W4)	685,000			
	785,000			
Non-controlling interest (W2)	60,000			
	845,000			
Current liabilities (200 + 150)	350,000			
Total equity and liabilities	1,195,000			

Solu	tion (continued)				
Worl	kings:				
W1	Net assets summary				
		At date of consolidation	At date acquisiti		l n
	Share capital	100,000	100,0	00	
	Retained earnings	100,000	50,0	00 50,000)
	Net assets	200,000*	150,0	00	
W2	Non-controlling interest			#	
	NCI's share of net assets (30% \times 150,000 (W1))	s at the date of acquisitio	n	45,000	
	NCI's share of the post-a (30% of 50,000 (W1))	cquisition retained earni	ngs of S	15,000	
	NCI's share of net assets	s at the date of consolida	tion	60,000	
	Alternative working				
	NCI's share of net assets (30% × 200,000*)	s at the date of consolida	tion -	60,000	
WЗ	Goodwill			#	
	Cost of investment			450,000	
	Non-controlling interest	at acquisition (see W2)		45,000	
			_	495,000	
	Net assets at acquisition	n (W1)		(150,000)	
			=	345,000	
W4	Consolidated retained p	rofits:		₩	
	All of P's retained earning	igs		650,000	
	P's share of the post-acc (70% of 50,000 (W1))	uisition retained earning	s of S	35,000	
				00,000	

	tion P Group: Consolidated sta	atoment of financial nos	ition at 21 F)ooomi	hor 2011
	r Group: Consolidated Sta	atement of financial pos	at SI L	Jecenn	
	Assets				N
	Goodwill (W3)				375,000
	Other assets (500 + 350)			_	850,000
	Total assets			_	1,225,000
	Equity				
	Share capital (P only)				100,000
	Consolidated retained ear	rnings (W4)		_	685,000
	Non controlling interest ()				785,000
	Non-controlling interest (V	(V∠)		-	90,000 875,000
	Current liabilities (200 + 2	150)			350,000
	Total equity and liabilities	-		_	1,225,000
				_	
	kings: Net assets summary	At date of	At dat	e of	
	Net assets summary	consolidation	acquis	ition	Post acq
	Net assets summary Share capital	consolidation 100,000	acquis 100,	ition 000	
	Net assets summary Share capital Retained earnings	consolidation 100,000 100,000	acquis 100, 50,	ition 000 000	Post acq 50,000
	Net assets summary Share capital	consolidation 100,000	acquis 100,	ition 000 000	
W1	Net assets summary Share capital Retained earnings	consolidation 100,000 100,000	acquis 100, 50,	ition 000 000	
Worl W1 W2	Net assets summary Share capital Retained earnings Net assets	consolidation 100,000 100,000 200,000*	acquis 100, 50,	ition 000 000 000	50,000
W1	Net assets summary Share capital Retained earnings Net assets Non-controlling interest	consolidation 100,000 100,000 200,000*	acquis 100, 50, 150,	ition 000 000 000 75	50,000
W1	Net assets summary Share capital Retained earnings Net assets Non-controlling interest Fair value of NCI at the o NCI's share of the post-a	consolidation 100,000 100,000 200,000* date of acquisition acquisition retained earn	acquis 100, 50, 150,	ition 000 000 000 75	50,000 - N 5,000
W1	Net assets summary Share capital Retained earnings Net assets Non-controlling interest Fair value of NCI at the o NCI's share of the post-a (30% of 50,000 (W1)) NCI's share of net assets	consolidation 100,000 100,000 200,000* date of acquisition acquisition retained earn	acquis 100, 50, 150,	ition 000 000 000 75	50,000 N 5,000 5,000
W1	Net assets summary Share capital Retained earnings Net assets Non-controlling interest Fair value of NCI at the o NCI's share of the post-a (30% of 50,000 (W1)) NCI's share of net assets Goodwill	consolidation 100,000 100,000 200,000* date of acquisition acquisition retained earn	acquis 100, 50, 150,	ition 000 000 75 	50,000 ** 5,000 5,000 0,000 **
W1	Net assets summary Share capital Retained earnings Net assets Non-controlling interest Fair value of NCI at the o NCI's share of the post-a (30% of 50,000 (W1)) NCI's share of net assets Goodwill Cost of investment	consolidation 100,000 200,000* date of acquisition acquisition retained earr s at the date of consolid	acquis 100, 50, 150,	ition 000 000 75 15 90 450	50,000 ** 5,000 5,000 0,000 ** 0,000
W1	Net assets summary Share capital Retained earnings Net assets Non-controlling interest Fair value of NCI at the o NCI's share of the post-a (30% of 50,000 (W1)) NCI's share of net assets Goodwill	consolidation 100,000 200,000* date of acquisition acquisition retained earr s at the date of consolid	acquis 100, 50, 150,	ition 000 000 75 15 90 450 75	50,000 N 5,000 5,000 0,000 N 0,000 5,000
W1	Net assets summary Share capital Retained earnings Net assets Non-controlling interest Fair value of NCI at the o NCI's share of the post-a (30% of 50,000 (W1)) NCI's share of net assets Goodwill Cost of investment	consolidation 100,000 100,000 200,000*	acquis 100, 50, 150,	ition 000 000 75 15 90 450 75 525	50,000 ** 5,000 5,000 0,000 ** 0,000

Solution (continued)			
W4	Consolidated retained profits:	₩	
	All of P's retained earnings	650,000	
	P's share of the post-acquisition retained earnings of S		
	(70% of 50,000 (W1))	35,000	
		685,000	

Skills level Financial reporting



Consolidated accounts: Statements of financial position -Complications

Contents

- 1 Possible complications: Before consolidation
- 2 Possible complications: During consolidation
- 3 Possible complications: After consolidation
- 4 Chapter review

INTRODUCTION

Purpose

In this element the accounting from the foundation level is taken up a level into financial accounting in the context of more complex events and transactions with a greater emphasis on compliance with regulations including International Accounting Standards and generally accepted accounting practices in the private sectors.

Students will be expected to demonstrate an understanding of and competence in financial statement analysis and basic analysis of choices in accounting treatments.

Competencies

4	Preparing consolidated financial statements of simple group (parent and one subsidiary)
4(c)	Identify from data provided a subsidiary or associate in accordance with the international financial reporting framework and local law.
4(d)	Evaluate and calculate the figures to be included in consolidated financial statements in respect of an acquisition involving one subsidiary and associate, continuing ownership but not including disposals of subsidiary and associate.
4(e)	Draft, compile and present the consolidated financial statements or extracts of them in accordance with selected accounting policies and the requirements of IFRS.

Exam context

This chapter explains further adjustments that might be necessary during the process of consolidation.

By the end of this chapter you will be able to:

- Account for acquisition related costs
- Incorporate straightforward fair value adjustments into a consolidation
- Account for a mid-year acquisition of a subsidiary
- Eliminate unrealised profit on transactions between a parent company and its subsidiary
- Account for goodwill
- Account for gain on a bargain purchase (negative goodwill)

1 POSSIBLE COMPLICATIONS: BEFORE CONSOLIDATION

Section overview

- Acquisition-related costs
- Acquired intangible assets
- Fair value exercise at acquisition

1.1 Acquisition-related costs

Acquisition-related costs are costs the acquirer incurs to effect a business combination. They include advisory, legal, accounting, valuation and other professional or consulting fees.

These costs are not capitalised as part of the cost of acquisition but expensed in the periods in which they are incurred. (This is different rule to that which applies to the purchase of property, plant and equipment or intangibles).

A question may incorrectly capitalise the costs. You would have to correct this before consolidating.

1.2 Acquired intangible assets

A question might provide information about an unrecognised asset of the subsidiary. You would have to include the asset in the subsidiary's financial statements before consolidating them.

Reason

Goodwill is recognised by the acquirer as an asset from the acquisition date.

It is initially measured as the difference between:

- Let the cost of the acquisition plus the non-controlling interest; and
- the net of the acquisition date amounts of identifiable assets acquired and liabilities assumed (measured in accordance with IFRS 3).

When a company acquires a subsidiary, it may identify intangible assets of the acquired subsidiary, which are not included in the subsidiary's statement of financial position. If these assets are separately identifiable and can be measured reliably, they should be included in the consolidated statement of financial position as intangible assets, and accounted for as such.

This can result in the recognition of assets and liabilities not previously recognised by the acquiree.



Illustration: Fair value adjustment

If a company bought 100% of the Coca-Cola Corporation they would be buying a lot of assets but part (perhaps the largest part) of the purchase consideration would be to buy the Coca Cola brand.

Coca Cola does not recognise its own brand in its own financial statements because companies are not allowed to recognised internally generated brands.

However, as far as the company buying the Coca-Cola Corporation is concerned the brand is a purchased asset. It would be recognised in the consolidated financial statements and would be taken into account in the goodwill calculation.



Example: Fair value adjustment (non-depreciable asset)

P bought 80% of S 2 years ago.

At the date of acquisition S's retained earnings stood at \$600,000. The fair value of its net assets was not materially different from the book value except for the fact that it had a brand which was not recognised in S's accounts. This had a fair value of 100,000 at this date and an estimated useful life of 20 years.

The statements of financial position ${\bf P}$ and ${\bf S}$ as at 31 December 20X1 were as follows:

	Р	S
	Ħ	Ħ
PP and E	1,800,000	1,000,000
Investment in S	1,000,000	
Other assets	400,000	300,000
	3,200,000	1,300,000
Share capital	100,000	100,000
Retained earnings	2,900,000	1,000,000
Liabilities	200,000	200,000
	3,200,000	1,300,000

A consolidated statement of financial position as at 31 December 20X1 can be prepared as follows:

P Group: Consolidated statement of financial position at 31 December 20X1

	Ħ
Assets	
Brand (see working)	90,000
Goodwill (see working)	360,000
Property, plant and equipment (1,800 + 1000)	2,800,000
Other assets (400 + 300)	700,000
Total assets	3,950,000
Equity	
Share capital (P only)	100,000
Consolidated retained earnings (see working)	3,212,000
	3,312,000
Non-controlling interest	238,000
	3,550,000
Current liabilities (200 + 200)	400,000
Total equity and liabilities	3,950,000



Example (continued):

et assets summary of S			
	At date of consolidation	At date o acquisitio	
Share capital	100,000	100,00	0
Retained earnings			
Given in the question	1,000,000	600,00	0
Extra depreciation on brand			
$(100,000 \times 2^{years}/20_{years})$	(10,000)		_
	990,000	600,00	0 390,00 0
Consolidation reserve on recognition of the brand	100,000	100,00	0
Net assets	1,190,000	800,00	0
Non-controlling interest			Ħ
NCI's share of net assets a (20% \times 800,000)	at the date of acc	uisition	160,000
NCI's share of the post-acc S (20% of 390,000 (see al	-	l earnings of	78,000
NCI's share of net assets a	238,000		
Goodwill			Ħ
Cost of investment			1,000,000
Non-controlling interest at	acquisition (20%	6 × 800,000)	160,000
			1,160,000
Net assets at acquisition (see above)		(800,000)
			360,000
Consolidated retained pro	fits:		₩
All of P's retained earning			2,900,000
P's share of the post-acqu (80% of 390,000 (see abo	isition retained e	arnings of S	312,000
			3,212,000
Brand			₩
On initial recognition			100,000
_	ition (100 000 ×	2 years $/_{20 \text{ years}}$	(10,000)
Depreciation since acquisition (100,000 \times ^{2 years} / _{20 years})			90,000

1.3 Fair value exercise at acquisition

A question might provide information about the fair value of a subsidiary's assets at the date of acquisition. You might have to revalue the assets in the subsidiary's financial statements before consolidating them.

Reason

Goodwill is recognised by the acquirer as an asset from the acquisition date.

It is initially measured as the difference between:

- Let the cost of the acquisition plus the non-controlling interest; and
- the net of the acquisition date amounts of identifiable assets acquired and liabilities assumed (measured in accordance with IFRS 3).

IFRS 3 requires that most assets and liabilities be measured at their fair value.



Definition: Fair value

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

IFRS 13 para 9

In every example so far it has been assumed that the fair value of the assets and liabilities of the subsidiary were the same as their book value as at the date of acquisition. In practice this will not be the case.

In other cases a question will include information about the fair value of an asset or assets as at the date of acquisition.

The net assets of a newly acquired business are subject to a fair valuation exercise.

Where the subsidiary has not reflected fair values at acquisition in its accounts, this must be done before consolidating. Note that this is almost always the case

Revaluation upwards:

The asset is revalued in the consolidation working papers (not in the general ledger of the subsidiary). The other side of the entry is taken to a fair value reserve as at the date of acquisition. This will appear in the net assets working and therefore become part of the goodwill calculation.

The reserve is also included in the net assets working at the reporting date if the asset is still owned by the subsidiary.

If a depreciable asset is revalued the post-acquisition depreciation must be adjusted to take account of the change in the value of the asset being depreciated.

Revaluation downwards

Write off the amount to retained earnings in the net assets working (book value less fair value of net assets at acquisition) at acquisition and at the reporting date if the asset is still owned.



Example: Fair value adjustment (depreciable asset)

P bought 80% of S 2 years ago.

At the date of acquisition S's retained earnings stood at 4600,000 and the fair value of its net assets were 1,000,000. This was 300,000 above the book value of the net assets at this date.

The revaluation was due to an asset that had a remaining useful economic life of 10 years as at the date of acquisition.

The statements of financial position ${\bf P}$ and ${\bf S}$ as at 31 December 20X1 were as follows:

	Р	S
	Ħ	Ħ
PP and E	1,800,000	1,000,000
Investment in S	1,000,000	
Other assets	400,000	300,000
	3,200,000	1,300,000
Share capital	100,000	100,000
Retained earnings	2,900,000	1,000,000
Liabilities	200,000	200,000
	3,200,000	1,300,000

A consolidated statement of financial position as at **31** December 20X1 can be prepared as follows:

P Group: Consolidated statement of financial position at 31 December 20X1

	₩
Assets	
Goodwill (see working)	200,000
PP and E (see working)	3,040,000
Other assets (400,000 + 300,000)	700,000
Total assets	3,940,000
Equity	
Share capital (P only)	100,000
Consolidated retained earnings (see working)	3,172,000
	3,272,000
Non-controlling interest	268,000
	3,540,000
Current liabilities (200 + 200)	400,000
Total equity and liabilities	3,940,000

Example (continued):				
Net assets summary of S				
	At date of	At date		
	consolidation	acquisit		Post acq
Share capital	100,000	100,0	000	
Retained earnings				
Given in the question	1,000,000	600,0	000	
Extra depreciation on fair value adjustment $(300 \times 2 \text{ years}/10 \text{ years}) -$				
see explanation on next page	(60,000)		_	
	940,000	600,0	000	340,000
Fair value reserve	300,000	300,0	000	
Net assets	1,340,000	1,000,0	000	
Non-controlling interest NCI's share of net asse $(20\% \times 1,000)$	ts at the date of acc		20	₩ 0,000
NCI's share of the post- S (20% of 340 (see abo	-	earnings of	6	8,000
NCI's share of net asse		nsolidation		8,000
Goodwill				Ħ
Cost of investment			1,00	0,000
Non-controlling interes	t at acquisition (20%	% × 1,000)	20	0,000
			1,20	0,000
Net assets at acquisition	on (see above)		(1,00	0,000)
			20	0,000
Consolidated retained	profits:			#
All of P's retained earn	ings		2,90	0,000
P's share of the post-ac	-	arnings of S	_	
(80% of 340 (see abov	e))			2,000
			3.17	2,000

Property plant and equipment	₩
Parent's	1,800
Subsidiary's	
Given in question	1,000
Fair value adjustment	300
Extra depreciation on fair value adjustment $(300 \times 2^{\text{years}}/_{10 \text{ years}})$	(60)
	1,240
To statement of financial position	3,040

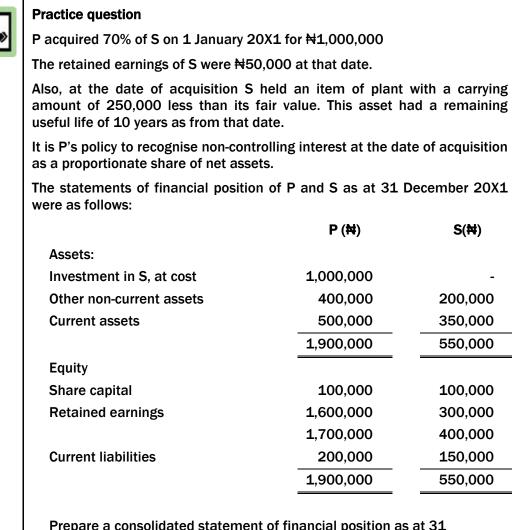
Explanation of extra depreciation

If a depreciable asset is revalued (which is usually the case) the post-acquisition depreciation must be adjusted to take account of the change in the value of the asset being depreciated.

In this example, two years ago the subsidiary had an asset which had a fair value ₩300,000 greater than its book value. This valuation was not recorded in the financial statements of the subsidiary so the subsidiary's figures need to be retrospectively adjusted, for the purposes of consolidation, at each year end.

Depreciation of an asset is based on its carrying amount. Depreciation of an asset increases when it is revalued. Therefore, the extra depreciation necessary as a result of the fair value adjustment is $\Re 30,000$ per annum ($\Re 300,000/_{10 \text{ years}}$).

The acquisition was 2 years ago so extra depreciation of \$60,000 ($\$30,000 \times 2$ years) must be recognised retrospectively.



Prepare a consolidated statement of financial position as at 31 December 20X1.

1

2 POSSIBLE COMPLICATIONS: DURING CONSOLIDATION

Section overview

- Mid-year acquisitions
- Types of intra-group transaction
- The need to eliminate intra-group transactions on consolidation
- Unrealised profit Inventory
- Unrealised profit Transfers of non-current assets

2.1 Mid-year acquisitions

Goodwill is measured at the date of acquisition of the subsidiary.

H may not acquire S at the start or end of a year. If S is acquired mid-year, it is necessary to calculate the net assets at date of acquisition in order to calculate goodwill, non-controlling interest and consolidated retained earnings.

This usually involves calculating the subsidiary's retained earnings at the date of acquisition. The profits of the subsidiary are assumed to accrue evenly over time unless there is information to the contrary.



Illustration: Retained earnings at the date of acquisition

	14	
Retained earnings at the start of the year	Х	
Retained earnings for the year up to the date of acquisition	Х	
Retained earnings at the date of acquisition	X	

ы



Example: Mid-year acquisition

P bought 70% of S on 31st March this year.

S's profit for the year was ₩12,000

The statements of financial position ${\bf P}$ and ${\bf S}$ as at 31 December 20X1 were as follows:

	Р	S
	Ħ	Ħ
PP and E	100,000	20,000
Investment in S	50,000	
Other assets	30,000	12,000
	180,000	32,000
Share capital	10,000	1,000
Share capital Retained earnings	10,000 160,000	1,000 30,000
•		
Retained earnings	160,000	30,000

A consolidated statement of financial position as at 31 December 20X1 can be prepared as follows:

P Group: Consolidated statement of financial position at 31 December 20X1

	Ħ
Assets	
Goodwill (see working)	34,600
PP and E (100,000 + 20,000)	120,000
Other assets (30,000 + 12,000)	42,000
Total assets	196,600
Equity	
Share capital (P only)	10,000
Consolidated retained earnings (see working)	166,300
	176,300
Non-controlling interest	9,300
	185,600
Current liabilities (10,000 + 1,000)	11,000
Total equity and liabilities	196,600

Example (continued):			
Net assets summary of S			
	At date of consolidation	At date of acquisition	
Share capital	1,000	1,000	
Retained earnings	_,	_,	
Given in the question	30,000		
See working below		21,000)
	30,000	21,000	
Net assets	31,000	22,000	
	,	,	
Retained earnings of	f the subsidiary as at	t the date of acq	-
Detained comings at the	atort of the year		*
Retained earnings at the	-	Г	20,000)
Retained earnings at the	-		30,000) (12,000)
Less: profit for the year	ſ	L	18,000
Profit from the start of th	a vaar ta tha data a	facquisition	18,000
$(3/12 \times 12,000)$	3,000		
NCI's share of net assets at the date of consolidation			21,000
Non-controlling interest		-	#
NCI's share of net assets	at the date of acou	isition	
(30% × 22,000)	6,600		
NCI's share of the post-a (30% of 9,000 (see abov	earnings of S	2,700	
NCI's share of net assets	NCI's share of net assets at the date of consolidation		
Goodwill		=	
			₩ 50,000
Cost of investment Non-controlling interest at acquisition $(30\% \times 22,000)$			
Non-controlling interest a		~ 22,000) _	6,600
Not accets at acquisition	(acc chove)		56,600
Net assets at acquisition	(see above)	-	(22,000)
		=	34,600
Consolidated retained pr	ofits:		*
All of P's retained earnin	gs		160,000
P's share of the post-acq		rnings of S	
(70% of 9,000 (see abov	ve))	_	6,300
			166,300

2.2 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
- □ Transfers of non-current assets between the parent and a subsidiary, or between two subsidiaries in the group
- □ The payment of dividends by a subsidiary to the parent (or by one subsidiary to another subsidiary)
- Loans by one entity in the group to another, and the payment of interest on intra-group loans.

2.3 The need to eliminate intra-group transactions on consolidation

Intra-group transactions should be eliminated on consolidation. In other words, the effects of intra-group transactions must be removed from the financial statements 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.

The consolidated financial statements represent the financial position and performance of a group of companies as if they are a single economic entity. A single economic entity cannot owe itself money!

IFRS 10 therefore requires that:

- □ Intra-group balances and transactions, including income, expenses and dividends, must be eliminated in full.
- Profits or losses resulting from intra-group transactions that are recognised in inventory or non-current assets must be eliminated in full.

Example: Elimination H owns 80% of S. H	-	-	actions or	n consolida	ation
			Adjust	tment	Consolidated statement of financial position
	Р	S	Dr	Cr	-
Receivables:					
From S	1,000			1,000	_
Payables:					
То Н		1,000	1,000		_

The above adjustment is simply a cancellation of the inter-company receivable in one group member's statement of financial position against the inter-company payable in another group member's statement of financial position.

Items in transit

At the year-end current accounts may not agree, owing to the existence of intransit items such as goods or cash.

The usual convention followed is to follow the item through to its ultimate destination and adjust the books of the ultimate recipient.

2.4 Unrealised profit – Inventory

Inter-company balances are cancelled on consolidation. The main reason for these arising is inter company (or intra group) trading. The other example you will come across is inter-company transfers of non-current assets.

If a member of a group sells inventory to another member of the group and that inventory is still held by the buying company at the year-end:

- The company that made the sale will show profit in its own accounts.
 - This is fine from the individual company viewpoint but the profit has not been realised by the group.
- □ The company that made the purchase will record the inventory at cost to itself.
 - This is fine from the individual company view but consolidation of this value will result in the inclusion in the financial statements of a figure which is not at cost to the group.

IFRS 10 requires that the unrealised profit be removed in full from the closing inventory valuation. It gives no further guidance on how this should be done.

This is an inventory valuation adjustment and can be processed in the consolidated financial statements.

Illustration: Unrealised profit double entry		
	Debit	Credit
Closing inventory – Statement of comprehensive income	Х	
Closing inventory – Statement of financial position		Х

There is a complication to think about. If S is the selling company the purpose of the above adjustment is to reduce the profit of the subsidiary because there is unrealised profit on the inter-company transaction and reduce the inventory held by P as it is not at cost to the group.

If the profit of the subsidiary is being reduced then NCI should share in that reduction. This implies a second journal as follows:

ustration: Unrealised profit double entry		
	Debit	Credit
NCI in the statement of financial position	Х	
NCI in the statement of comprehensive income		х
With their share of the adjustment		

The two journals can be combined as follows to produce a composite adjustment in questions which only require the preparation of the statement of financial position.

Illustration: Unrealised profit double entry		
	Debit	Credit
Consolidated retained earnings	Х	
NCI in the statement of financial position	Х	
Closing inventory – Statement of financial position		Х



Example: Unrealised profit

P bought 80% of S 2 years ago. At the date of acquisition S's retained earnings stood at ₩1,600

During the year S sold goods to H for 20,000 which gave S a profit of 8,000. H still held 40% of these goods at the year end.

The statements of financial position P and S as at 31 December 20X1 were as follows:

Р	S
Ħ	N
100,000	41,000
50,000	
110,000	50,000
260,000	91,000
50,000	30,000
200,000	56,000
10,000	5,000
260,000	91,000
	N 100,000 50,000 110,000 260,000 50,000 200,000 10,000

A consolidated statement of financial position as at 31 December 20X1 can be prepared as follows:

P Group: Consolidated statement of financial position at 31 20X1	December
Assets	₩
Goodwill (see working)	13,200
PP and E (100,000 + 41,000)	141,000
Other assets (see working)	156,800
Total assets	311,000
Equity	
Share capital (P only)	50,000
Consolidated retained earnings (see working)	229,440
	279,440
Non-controlling interest	16,560
	296,000
Current liabilities (10,000 + 5,000)	15,000
Total equity and liabilities	311,000

0

Example (continued):

Net assets summary of S

et assets summary of S			
	At date of consolidation	At date of acquisition	Post acq ⁿ
Share capital	30,000	30,000	
Retained earnings			
Given in the question	56,000	16,000	40,000
Net assets	82,800	46,000	-
Unrealised profit			
			₩
Total profit on transac	tion		8,000
Inventory held at year		ofit on this is	4004
unrealised by the grou	ip)		40%
Adjustment			3,200
Double entry in conso	lidated financial state	ements Dr	Cr
Consolidated retained	earnings (80% \times 3,2	00) 2,56	0
NCI – Statement of fir	nancial position (20%	× 3,200) 640)
Closing inventory – St	atement of financial	position	3,200
Non-controlling intere	st		Ħ
NCI's share of net ass (20% × 46,000)	ets at the date of acc	juisition	9,200
NCI's share of the pos	-	l earnings of	
S (20% of 40,000 (see			8,000
NCI share of unrealise			(640)
NCI's share of net ass	ets at the date of cor	solidation	16,560
Goodwill			Ħ
Cost of investment			50,000
Non-controlling interes	st at acquisition (20%	^б × 46,000)	9,200
			59,200
Net assets at acquisit	on (see above)		(46,000)

2

e,

Example	(continued)
EAGILIPIO (

Consolidated retained profits:	Ħ
All of P's retained earnings	200,000
P's share of the post-acquisition retained earnings of S (80% of 40,000 (see above))	32,000
Unrealised profit adjustment	(2,560)
	229,440



Practice question

P acquired 60% of S on 1 January 20X1 for ₩2,000,000

The retained earnings of S were 1785,000 at that date and S held land which had a fair value of 1500,000 more than its carrying value.

It is P's policy to recognise non-controlling interest at the date of acquisition as a proportionate share of net assets.

During the period P had sold goods to S for \$50,000 at a mark-up of 25% on cost. S had sold some of this inventory to third parties but still held inventory bought from P for \$12,500 at 31 December 20X1.

The statements of financial position of P and S as at 31 December 20X1 were as follows:

	P (种)	S(₩)
Assets:		
Investment in S, at cost	2,000,000	-
Other non-current assets	650,000	826,000
Current assets		
Inventory	100,000	80,000
Amount owed by S	6,000	na
Other current assets	374,000	320,000
	480,000	400,000
	3,130,000	1,226,000
Equity		
Share capital	100,000	50,000
Retained earnings	2,590,000	1,050,000
Current liabilities		
Amount owed to P	na	6,000
Other current liabilities	240,000	120,000
	440,000	126,000
	3,130,000	1,226,000

Prepare a consolidated statement of financial position as at 31 December 20X1.

2.5 Unrealised profit – Transfers of non-current assets

One member of a group may sell a non-current asset to another member of the group.

The company making the sale will recognise a profit or loss on disposal.

The company buying the asset will include the asset at purchase cost in its own accounts and depreciation will be based on that amount. This cost will be different to cost to the group.

As far as the group is concerned no transfer has occurred. The group accounts must reflect non-current assets at the amount they would have been stated at had the transfer not been made.

Summary of adjustments:

- Remove profit from the financial statements of the company that made the sale; and
- Correct the depreciation charge in the financial statements of the company that made the purchase.

These two adjustments establish the transferred asset at its cost less accumulated depreciation to the group.

The double entry is shared to the NCI as appropriate in the consolidated statement of financial position.

- □ If the sale was to S the NCI would share the depreciation adjustment.
- □ If the sale was from S to H the NCI would share the profit adjustment.

This is best seen with an illustration.



Example: Unrealised profit on transfer of non-current assets

H owns 80% of S.

There was a transfer of an asset within the group for ₩15,000 on 1 January 20X3.

The original cost to H was ₩20,000 and the accumulated depreciation at the date of transfer was ₩8,000.

Both companies depreciate such assets at 20% per year on cost to the company, recognising a full year's depreciation in the year of purchase and none in the year of sale.

	Figures in the accounts	Figures if no transfer had been made	Adjustment required
Against S's figures:			
Cost	15,000	20,000	5,000 Dr
Accumulated depreciation	(3,000)	(12,000)	9,000 Cr
	12,000	8,000	4,000 Cr
Charge for the year	3,000	4,000	1,000 Dr
Against P's figures:			
Profit on disposal			
Proceeds	15,000]	
Carrying amount at			
disposal (20,000 - 8,000)	(12,000)		
	3,000	nil	
If the transfer was from H to	S – Full journal	I	
Consolidated financial stater	nents	Dr	Cr
Income statement (profit on	disposal)	3,000	0
Income statement (deprecia	tion)	1,000	0
Non-current asset			4,000
NCI in the statement of finan	cial position	200	
NCI in the statement of comp	orehensive inco	ome	200
Being the NCI share of the de	epreciation adju	ustment (20% \times	1,000)
Composite journal if just pre consolidated statement of fi		n Dr	Cr
Consolidated retained earning	-	3,80	•••
consolidated retained earlin	153	3,80	0
Non-current asset			4,000



xample (continued)		
If the transfer was from S to H – Full journal		
Consolidated financial statements	Dr	Cr
Income statement (profit on disposal)	3,000	
Income statement (depreciation)	1,000	
Non-current asset		4,000
NCI in the statement of financial position	600	
NCI in the statement of comprehensive income		600
Being the NCI share of the profit adjustment (20%	× 3,000)	
Composite journal if just preparing the consolidated statement of financial position	Dr	Cr
Consolidated retained earnings	3,400	
Non-current asset		4,000
NCI in the statement of financial position	600	

3 POSSIBLE COMPLICATIONS: AFTER CONSOLIDATION

Section overview

- Accounting for goodwill
- Negative goodwill and bargain purchases

3.1 Accounting for goodwill

Goodwill is carried as an asset. It is not depreciated or amortised but instead it is subject to an annual impairment review.

This means that the recoverable amount of goodwill must be estimated on an annual basis. If the recoverable amount is less than the carrying amount, the goodwill is written down to the recoverable amount.

The amount of the impairment is included as a charge against profit in the consolidated statement of comprehensive income.



Example: Goodwill impairment

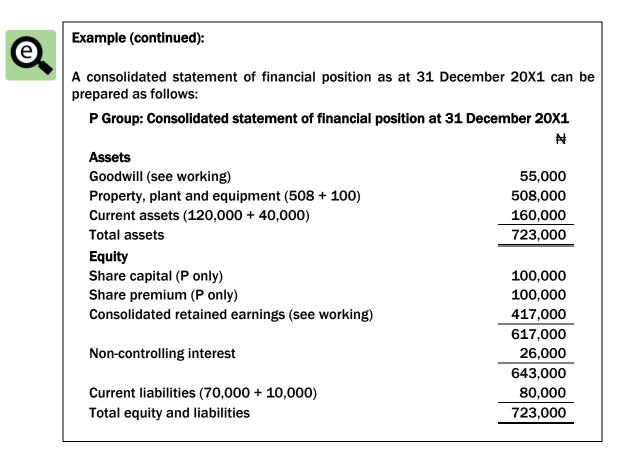
P acquired 80% of S when the retained earnings of S were ₩20,000.

The values for assets and liabilities in the statement of financial position for S represent fair values.

A review of goodwill at 31 December 20X1 found that goodwill had been impaired, and was now valued at \$55,000.

The statements of financial position of a parent company P and its subsidiary S at 31 December 20X1 are as follows:

	P (Ħ)	S (Ħ)
Non-current assets:		
Property, plant and equipment	408,000	100,000
Investment in S	142,000	-
Current assets	120,000	40,000
	670,000	140,000
Equity		
Share capital	100,000	20,000
Share premium	100,000	50,000
Retained earnings	400,000	60,000
	600,000	130,000
Bank Ioan	70,000	10,000
	670,000	140,000





Example (continued):

Net assets summary of S

	At da	te of	
	Consolidation	Acquisition	Post acq ⁿ
Share capital	20,000	20,000	
Share premium	50,000	50,000	
Retained earnings	60,000	20,000	40,000
Net assets	130,000	90,000	
Non-controlling intere	est		Ħ
NCI's share of net ass $(20\% \times 90,000)$	ets at the date of acq	uisition	18,000
NCI's share of the pos S (20% of 40,000 (se	-	earnings of	8,000
NCI's share of net ass	sets at the date of con	solidation	26,000
Goodwill			N
Cost of investment			142,000
Non-controlling intere	st at acquisition (20%	5 × 90,000)	18,000
			160,000
Net assets at acquisit	ion (see above)		(90,000)
			70,000
Write down of goodw	ill (balancing figure)		(15,000)
Recoverable amount	of goodwill (given)	_	55,000
Consolidated retained	d profits:		N
All of P's retained ear	-		400,000
P's share of the post-	-	arnings of S	,
(80% of 40,000 (see		-	32,000
Write down of goodw	ill (see goodwill worki	ng)	(15,000)
			417,000

2.2 Negative goodwill and bargain purchases

A bargain purchase is a business combination in which the calculation of goodwill leads to a negative figure.

When this happens the acquirer must then review the procedures used to measure the amounts recognised at the acquisition date for all of the following:

- The identifiable assets acquired and liabilities assumed;
- The non-controlling interest in the acquiree (if any); and
- □ The consideration transferred.

Any amount remaining after applying the above requirements is recognised as a gain in profit or loss on the acquisition date.

This means that in most cases when a bargain purchase occurs, the 'negative goodwill' should be added to the consolidated profit for the group for the year.

4 CHAPTER REVIEW

Chapter review

Before moving on to the next chapter check that you now know how to:

- Account for acquisition related costs
- Incorporate straightforward fair value adjustments into a consolidation
- Account for a mid-year acquisition of a subsidiary
- Eliminate unrealised profit on transactions between a parent company and its subsidiary
- Account for goodwill
- Account for gain on a bargain purchase (negative goodwill)

SOLUTIONS TO PRACTICE QUESTIONS

Solu	tion			
I	P Group: Consolidated staten	nent of financial pos	sition at 31 Deco	ember 20X1
1	Assets			N
(Goodwill (W3)			720,000
(Other non-current assets (40	0 + (200 + 250 - 25	5))	825,000
(Other assets (500 + 350)			850,000
-	Total assets			2,395,000
I	Equity			
	Share capital (P only)			100,000
(Consolidated retained earnin	gs (W4)		1,757,500
				1,857,500
	Non-controlling interest (W2)			187,500
	0	、 、		2,045,000
	Current liabilities (200 + 150)		350,000
	Total equity and liabilities			2,395,000
Norl	kings:			
V1	Net assets summary			
		At date of	At date of	f
		consolidation	acquisitio	n Post acq ^r
	Share capital	100,000	100,000)
	Retained earnings			
	Given in the question	300,000	50,000)
	Extra depreciation on fair value adjustment (250 × 1			
	years/10 years)	(25,000)	-	-
		275,000	50,000	225,000
	Fair value reserve	250,000	250,000)
	Net assets	625,000	400,000)
N2	Non-controlling interest			*
	NCI's share of net assets at $(30\% \times 400)$	the date of acquisit	ion	120,000
	NCI's share of the post-acqu (30% of 225 (W1))	uisition retained ear	nings of S	67,500
	NCI's share of net assets at	the date of concolic	Lation	187,500

Solu	tion (continued)	
W3	Goodwill	#
	Cost of investment	1,000,000
	Non-controlling interest at acquisition (W2)	120,000
		1,120,000
	Net assets at acquisition (see above)	(400,000)
		720,000
V4	Consolidated retained profits:	Ħ
	All of P's retained earnings	1,600,000
	P's share of the post-acquisition retained earnings of S	
	(70% of 225 (W1))	157,500
		1,757,500

ition	
P Group: Consolidated statement of financial position at	31 December 20X1
Assets	H
Goodwill (W3)	1,199,000
Other non-current assets (650 + (826 + 500) Current assets:	1,976,000
Inventory (100 + 80 – 2.5)	177,500
Other current assets (374 + 320)	694,000
Total assets	4,046,500
Equity	
Share capital (P only)	100,000
Consolidated retained earnings (W4)	2,746,500
	2,846,500
Non-controlling interest (W2)	640,000
	3,486,500
Current liabilities (440 + 120)	560,000
Total equity and liabilities	4,046,500

Solu	tion (continued)					
Worl	kings:					
%1	Net assets summary					
		At date of	At da		-	
		consolidation	acquis		Post acq ⁿ	
	Share capital	50,000 1,050,000		,000,	265.000	
	Retained earnings Fair value reserve	500,000		,000 ,000	265,000	
	Net assets	1,600,000	1,335			
	NCI 855015	1,000,000	I,335	,000		
W2	Non-controlling interest			Ħ		
	NCI's share of net assets	at the date of acquisition	า			
	(40% $ imes$ 1,335 (W1))			534	,000	
	NCI's share of the post-ac (40% of 265 (W1))	equisition retained earnir	igs of S	106	,000	
	NCI's share of net assets	at the date of consolidat	ion	640	,000	
WЗ	Goodwill			Ħ		
	Cost of investment			2,000	,000	
	Non-controlling interest a	t acquisition (W2)		534	,000	
				2,534	,000	
	Net assets at acquisition	(see above)		(1,335	,000)	
				1,199	,000	
W4	Consolidated retained pro	ofits:		Ħ		
	All of P's retained earning	şs		2,590	,000	
	Unrealised profit (W5)			(2	,500)	
	P's share of the post-acqu	uisition retained earning	s of S	450	000	
	(60% of 265 (W1))				,000	
				2,746	,500	
W5	Unrealised profit			Ħ		
	Inventory held at sale val	ue		12,	,500	
	Cost (100/125)			(10	,000)	
	Mark-up (25% of cost or 2	25/125 of sale price)		2,	,500	
	Double entry in consolida	ted financial statements	i	Dr	Cr	
	Consolidated retained ea	rnings		2,500		
	Closing inventory – stater	ment of financial position	า		2,500	
	NCI not affected as sale i	s from P to S				

Skills level Financial reporting



Consolidated accounts: Statements of comprehensive income

Contents

- 1 Consolidated statement of profit or loss and other comprehensive income
- 2 Complications
- 3 Chapter review

INTRODUCTION

Purpose

In this element the accounting from the foundation level is taken up a level into financial accounting in the context of more complex events and transactions with a greater emphasis on compliance with regulations including International Accounting Standards and generally accepted accounting practices in the private sectors.

Students will be expected to demonstrate an understanding of and competence in financial statement analysis and basic analysis of choices in accounting treatments.

Competencies

4	Preparing consolidated financial statements of simple group (parent and one subsidiary)
4(c)	Identify from data provided a subsidiary or associate in accordance with the international financial reporting framework and local law.
4(d)	Evaluate and calculate the figures to be included in consolidated financial statements in respect of an acquisition involving one subsidiary and associate, continuing ownership but not including disposals of subsidiary and associate.
4(e)	Draft, compile and present the consolidated financial statements or extracts of them in accordance with selected accounting policies and the requirements of IFRS.

Exam context

This chapter explains the consolidation of statements of comprehensive income.

By the end of this chapter you will be able to:

- Prepare a basic consolidated statement of profit or loss
- Eliminate the results of inter-company transactions on consolidation
- Eliminate unrealised profit on consolidation
- Incorporate straightforward fair value adjustments during consolidation

1 **CONSOLIDATED STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME**

Section overview

- Consolidated income statement: the basic rules
- Pre- and post-acquisition profits

1.1 Consolidated income statement: the basic rules

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

A consolidated statement of profit or loss brings together the sales revenue, income and expenses of the parent and the sales revenue, income and expenses of its subsidiaries.

All items of income and expense in the consolidated statement of profit or loss are a straight cross cast of equivalent items in the individual financial statements of the members of the group.

Non-controlling interest

Consolidated financial statements must also disclose the profit or loss for the period and the total comprehensive income for the period attributable to:

- Owners of the parent company; and
- Non-controlling interests.

The figure for NCI is simply their share of the subsidiary's profit for the year that has been included in the consolidated statement of profit or loss.

The amounts attributable to the owners of the parent and the non-controlling interest are shown as a metric (small table) immediately below the statement of profit or loss and other comprehensive income.



Illustration:		
Total cor	nprehensive income attributable to:	N
Owners	s of the parent (balancing figure)	X
Non-co	ntrolling interests (x% of y)	X
		X
Where:	x% is the NCI ownership interest	
	y is the subsidiary's profit for the year that has in the consolidated statement of profit	



Example:

Entity P bought 80% of S several years ago.

The income statements for the year to 31 December 20X1 are as follows.

	Р	S
	Ħ	₩
Revenue	500,000	250,000
Cost of sales	(200,000)	(80,000)
Gross profit	300,000	170,000
Other income	25,000	6,000
Distribution costs	(70,000)	(60,000)
Administrative expenses	(90,000)	(50,000)
Other expenses	(30,000)	(18,000)
Finance costs	(15,000)	(8,000)
Profit before tax	120,000	40,000
Income tax expense	(45,000)	(16,000)
Profit for the period	75,000	24,000

A consolidated statement of profit or loss can be prepared as follows:

	Working		
	Р	S	Consolidated
	₩	₩	₩
Revenue	500,000	250,000	750,000
Cost of sales	(200,000)	(80,000)	(280,000)
Gross profit	300,000	170,000	470,000
Other income	25,000	6,000	31,000
Distribution costs	(70,000)	(60,000)	(130,000)
Administrative expenses	(90,000)	(50,000)	(140,000)
Other expenses	(30,000)	(18,000)	(48,000)
Finance costs	(15,000)	(8,000)	(23,000)
Profit before tax	120,000	40,000	160,000
Income tax expense	(45,000)	(16,000)	(61,000)
Profit for the period	75,000	24,000	99,000

94,200
4,800
99,000

~

1.2 Pre- and post-acquisition profits

Only post acquisition profits are consolidated. 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.



Example:

Entity P acquired 80% of S on 1 October 20X1.

The acquisition date was 1 October. This means that only $3/_{12}$ of the subsidiary's profit for the year is post-acquisition profit.

n

The income statements for the year to 31 December 20X1 are as follows:

	Р	S
	Ħ	N
Revenue	400,000	260,000
Cost of sales	(200,000)	(60,000)
Gross profit	200,000	200,000
Other income	20,000	-
Distribution costs	(50,000)	(30,000)
Administrative expenses	(90,000)	(95,000)
Profit before tax	80,000	75,000
Income tax expense	(30,000)	(15,000)
Profit for the period	50,000	60,000

A consolidated statement of profit or loss can be prepared as follows:

	Working		
	Р	S (³/12)	Consolidated
	₩	₩	N
Revenue	400,000	65,000	465,000
Cost of sales	(200,000)	(15,000)	(215,000)
Gross profit	200,000	50,000	250,000
Other income	20,000	-	20,000
Distribution costs	(50,000)	(7,500)	(57,500)
Administrative expenses	(90,000)	(23,750)	(113,750)
Profit before tax	80,000	18,750	98,750
Income tax expense	(30,000)	(3,750)	(33,750)
Profit for the period	50,000	15,000	65,000
Total comprehensive inc	ome attributable	to:	
- -			~~~~

otal comprehensive income attributable to:	
Owners of the parent (balancing figure)	62,000
Non-controlling interests (20% of 15,000)	3,000
	65,000

2 COMPLICATIONS

Section overview

- Inter-company items
- Fair value adjustments
- Impairment of goodwill and consolidated profit

2.1 Inter-company items

Consolidated income statements are prepared by combining the information given in the income statements of the individual companies.

It is usually necessary to make adjustments to eliminate the results of intercompany trading. This includes adjustments to cancel out inter-company trading balances and unrealised profit.

Inter-company trading

Inter-company trading will be included in revenue of one group company and purchases of another. These are cancelled on consolidation.



Illustration:

	Debit	Credit	
Revenue	Х		
Cost of sales (actually purchases within cost of sales)		Х	



Example:

P acquired 80% of S 3 years ago.

During the year P sold goods to S for ₩50,000.

By the year-end S had sold all of the goods bought from P to customers.

Extracts of the income statements for the year to 31 December 20X1 are as follows.

Р	S
Ħ	N
800,000	420,000
(300,000)	(220,000
500,000	200,000
	₩ 800,000 (300,000)

The adjustment in respect of inter-company trading can be shown as follows:

		Worki	ings		
	Р	S	Dr	Cr	Consol.
	₦(000)	₩(000)	₩(000)	₦(000)	₩(000)
Revenue	800	420	(50)		1,170
Cost of sales	(300)	(220)		50	(470)
Gross profit	500	200	(50)	50	700

The adjustment has no effect on gross profit.

Unrealised profits on trading

If any items sold by one group company to another are included in inventory (i.e. have not been sold on outside the group by the year end), their value must be adjusted to lower of cost and net realisable value from the group viewpoint (as for the consolidated statement of financial position).

This is an inventory valuation adjustment made in the consolidated financial statements.

Illustration:		
	Debit	Credit
Closing inventory – Statement of profit or loss	Х	
Closing inventory – Statement of financial position		Х

The adjustment in the statement of profit or loss reduces gross profit and hence profit for the year. The NCI share in this reduced figure and the balance is added to retained earnings. Thus, the adjustment is shared between both ownership interests.



Example:

P acquired 80% of S 3 years ago.

During the year P sold goods to S for \$50,000 at a mark-up of 25% on cost. This means that the cost of the goods to P was $\$40,000 (\frac{100}{125} \times \$50,000)$ and P made a profit of $\$10,000 000 (\frac{25}{125} \times \$50,000)$ on the sale to S.

At the year-end S still had a third of the goods in inventory.

This means that S still held goods which it had purchased from P for 15,000 at a profit to P of 3,000. The 3,000 is unrealised by the group as at the year-end.

Extracts of the income statements for the year to 31 December 20X1 are as follows.

	P (Ħ)	S (Ħ)
Revenue	800,000	420,000
Cost of sales	(300,000)	(220,000
Gross profit	500,000	200,000

The adjustments in respect of inter-company trading¹ and unrealised profit² can be shown as follows:

	(Worki	ings		
	Р	S	Dr	Cr	Consol.
	₦(000)	₦(000)	₩(000)	₦(000)	₩(000)
Revenue	800	420	(50) ¹		1,170
Cost of sales	(300)	(220)	(3) ²	50 <u>1</u>	(473)
Gross profit	500	200	(53)	50	697

The adjustment in respect of inter-company trading¹ has no effect on gross profit.

The adjustment in respect of and unrealised profit² reduces gross profit.

If the sale is from S to P the unrealised profit adjustment must be shared with the NCI.



Example:

P acquired 80% of S 3 years ago.

During the year S sold goods to P for \$50,000 at a mark-up of 25% on cost. This means that the cost of the goods to S was $\$40,000 (\frac{100}{125} \times \$50,000)$ and S made a profit of $\$10,000 000 (\frac{25}{125} \times \$50,000)$ on the sale to S.

At the year-end P still had a third of the goods in inventory.

This means that P still held goods which it had purchased from S for \$15,000 at a profit to S of \$3,000. The \$3,000 is unrealised by the group as at the year-end. The NCI's share of the unrealised profit adjustment is $\$600 (20\% \times \$3,000)$

Extracts of the income statements for the year to 31 December 20X1 are as follows.

	P (Ħ)	S (Ħ)
Revenue	800,000	420,000
Cost of sales	(300,000)	(220,000
Gross profit	500,000	200,000
Expenses	(173,000)	(123,000)
Profit before tax	327,000	77,000

The adjustments in respect of inter-company trading¹ and unrealised profit² can be shown as follows:

		Worki	ings		
	Р	S	Dr	Cr	Consol.
	₦(000)	₦(000)	₩(000)	N (000)	₦(000)
Revenue	800	420	(50) ¹		1,170
Cost of sales	(300)	(220)	(3) ²	501	(473)
Gross profit	500	200	(53)	50	697
Expenses	(173)	(123)			(296)
Profit	427	77	(53)	50	401

The adjustment in respect of and unrealised profit² reduces gross profit and is shared with the NCI.

Total comprehensive income attributable to:	₩(000)
Owners of the parent (balancing figure)	386.2
Non-controlling interests (20% $ imes$ 77,000) $-$ 600)	14.8
	401.0

Inter-company management fees and interest

All other inter-company amounts must also be cancelled.

Where a group company charges another group company, management fees/interest, there is no external group income or external group expense and they are cancelled one against the other like inter-company sales and cost of sales.



Illustration:			
	Debit	Credit	
Income (management fees)	Х		
Expense (management charges)		Х	



Example:

P acquired 80% of S 3 years ago.

Other income in P's statement of profit or loss includes an inter-company management charge of \$5,000 to S. S has recognised this in administrative expenses.

Extracts of the income statements for the year to 31 December 20X1 are as follows:

	Р	S
	Ħ	Ħ
Revenue	800,000	420,000
Cost of sales	(300,000)	(220,000)
Gross profit	500,000	200,000
Administrative expenses	(100,000)	(90,000)
Distribution costs	(85,000)	(75,000)
Other income	12,000	2,000
Profit before tax	327,000	37,000



Example continued

The adjustments in respect of inter-company management charge can be shown as follows:

	Workings				
	Р	S	Dr	Cr	Consol.
	₦(000)	₦(000)	₦(000)	₦(000)	₩(000)
Revenue	800	420			1,220
Cost of sales	(300)	(220)			(520)
Gross profit	500	200			700
Administrative expenses	(100)	(90)		5	(185)
Distribution costs	(85)	(75)			(160)
Other income	12	2	(5)		9
Profit before tax	327	37			364

The adjustment in respect of inter-company management charge has no effect on gross profit.

Inter-company dividends

The parent may have accounted for dividend income from a subsidiary. This is cancelled on consolidation.

Dividends received from a subsidiary are ignored in the consolidation of the statement of profit or loss because the profit out of which they are paid has already been consolidated.

2.2 Fair value adjustments

Depreciation is charged on the carrying amount of assets.

If a depreciable asset is revalued on consolidation the depreciation stream that relates to that asset will also need to be revalued.

This adjustment is carried out in the financial statements of the subsidiary. It will affect the subsidiary's profit after tax figure and therefore will affect the NCI.



Example:

P acquired 80% of S 3 years ago.

At the date of acquisition S had a depreciable asset with a fair value of 120,000 in excess of its book value. This asset had a useful life of 10 years at the date of acquisition.

This means that the group has to recognise extra depreciation of \$36,000 ($^{\aleph_{120,000}}/_{10\ years}\times 3$ years) by the end of this period. One year's worth of this (\$12,000) is recognised in S's statement of profit or loss prior to consolidation this year.

Extracts of the income statements for the year to 31 December 20X1 are as follows:

Р	S
Ħ	N
800,000	420,000
(300,000)	(220,000)
500,000	200,000
(173,000)	(163,000)
327,000	37,000
	N 800,000 (300,000) 500,000 (173,000)

The adjustments in respect of extra depreciation can be shown as follows:

	Workings				
	Р	S	Dr	Cr	Consol.
	₦(000)	N (000)	N (000)	N (000)	₦(000)
Revenue	800	420			1,220
Cost of sales	(300)	(220)			(520)
Gross profit	500	200			700
Expenses	(173)	(163)			(249)
Adjustment		(12)			(348)
Profit before tax	327	25			352

The adjustment in respect of the extra depreciation reduces the profit of S that is consolidated.

2.3 Impairment of goodwill and consolidated profit

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 income statement.

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 the consolidated income statement (normally in administrative expenses).

Example:

P acquired 80% of S 3 years ago.

Goodwill on acquisition was ₩200,000.

The annual impairment test on goodwill has shown it to have a recoverable amount of only 175,000. Thus a write down of 25,000 is required.

Extracts of the income statements for the year to 31 December 20X1 are as follows.

	Р	S
	₩	₩
Revenue	800,000	420,000
Cost of sales	(300,000)	(220,000)
Gross profit	500,000	200,000
Expenses	(173,000)	(163,000)
Profit before tax	327,000	37,000

The adjustment in respect of inter-company trading¹ and unrealised profit² can be shown as follows:

	Workings				
	P S Dr Cr				Consol.
	N (000)	₩(000)	₦(000)	N (000)	₦(000)
Revenue	800	420			1,220
Cost of sales	(300)	(220)			(520)
Gross profit	500	200			700
Expenses	(173)	(163)	(25)		(361)
Profit before tax	327	37	(25)		339

The adjustment in respect of the goodwill reduces the consolidated profit. (There is no impact on NCI).



Practice question

P acquired 80% of S 3 years ago. Goodwill on acquisition was 80,000. The recoverable amount of goodwill at the year-end was estimated to be 65,000. This was the first time that the recoverable amount of goodwill had fallen below the amount at initial recognition.

S sells goods to P. The total sales in the year were 100,000. At the year-end P retains inventory from S which had cost S 30,000 but was in P's books at 35,000.

The distribution costs of S include depreciation of an asset which had been subject to a fair value increase of 100,000 on acquisition. This asset is being written off on a straight line basis over 10 years.

The income statements for the year to 31 December 20X1 are as follows:

	Р	S
	N (000)	₦(000)
Revenue	1,000	800
Cost of sales	(400)	(250)
Gross profit	600	550
Distribution costs	(120)	(75)
Administrative expenses	(80)	(20)
	400	455
Dividend from S	80	-
Finance cost	(25)	(15)
Profit before tax	455	440
Тах	(45)	(40)
Profit for the period	410	400

Prepare the consolidated income statement for the year ended 31 December.

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3 CHAPTER REVIEW

Chapter review

Before moving on to the next chapter check that you are able to:

- Prepare a basic consolidated statement of profit or loss
- Eliminate the results of inter-company transactions on consolidation
- Eliminate unrealised profit on consolidation
- Incorporate straightforward fair value adjustments during consolidation

SOLUTIONS TO PRACTICE QUESTIONS

Solutions

Consolidated statement of profit or loss for the year ended 31 December.

		Work	kings		
	Р	S	Dr	Cr	Consol.
	₦(000)	₦(000)	N (000)	N (000)	₩(000)
Revenue	1,000	800	(100)		1,700
Cost of sales	(400)	(250)	³ (5)	100	(555)
Gross profit	600	550	(105)	100	1,145
Distribution costs	(120)	(75)			
Fair value adjustment		<u>1</u> (10)			
	(120)	(85)			(205)
Administrative expenses	(80)	(20)	² (15)		(115)
	400	445			
Dividend from S	80	-	(80)		
Finance cost	(25)	(15)			(40)
Profit before tax	455	430			785
Tax	(45)	(40)			(85)
Profit for the period	410	390	(200)	100	700
Total comprehensive in	come attribu	table to:			₦(000)
Owners of the parent	(balancing fig	gure)			633
Non-controlling interes	sts (20% of 3	890,000) -	(20% of ³ 5,0	000)	77
					700
Notes:					
1: Extra depreciation on	fair value ac	ljustment (100/10 years)		
2: Goodwill impairment					
3: Unrealised profit					

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Skills level Financial reporting



Associates and joint ventures

Contents

- 1 IFRS 11: Joint arrangements
- 2 IAS 28: Investments in associates and joint ventures
- 3 Chapter review

Purpose

In this element the accounting from the foundation level is taken up a level into financial accounting in the context of more complex events and transactions with a greater emphasis on compliance with regulations including International Accounting Standards and generally accepted accounting practices in the private sectors.

Students will be expected to demonstrate an understanding of and competence in financial statement analysis and basic analysis of choices in accounting treatments.

Competencies

4	Preparing consolidated financial statements of simple group (parent and one subsidiary)
4(c)	Identify from data provided a subsidiary or associate in accordance with the international financial reporting framework and local law.
4(d)	Evaluate and calculate the figures to be included in consolidated financial statements in respect of an acquisition involving one subsidiary and associate, continuing ownership but not including disposals of subsidiary and associate.
4(e)	Draft, compile and present the consolidated financial statements or extracts of them in accordance with selected accounting policies and the requirements of IFRS.

IAS 28 is an examinable document.

Exam context

This chapter explains the accounting rules for associates.

By the end of this chapter you will be able to:

- Define an associate
- Explain equity accounting
- Measure investment in an associate for inclusion in the statement of financial position using equity accounting
- Measure share of profit of an associate for inclusion in the statement of comprehensive income
- Account for unrealised profit on transactions between an associate and its parent or a member of the parent's group

1 IFRS **11**: JOINT ARRANGEMENTS

Section overview

- Introduction
- Joint arrangements
- Types of joint arrangements

1.1 Introduction

A controlling interest in an investee results in an investment (a subsidiary) which is consolidated.

An interest in the equity shares of another company that gives no influence is accounted for as follows:

- □ The shares are shown in the statement of financial position as long-term assets (an investment) and valued in accordance with IAS 39 (IFRS 9); and
- Any dividends received for the shares are included in profit or loss for the year as other income.

Other investments might result in joint control or significant influence. The rules for accounting for these are given in:

□ IFRS 11 Joint Arrangements: and

□ IAS 28 Investments in Associates and Joint ventures.

This session introduces the rules on accounting for joint arrangements.

IFRS 11 is not an examinable document at this level. It is discussed briefly to provide an introduction to IAS 28.

1.2 Joint arrangements



Definition

A **joint arrangement** is an arrangement of which two or more parties have joint control.

Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require the unanimous consent of the parties sharing control.

1.3 Types of joint arrangements

There are two types of joint arrangement. A joint arrangement is either a joint operation or a joint venture.

- A joint operation is a joint arrangement whereby the parties that have joint control of the arrangement have rights to the assets, and obligations for the liabilities, relating to the arrangement. Those parties are called joint operators.
- A **joint venture** is a joint arrangement where the parties that have joint control of the arrangement have rights to the net assets of the arrangement. Those parties are called joint venturers.

A joint venturer must recognise its interest in a joint venture as an investment and account for it using the equity method in accordance with **IAS 28** *Investments in Associates and Joint Ventures* unless the entity is exempted from applying the equity method as specified in that standard.

2 IAS 28: INVESTMENTS IN ASSOCIATES AND JOINT VENTURES

Section overview

- Associates and joint ventures
- Accounting for associates and joint ventures
- Trading with an associate or joint venture

2.1 Associates and joint ventures



Definition

An **associate** is an entity over which the investor has significant influence.

Significant influence

Significant influence is the power to participate in the financial and operating policy decisions of the investee but is not control or joint control of those policies.

- 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; or
- The provision of essential technical information by one entity to the other.

2.2 Accounting for associates and joint ventures

IAS 28 states that associates and joint ventures must be accounted for using the equity method.

The **equity method** is defined as a method of accounting whereby the investment is initially recognised at cost and adjusted thereafter for the post-acquisition change in the investor's share of the investee's net assets.

The investor's profit or loss includes its share of the investee's profit or loss and the investor's other comprehensive income includes its share of the investee's other comprehensive income.

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 measured at:

Q

stration:	
	₩
Cost of investment	Х
Plus/(Minus): Parent's share of profits (losses) of the associate (or JV) since acquisition	х
Plus/(Minus): Parent's share of OCI of the associate (or JV) since acquisition	х
Minus any impairment of the investment recognised	(X)
Goodwill	Х

There is no goodwill-recognised for an investment in an associate.

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 (or JV), (**minus** any impairment in the value of the investment since acquisition). This completes the other side of the entry when the investment is remeasured.

Similarly any other reserve of the reporting entity (or any other consolidated reserves when consolidated accounts are prepared) should include the investor's share of the post-acquisition movement in the reserve of the associate (or JV).

Statement of profit or loss and other comprehensive income

In the statement of profit or loss and other comprehensive income, there should be separate lines for:

- Share of profits of associate (or JV)' in the profit and loss section of the statement
- □ 'Share of other comprehensive income of associate (or JV)' in the 'other comprehensive income' section of the statement.

	Example: Equity method				
e	Entity P acquired 30% of the equity shares in Entity A during Year 1 at a cost on ₩147,000 when the fair value of the net assets of Entity A was ₩350,000.				
	Entity P is able to exercise significant influence over Entity A.				
	At 31 December Year 5, the net assets of Entity A were ₩600,0	000.			
	In the year to 31 December Year 5, the profits of Entity A after	tax were ₦80,000			
	The figures that must be included to account for the associan statements of Entity P for the year to 31 December Year 5 are				
	Statement of financial position:				
	The investment in the associate is as follows:				
		N			
	Investment at cost	147,000			
	Investor's share of post-acquisition profits of A (W1)	75,000			
	Minus: Accumulated impairment in the investment	(18,000)			
	Investment in the associate	204,000			
	W1 Retained post-acquisition profits of Entity A	Ħ			
	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 Entity P's share of A	250,000 30%			
	Entity P's share of A's profits since the date of acquisition	₩75,000			
	Note: ₦75,000 will be included in the accumulated profits o	f Entity P			
	The journal to achieve the re-measurement is				
	Dr Cost ₦75,000 and Cr Accumulated profits ₦75,	000			
	· · · · · · · · · · · · · · · · · · ·				
	Statement of profit or loss				
	The share of the associate's after tay profit for the year is sh	own on a conarat			

The share of the associate's after-tax profit for the year is shown on a separate line as:

Share of profits of associate (30% × ₩80,000): ₩24,000.

Г



Practice question

Entity P acquired 40% of the equity shares in Entity A during Year 1 at a cost of \$128,000 when the fair value of the net assets of Entity A was \$250,000.

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Since that time, the investment in the associate has been impaired by \$8,000.

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.

On 31 December Year 5, the net assets of Entity A were ₩400,000.

In the year to 31 December Year 5, the profits of Entity A after tax were \$50,000.

What figures would be included for the associate in the financial statements of Entity P for the year to 31 December Year 5?

2.3 Trading with an associate or joint venture

There might be trading between a parent and an associate (or JV). If in addition to the associate (or JV) the parent holds investments in subsidiaries there might also be trading between other members of the group and the associate (or JV).

In such cases there might be:

- Inter-company balances (amounts owed between the parent (or group) and the associate (or JV) in either direction); and
- Unrealised profit on inter-company transactions.

The accounting rules for dealing with these items for associate (or JVs) are different from the rules for subsidiaries.

Inter-company balances

Inter-company balances between the members of a group (parent and subsidiaries) are cancelled out on consolidation.

Inter-company balances between the members of a group (parent and subsidiaries) and associates (or JVs) *are not cancelled out* on consolidation. An associate (or JV) is not a member of the group but is rather an investment made by the group. This means that it is entirely appropriate that consolidated financial statements show amounts owed by the external party as an asset and amount owed to the external party as a liability.

This is also the case if a parent has an associate (or JV) and no subsidiaries. The parent must equity account for the investment. Once again, it is entirely appropriate that consolidated financial statements show amounts owed by the external party as an asset and amount owed to the external party as a liability.

Unrealised inter-group profit

Unrealised inter-company (intra-group) profit between a parent and a member of a group must be eliminated in full on consolidation.

For unrealised profit arising on trade between a parent and associate (or JV) **only the parent's share** of the unrealised profit is eliminated.

IAS 28 does not specify the double entry to achieve this.

The following are often used in practice

Parent sells to associate (or JV):

- The unrealised profit is held in inventory of the associate (or JV). The investment in the associate (or JV) should be reduced by the parent's share of the unrealised profit.
- The other side of the entry increases cost of sales



Illustration: Unrealised profit double entry when parent sells to associate			
	Debit	Credit	
Cost of sales	Х		
Investment in associate		Х	

Associate (or JV) sells to parent:

- □ The unrealised profit is held in inventory of the parent and this should be reduced in value by the parent's share of the unrealised profit.
- The other side of the entry reduces the parent's share of the profit of the associate (or JV).



Illustration: Unrealised profit double entry when associate sells to parent		
	Debit	Credit
Share of profit of associate	Х	
Inventory		Х

In both cases, there should also be a reduction in the post-acquisition profits of the associate (or JV), 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: Unrealised profit

Entity P acquired 40% of the equity shares of Entity A several years ago. The cost of the investment was \$205,000.

As at 31 December Year 6 Entity A had made profits of ₩275,000 since the date of acquisition.

In the year to 31 December Year 6, Entity P sold goods to Entity A at a sales price of ₩200,000 at a mark-up of 100% on cost.

Goods which had cost Entity A 30,000 were still held as inventory by Entity A at the year-end.

The necessary adjustments for unrealised profit, and the double entries are as follows:

Unrealised profit adjustment		₩
Inventory sold by P to A	-	200,000
Profit on the sale (× 100%/200%)	-	100,000
Unrealised profit (× ₩30,000/₩200,000)	-	15,000
Entity P's share (40%)		6,000
Double entries:	Dr(₩)	Cr(₦)
Investment in associate	110,000	
Accumulated profits		110,000
Being: Share of post-acquisition profits (40%	% of ₦275,000)	
	Dr(₦)	Cr(₦)
Cost of sales (hence accumulated profit)	6,000	
Investment in associate		6,000
Being: Elimination of share of unrealised pro	ofit (see above)	
Investment in associate (see above for adju	stments)	Ħ
Cost of the investment	205,000	
Entity P's share of post-acquisition profits of	f Entity A	110,000
Minus: Entity P's share of unrealised profit in	n inventory	(6,000)
	-	309,000



Practice question

Entity P acquired 30% of the equity shares of Entity A several years ago at a cost of \$275,000.

2

As at 31 December Year 6 Entity A had made profits of ₩380,000 since the date of acquisition.

In the year to 31 December Year 6, the reported profits after tax of Entity A were \$100,000.

In the year to 31 December Year 6, Entity P sold goods to Entity A for \$180,000 at a mark-up of 20% on cost.

Goods which had cost Entity A \$60,000 were still held as inventory by Entity A at the year-end.

- a) Calculate the unrealised profit adjustment and state the double entry.
- b) Calculate the investment in associate balance that would be included in Entity P's statement of fiancial position as at 31 December Year 6.
- c) Calculate the amount that would appear as a share of profit of associate in Entity P's statement of profit or loss for the year ending 31 December Year 6.

3 CHAPTER REVIEW

Chapter review

Before moving on to the next chapter check that you are able to:

- Define an associate
- Explain equity accounting
- Measure investment in an associate for inclusion in the statement of financial position using equity accounting
- Measure share of profit of an associate for inclusion in the statement of comprehensive income
- Account unrealised profit on transactions between an associate and its parent or a member of the parent's group

SOLUTIONS TO PRACTICE QUESTIONS

Solution	
The figures that must be included to account for the asso statements of Entity P for the year to 31 December Year 5 are as	
Statement of financial position:	
The investment in the associate is as follows:	
	Ħ
Investment at cost	128,000
Investor's share of post-acquisition profits of A (W1)	60,000
Minus: Accumulated impairment in the investment	(8,000)
Investment in the associate	180,000
W1 Retained post-acquisition profits of Entity A	Ħ
Net assets of the associate at 31 December Year 5	400,000
Net assets of Entity A at date of acquisition of shares	(250,000)
Retained post-acquisition profits of Entity A	150,000
Entity P's share of A	40%
Entity P's share of A's profits since the date of acquisition	₩60,000
Statement of profit or loss	
The share of the associate's after-tax profit for the year is shown o	on a separate line as
Share of profits of associate $(40\% \times \$50,000)$: $\$20,000$.	

Solu	ution			
a)	Unrealised profit adjustment		₩	
	Inventory sold by P to A		180,000	
	Profit on the sale (\times 20%/120%)		30,000	
	Unrealised profit (× ₦60,000/₦180,000)		10,000	
	Entity P's share (30%)		3,000	
	Double entry	Dr(₩)	Cr(ℕ)	
	Cost of sales (hence accumulated profit) Investment in associate	3,000	3,000	
	Being: Elimination of share of unrealised profit (se	e above)		
b)	Investment in associate (see above for adjustmen	ts)	Ħ	
	Cost of the investment		275,000	
	Entity P's share of post-acquisition profits of Entity	A (30% of		
	₩380,000)		114,000	
	Minus: Entity P's share of unrealised profit in inver	ntory	(3,000)	
			386,000	
c)	Statement of profit or loss			
	The share of the associate's after-tax profit for separate line as:	the year is s	shown on a	
	Share of profits of associate (30% × ₩100,000): ₩	30,000.		

Skills level Financial reporting



Analysis and interpretation of financial statements

Contents

- 1 Purpose of financial ratio analysis
- 2 Return on capital, profitability and asset turnover
- 3 Working capital efficiency ratios
- 4 Liquidity ratios
- 5 Debt ratios
- 6 Investor ratios
- 7 Limitations of interpretation techniques
- 8 Chapter review

Purpose

In this element the accounting from the foundation level is taken up a level into financial accounting in the context of more complex events and transactions with a greater emphasis on compliance with regulations including International Accounting Standards and generally accepted accounting practices in the private sectors.

Students will be expected to demonstrate an understanding of and competence in financial statement analysis and basic analysis of choices in accounting treatments.

Competencies

3 Financial statement analysis and evaluation

- **3(a)** Calculate basic financial ratios and assess the financial results and position of a single entity.
- **3(b)** Evaluate, judge and advise on the appropriateness of chosen accounting policies with regard to compliance with international reporting standards.

Exam context

This chapter explains the purpose of interpretation and the use of common financial ratios.

By the end of this chapter you will be able to:

- Calculate and interpret return on capital employed and similar ratios
- Calculate and interpret profitability ratios, working capital ratios, liquidity ratios, debt ratios and gearing ratios
- Analyse performance of a company from information provided
- Explain the limitations of financial statements and interpretation

1 PURPOSE OF FINANCIAL RATIO ANALYSIS

Section overview

- Financial statement analysis
- Using ratios: comparisons
- Categories of financial ratios
- Users of the financial statements and their information needs

1.1 Financial analysis

There is no single definition of financial statement analysis. One possible definition is as follows.



Definition

Financial statement analysis is the process of understanding the risk and profitability of a firm through analysis of reported financial information, by using different accounting tools and techniques.

The above definition refers to accounting tools and techniques. Ratios are one such tool.

Financial statements are used to make decisions. They are used by shareholders and investors, and also by lenders, as well as by management. The financial statements contain a large number of figures, but the figures themselves do not necessarily have much meaning to a user of the financial statements. However, the figures can be analysed and interpreted by calculating financial ratios.

Financial ratios can help the user of the financial statements to assess:

- □ The financial position of the entity, and
- Its financial performance

1.2 Using ratios: comparisons

Financial ratios can be used to make comparisons:

- Comparisons over a number of years. By looking at the ratios of a company over a number of years, it might be possible to detect improvements or a deterioration in the financial performance or financial position of the entity. Ratios can therefore be used to make comparisons over time, and to identify changes or trends
- Comparisons with the similar ratios of other, similar companies for the same period.
- □ In some cases, perhaps, comparisons with 'industry average' ratios.

1.3 Categories of financial ratios

The main financial ratios can be classified as:

- □ Financial performance: return on capital, profitability and use of assets
- Working capital 'turnover' ratios
- Liquidity ratios
- Debt ratios
- Investor ratios.

1.4 Users of the financial statements and their information needs

IAS 1 defines general purpose financial statements .



Definition

General purpose financial statements (referred to as 'financial statements') are those intended to meet the needs of users who are not in a position to require an entity to prepare reports tailored to their particular information needs.

Some users (including management and perhaps lenders are in a position to require the preparation of tailored reports. However, there are several groups of people who are not in this position and may use general purpose financial statements:

- □ investors and potential investors;
- lenders;
- employees;
- □ suppliers;
- customers;
- government and government agencies;
- □ the general public.

All these groups are interested in financial performance, financial position and cash flows, but some users are mainly interested in performance and profitability, while others may be more interested in liquidity and gearing or other matters.

For example:

- A private investor needs to know whether to continue to hold shares or to sell them. He or she will tend to be most interested in profitability ratios (such as gross and net profit margin and return on capital employed) and investor ratios (such as earnings per share, dividend cover and price earnings ratio).
- A potential acquirer needs information about an entity's profitability and probably also information about whether or not the entity is managed efficiently. The acquirer's management is likely to focus on profit margins, return on capital employed, asset turnover and working capital ratios.
- A bank that has been approached to lend money to an entity needs to know whether it will receive interest payments when these are due and whether the money that it lends will eventually be repaid. A bank manager will normally be most interested in cash flows and liquidity ratios (current ratio, acid test ratio) gearing and interest cover. A potential lender will also be interested in predicting future performance as without sales there will be no cash.

Any analysis should focus on the needs of the user. What do they need to know? What are they interested in? What decision do they need to make?

2 RETURN ON CAPITAL, PROFITABILITY AND ASSET TURNOVER

Section overview

- Return on capital employed
- Return on shareholder capital
- Return on assets
- Analysing return: profitability and asset utilisation
- Profit/sales ratio (and cost/sales ratios)
- Asset turnover ratio
- Percentage annual growth in sales

The aim of 'profitability ratios' is to assess the financial performance of a profitmaking entity and the return that it makes on the capital invested.

2.1 Return on capital employed

Profit-making companies should try to make a profit that is large enough in relation to the amount of money or capital invested in the business. The most important profitability ratio is probably return on capital employed or ROCE.

For a single company:

Formula:



ROCE = (Share capital and reserves + long-term debt capital + preference share capital) Y 100%

Capital employed is the share capital and reserves, plus long-term debt capital such as bank loans, bonds and loan stock.

Where possible, use the average capital employed during the year. This is usually the average of the capital employed at the beginning of the year and end of the year.

0

Example: Return on capital employed

The following figures relate to Company X for Year 1.

		1 January Year 1	31 December Year 1
		Ħ	N
S	hare capital	200,000	200,000
	hare premium	100,000	100,000
	etained earnings	500,000	600,000
В	ank loans	200,000	500,000
		1,000,000	1,400,000
			Ħ
Ρ	rofit before tax		210,000
In	come tax expense		(65,000)
Ρ	rofit after tax		145,000
ntei	est charges on bank loans were	₩30,000.	
ROC	E is calculated as follows:		
	ROCE = 240,000 (W1)/1,200,0	00 (W2) × 100 = 209	%
W1	Profit before interest and tax		Ħ
	Profit before tax		210,000
	Add back interest deducted		30,000
	Profit before interest and tax		240,000
W2	Capital employed		Ħ
	Capital employed at the beginn	ing of the year	1,000,000
	Capital employed at the end of		1,400,000
			2,400,000
			2,400,000 ÷2
			÷Ζ
	Average capital employed		1,200,000

Groups of companies and ROCE

To calculate the ROCE for a group of companies, it is necessary to decide what to do with any non-controlling interest (minority interest). Since capital employed includes all the debt capital in the group, it makes sense to include the non-controlling interest (minority interest) in the capital employed.

ROCE should therefore be measured as profit before interest and tax as a proportion of total capital employed, including the non-controlling interest.

2.2 Return on shareholder capital

ROSC

Return on shareholder capital (ROSC) measures the return on investment that the shareholders of the company have made. This ratio normally uses the values of the shareholders' investment as shown in the statement of financial position (rather than market values of the shares).



Formula: Return on shareholder capital

Profit after taxation and preference dividend

Share capital and reserves

The average value of shareholder capital should be used if possible. This is the average of the shareholder capital at the beginning and the end of the year.

Profit after tax is used as the most suitable measure of return for the shareholders, since this is a measure of earnings (available for payment as dividends or for reinvestment in the business).



Example: Return on shareholder capital

The following figures relate to Company X for Year 1.

		1 January Year 1	31 December Year 1
		N	₩
	nare capital	200,000	200,000
	nare premium	100,000	100,000
	etained earnings	500,000	600,000
	nareholder capital	800,000	900,000
Ba	ank loans	200,000	500,000
		1,000,000	1,400,000
			Ħ
Pr	ofit before tax		210,000
In	come tax expense		(65,000)
	rofit after tax	145,000	
Inter	est charges on bank loans were ‡	₩30,000.	
ROS	C is calculated as follows:		
	ROSC = 145,000/850,000 (W2) × 100 = 17.06%	
W1	Shareholder capital		Ħ
	Shareholder capital at the begin	ning of the year	800,000
	Shareholder capital at the end of	of the year	900,000
			1,700,000
			÷2
	Average shareholder capital		850,000

× **100**

Groups of companies and ROSC

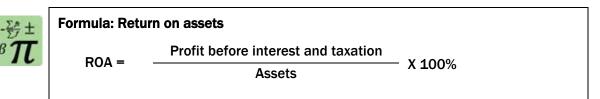
When calculating the ROSC for a group of companies, the main focus of attention is normally the return on the investment of the shareholders in the parent company. The ROSC should therefore be calculated as:



Formula: Return on shareholder capital of a group						
ROSC	=	Profit after taxation and non-controlling interest Equity attributable to equity holders of the parent company	× 100			

The share capital and reserves should not include the non-controlling interest in the equity reserves.

2.3 Return on assets



The normal convention is to use 'total assets' which includes both current and non-current assets. However, other variations are sometimes used such as noncurrent assets only.

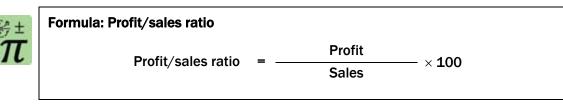
2.4 Analysing return: profitability and asset utilisation

The size of the return on capital employed, or the size of the return on shareholders' capital, depends on two factors:

- The profitability of the goods or services that the entity has sold
- □ The volume of sales that the entity has achieved with the capital and assets it has employed: this is known as asset utilisation or asset turnover.

2.5 Profit/sales ratio (and cost/sales ratios)

The profit/sales ratio is the ratio of the profit that has been achieved for every ₩1 of sales.



Profit/sales ratios are commonly used by management to assess financial performance, and a variety of different figures for profit might be used.

The definition of profit can be any of the following:

- Profit before interest and tax
- Gross profit (sales minus the cost of sales) = 'gross profit ratio'
- Net profit (profit after tax) = 'net profit ratio'.

It is important to be consistent in the definition of profit, when comparing performance from one year to the next.

The gross profit ratio is often useful for comparisons between companies in the same industry, or for comparison with an industry average.

It is also useful to compare the net profit ratio with the gross profit ratio. A high gross profit ratio and a low net profit ratio indicate high overhead costs for administrative expenses and selling and distribution costs.



Example: Profit to sales ratios

The following figures relate to Company X for Year 1. ₩ Profit before tax 210,000 Income tax expense (65,000)145,000 Profit after tax Interest charges on bank loans were ₩30,000. Sales during the year were \$5,800,000. Profit to sales ratios are calculated as follows: If profit is defined as profit before interest and tax: a) = 240,000 (W1)/5,800,000 × 100 = 4.14% b) If profit is defined as profit after interest and tax: = 145,000 (W1)/5,800,000 × 100 = 2.5% W1 Profit before interest and tax ₩ Profit before tax 210.000 Add back interest deducted 30,000 Profit before interest and tax 240,000

It is also useful to monitor the ratio of different types of cost to sales. The following ratios can be useful to highlight an unexpected change in a period or to indicate a difference between the company and another in a similar industry:

- Cost of sales/Sales) × 100%
- Administration costs/Sales) × 100%
- Selling and distribution costs/Sales) × 100%

2.6 Asset turnover ratio

The asset turnover ratio is the ratio of sales to capital employed.

It measures the amount of sales achieved during the period for each \$1 of investment in assets.



It is measured as a multiple (so many times a year).

The asset turnover ratio is also the ratio of sales to (assets – current liabilities). This is because capital employed = total assets minus liabilities excluding long-term debt.



Example: Asset turnover ratio

The following figures relate to Company X for Year 1.

Average capital employed (as given before)№1,200,000Profit before interest and tax = 240,000 (as given before)Sales during the year were №5,800,000.

ROCE = 240,000 / 1,200,000 × 100 = 20% (as given before)

Asset turnover

Asset turnover ratio = ₩5,800,000/₩1,200,000 = 4.83 times.

Note that: ROCE = Profit/sales ratio × Asset turnover ratio (where profit is defined as profit before interest and taxation).

Using the figures shown earlier:

ROCE	-	Profit/sales	×	Sales/capital employed	
240,000 1,200,000	=	240,000 5,800,000	×	5,800,000 1,200,000	
20%	=	4.14%	×	4.83 times	

2.7 Percentage annual growth in sales

It can be useful to measure the annual growth (or decline) in sales, measured as a percentage of sales in the previous year.

For example, if sales in the year just ended were \$5,800,000 and sales in the previous year were \$5,500,000, the annual growth in sales has been (\$300,000/\$5,500,000) × 100% = 5.45%.

3 WORKING CAPITAL EFFICIENCY RATIOS

Section overview

- Purpose of working capital efficiency ratios
- Average time to collect (receivables days or days sales outstanding)
- Average time for holding inventory (inventory turnover)
- Average time to pay suppliers
- Cash operating cycle/working capital cycle

3.1 Purpose of working capital efficiency ratios

Working capital efficiency ratios measure the efficiency with which the entity has managed its receivables, inventory and trade payables. The ratios are usually measured in terms of an average number of days.

The working capital ratios are a useful measure of whether the entity has too much or too little invested in working capital.

Excessive investment in working capital is indicated by a long cash cycle (a long working capital cycle) that appears to be getting even longer. When too much is invested in working capital, the return on capital employed and ROSC will be lower than they should be.

Under-investment in working capital is an indication of possible liquidity difficulties. When working capital is low in comparison with the industry average, this might indicate that current assets are being financed to an excessive extent by current liabilities, particularly trade payables and a bank overdraft.

(The cash cycle, also called the operating cycle and the working capital cycle) is explained later).

3.2 Average time to collect (receivables days or days sales outstanding)

This ratio estimates the time that it takes on average to collect the payment from customers after the sale has been made. It could be described as the average credit period allowed to customers or the 'average collection period'.



Formula: Average	time	to	collect	(average	collection	period	or	average
receivables days)								

Trade receivables should be the average value of receivables during the year. This is the average of the receivables at the beginning of the year and the receivables at the end of the year.

However, the value for receivables at the end of the year is also commonly used.

Sales are usually taken as total sales for the year. However, if sales are analysed into credit sales and cash sales, it is probably more appropriate to use the figure for credit sales only.

The average time to collect money from credit customers should not be too long. A long average time to collect suggests inefficient collection of amounts due from receivables.

3.3 Average time for holding inventory (inventory turnover)

This ratio is an estimate of the average time that inventory is held before it is used or sold.



Formula: Average time for holding inventory (Inventory holding period or average inventory days)

Average inventory days = Cost of sales × 365 days

In theory, inventory should be the average value of inventory during the year. This is the average of the inventory at the beginning of the year and the inventory at the end of the year.

However, the value for inventory at the end of the year is also commonly used, particularly in examinations.

3.4 Average time to pay suppliers

The average time to pay suppliers may be calculated as follows:



F

Formula: Average time to pa	ay su	ppliers (Average payables days	s)
Average time to pay		Trade payables	× 265 dava
	-	Purchases	- × 365 days

Trade payables should be the average value of trade payables during the year. This is the average of the trade payables at the beginning of the year and the trade payables at the end of the year.

However, the value for trade payables at the end of the year is also commonly used

When the cost of purchases is not available, the **cost of sales** should be used instead. This figure is obtained from the profit and loss information in the statement of comprehensive income.



Example: Working capital efficiency ratios

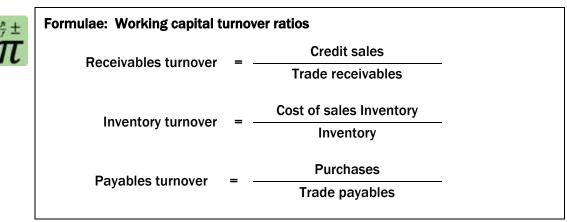
The following information is available for Company Y for Year 1.

	1 January Year 1	31 December Year 1
	₩	N
Inventory	300,000	360,000
Trade receivables	400,000	470,000
Trade payables	150,000	180,000
Sales in Year 1 totalled	₩3,000,000 and the	e cost of sales was ₦1,800,000.
The Working capital eff	iciency ratios are cal	culated as follows:
Efficiency ratios		
Average days to collect	= [435,000/3,000,0	000] × 365 days = 52.9 days
Inventory turnover perio	od = [330,000/1,800	0,000] × 365 days = 66.9 days
Average time to pay = [165,000/1,800,000] × 365 days = 33.5 days.
Workings		
Average inventory = [N	300,000 + ₦360,000	0]/2 = ₩330,000
Average trade receivab	les = [₦400,000 + ₦	470,000]/2 = ₦435,000
Average trade payables	s = [₩150,000 + ₩18	80,000]/2 = ₩165,000.

Turnover ratios (multiples)

Turnover ratios can be used as an alternative way of telling the same story as the efficiency ratios. These show the number of times a balance in the statement of financial position is *turned over* in the period.

They are multiples which provide the same insight as the efficiency ratios but in a different way.



3.5 Cash operating cycle/working capital cycle

The cash operating cycle or working capital cycle is the average time of one cycle of business operations:

- From the time that suppliers are paid for the resources they supply
- □ To the time that cash is received from customers for the goods (or services) that the entity makes (or provides) with those resources and then sells.

A cash cycle or operating cycle is measured as follows:



stration: Cash operating cycle	
	Days/weeks/ months
Average inventory holding period	Х
Average trade receivables collection period	Х
	X
Average period of credit taken from suppliers	(X)
Operating cycle	Х

The working capital ratios and the length of the cash cycle should be monitored over time. The cycle should not be allowed to become unreasonable in length, with a risk of over-investment or under-investment in working capital.

Example: Constructing a cash operating cycle		
The following figures have been extracted from a company's accounts:		
Statement of profit or loss	Ħ	
Sales	1,200,000	
Cost of sales:		
Opening inventory	250,000	
Purchases	1,000,000	
	1,250,000	
Closing inventory	(250,000)	
Cost of sales	(1,000,000)	
Gross profit	200,000	
Statement of financial position		
Trade receivables	400,000	
Trade payables	166,667	
Average inventory holding period:		
Average Inventory holding period = Average Inventory Annual cost of sales × 365 days		
Average inventory holding period = $\frac{250,000}{1,000,000} \times 365$ days = 91 days		
Average receivables collection period:		
Average receivables collection period = Avera	ge trade recelvables Annual sales	
Average receivables collection period = $\frac{400,000}{1,200,000} \times 365$ days = 122 days		
Average payables period:		
Average payables period = Average trade payables Annual purchases × 365 days		
Average payables period = $\frac{166.667}{1,000,000} \times 365$	days = 61 days	
Cash operating cycle:	Days	
Average inventory holding period	91	
Average trade receivables collection period	122	
Average period of credit taken from suppliers	(61)	
	152	

4 LIQUIDITY RATIOS

Section overview

- The meaning of liquidity
- Current ratio
- Quick ratio or acid test ratio
- Liquidity ratios and consolidated accounts

4.1 The meaning of liquidity

Liquidity means having cash or access to cash readily available to meet obligations to make payments.

For the purpose of ratio analysis, liquidity is measured on the assumption that the only sources of cash available are:

- Cash in hand or in the bank, plus
- Current assets that will soon be converted into cash during the normal cycle of trade.

It is also assumed that the only immediate payment obligations faced by the entity are its current liabilities.

There are two ratios for measuring liquidity:

- Current ratio
- Quick ratio, also called the acid test ratio.

The more suitable ratio for use depends on whether inventory is considered a liquid asset that will soon be used or sold, and converted into cash from sales.

4.2 Current ratio

The current ratio is the ratio of current assets to current liabilities.



Formula: Current ratio

Current ratio = Current assets

Current liabilities

The amounts of current assets and current liabilities in the statement of financial position at the end of the year may be used. It is not necessary to use average values for the year.

It is sometimes suggested that there is an 'ideal' current ratio of 2.0 times (2:1).

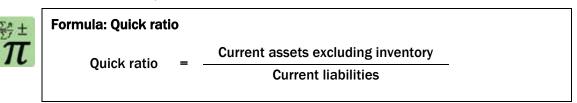
However, this is not necessarily true and in some industries, much lower current ratios are normal. It is important to assess the liquidity ratios by considering:

- Changes in the ratio over time
- □ The liquidity ratios of other companies in the same period
- □ The industry average ratios.

Liquidity should be monitored by looking at changes in the ratio over time.

4.3 Quick ratio or acid test ratio

The quick ratio or acid test ratio is the ratio of current assets excluding inventory to current liabilities. Inventory is excluded from current assets on the assumption that it is not a very liquid item.



The amounts of current assets and current liabilities in the statement of financial position at the end of the year may be used. It is not necessary to use average values for the year.

This ratio is a better measurement of liquidity than the current ratio when inventory turnover times are very slow, and inventory is not a liquid asset.

It is sometimes suggested that there is an 'ideal' quick ratio of 1.0 times (1:1).

However, this is not necessarily true and in some industries, much lower quick ratios are normal. As indicated earlier, it is important to assess liquidity by looking at changes in the ratio over time, and comparisons with other companies and the industry norm.

4.4 Liquidity ratios and consolidated accounts

Liquidity ratios are more informative when they are calculated for individual companies. When liquidity ratios are calculated from a consolidated statement of financial position, they are average measures for all the companies in the group. The average liquidity ratios for the group might hide the fact that there may be poor liquidity in some of the subsidiaries in the group.

5 DEBT RATIOS

Section overview

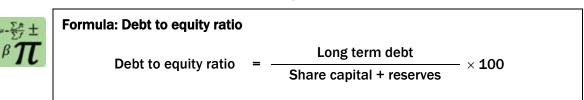
- Gearing (leverage) ratios
- Interest cover ratio

Debt ratios are used to assess whether the total debts of the entity are within control and are not excessive.

5.1 Gearing (leverage) ratios

Gearing (also called leverage), measures the total long-term debt of a company as a percentage of either:

- The equity capital in the company: or
- The total capital of the company.



Alternatively:



	Formula: Gearing ratio		
	Gearing ratio = -	Long term debt	- × 100
1		Share capital + reserves + long term debt	- × 100

It is usually appropriate to use the figures from the statement of financial position at the end of the year. However, a gearing ratio can also be calculated from average values for the year.

When there are preference shares, it is usual to include the preference shares within debt capital.

A company is said to be **high-geared** or **highly-leveraged** when its debt capital exceeds its share capital and reserves. This means that a company is high-geared when the gearing ratio is above either 50% or 100%, depending on which method is used to calculate the ratio.

A company is said to be **low-geared** when the amount of its debt capital is less than its share capital and reserves. This means that a company is low-geared when the gearing ratio is less than either 50% or 100%, depending on which method is used to calculate the ratio.

A high level of gearing may indicate the following:

- □ The entity has a high level of debt, which means that it might be difficult for the entity to borrow more when it needs to raise new capital.
- High gearing can indicate a risk that the entity will be unable to meet its payment obligations to lenders, when these obligations are due for payment.

The gearing ratio can be used to monitor changes in the amount of debt of a company over time. It can also be used to make comparisons with the gearing levels of other, similar companies, to judge whether the company has too much debt, or perhaps too little, in its capital structure.

Gearing and consolidated accounts

The gearing ratio for a group of companies is difficult to interpret, because the debt will be spread over several entities in the group.

When measuring gearing, the total capital or equity capital (the denominator in the ratio) should include non-controlling interests (minority interests).

5.2 Interest cover ratio

Interest cover measures the ability of the company to meet its obligations to pay interest.



Formula: Interest cover

Interest cover = Profit before interest and tax Interest charges in the year

Profit before interest and taxation is calculated by adding the interest charges for the year to the figure for profit before taxation.

A low interest cover ratio suggests that the company could be at risk from too much debt in relation to the amount of profits it is earning.

Note that what constitutes low or high gearing very much depends on the type of company. For example:

- □ Companies with high levels of physical assets (e.g. property companies) are able to borrow because they can offer assets as security to lenders.
- Companies with low levels of physical assets (e.g. advertising companies) might be expected to have lower levels of borrowing because they cannot offer assets as security to a lender.

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Example: Gearing ratios	
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The following information is available for Company Z for Year 6:

At 31 December Year 6	
	1 000
Total assets	5,800
Share capital	1,200
Reserves	2,400
	3,600
Long-term liabilities (Bank loans)	1,500
	5,100
Current liabilities	700
	5,800
For the year to 31 December Year 6	N 000
Profit before interest and taxation	700
Interest	(230)
	470
Taxation	(140)
Profit after taxation	330

The following ratios can be calculated to shed light on the company's gearing in Year 6 (compared to previous years or to other companies).

Debt to equity ratio: 1,500/3,600 \times 100 = 41.7%

Gearing ratio: 1,500/5,100 \times 100 = 29.4%

Interest cover: 700/230 = 3.04 times

6 INVESTOR RATIOS

Section overview

- Earnings per share (EPS)
- Price earnings ratio (P/E ratio)
- Dividend yield
- Dividend cover

Investor ratios are of interest to investors in shares and bonds and their advisers. Some of these measure stock market performance. Earnings per share (EPS) and the price earnings ratio (P/E ratio) were described in an earlier chapter.

6.1 Earnings per share (EPS)

EPS is normally viewed as a key measure of an entity's financial performance. It measures the profit earned for each equity share of the entity.

Basic EPS is calculated as follows:



Formula: Basic EPS

Net profit (or loss) attributable to ordinary shareholders during a period

weighted average number of shares in issue during the period

6.2 Price-earnings ratio (P/E ratio)

The price/earnings (P/E) ratio measures how expensive or cheap a share is in relation to its annual earnings. A P/E ratio of 10, for example, means that investors are prepared to pay a price for the share equal to 10 years of earnings (at the level of EPS in the previous year). A high P/E ratio is usually a sign of confidence in an entity, because it suggests that its earnings are expected to grow in future years. A low P/E ratio usually means that an entity's future prospects for EPS growth are expected to be poor, so that investors do not put a high value on the shares.

The P/E ratio is calculated as follows:



Formula: Price earnings ratio

P/E ratio = Market value of share

Earnings per share

6.3 Dividend yield

The dividend yield measures the dividend paid by an entity in relation to its price. It is calculated as follows:



Formula: Dividend yield			
Dividend yield =	Dividend per share Current market price per share	- × 100	

This is a measure of the return that a shareholder can obtain (the dividend received) in relation to the current value of the investment in the shares (the price of the shares). A high dividend yield might seem attractive to investors, but in practice companies with a high dividend yield might have a relatively low share price.

There are two things to note:

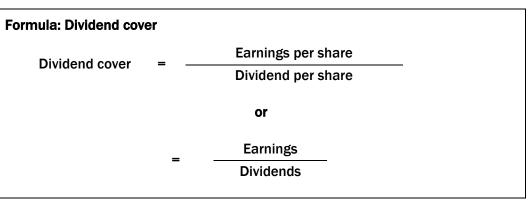
- Dividend yield reflects the dividend policy of the entity, not its actual performance. Management decides on the amount of the dividend and this may not only depend on earnings, but on the amount that must be retained for future investment in EPS growth.
- □ The ratio is based on the most recent dividend, but the current share price may move up and down in response to the market's expectations about future dividends. This may lead to distortion in the ratio.

6.4 Dividend cover

The dividend cover ratio measures the number of times that an entity's dividends are 'covered' by profits (how many times an entity could pay the current level of dividend from its available profits).

It is calculated as follows:





A low dividend cover (for example, less than 2), suggests that dividends may be cut if there is a fall in profits.



Example: Dividend yield and dividend cover The following amounts relate to Entity Q.

The current market price of its equity shares is ₦5.50 per share.

Profit for the most recent period was \$1.4 million and equity dividends paid were \$450,000.

There are 1.2 million ₦1 equity shares in issue.

Earnings per share = $\frac{1,400,000}{1,200,000}$ = \\1.17.

P/E ratio = $\frac{5.50}{1.17}$ **= 4.7**

Dividend per share = $\frac{450,000}{1,200,000}$ = 0.38

Dividend yield = $\frac{0.38}{5.50} \times 100\% = 6.9\%$

Dividend cover = $\frac{1,400,000}{450,000}$ = 3.1 times or $\frac{1.17}{0.38}$ = 3.1 times

7 LIMITATIONS OF INTERPRETATION TECHNIQUES

Section overview

- Differences in accounting policy
- Other limitations in the use of financial ratios
- Using historical information
- Creative accounting
- Related party relationships and transactions
- Using figures from the statement of financial position

There are several limitations or weaknesses in the use of interpretation techniques for analysing the financial position and financial performance of companies. Some of these are limitations of ratio analysis (the method of interpretation most often used) and some are limitations of financial statements and financial information.

7.1 Differences in accounting policy

One of the uses of financial ratios is to compare the financial position and performance of one company with those of similar companies for the same period.

Comparisons between companies might not be reliable, however, when companies use different accounting policies, or have different judgements in applying accounting policies or making accounting estimates. For example:

- Entities might have different policies about the revaluation of non-current assets.
- Entities might use different methods of depreciation.
- Entities might use different judgements in estimating the expected profitability on incomplete construction contracts.
- Entities might use different judgements in assessing whether a liability should be treated as a provision or a contingent liability.

IAS 8 states that an entity should not change its accounting policies unless the change is required by an accounting standard or it will result in more relevant and reliable information. Therefore changes should not happen often.

Where there has been a change in an accounting policy, IAS 8 also requires comparative figures to be restated and information to be disclosed. However, changes in accounting policies and accounting estimates can still make it difficult to compare the financial statements of an entity over time, particularly if analysis is based on extracts rather than the full published financial statements.

7.2 Other limitations in the use of financial ratios

There are other problems with the use of financial ratios, particularly where these are used to compare the performance and position of different entities or of an entity with an industry average.

- □ It is possible to calculate the same ratio in different ways. For example, there are several variations of return on capital employed (ROCE) and gearing. Comparisons can be misleading if different calculations are used.
- Even where two entities operate in the same industry, comparisons can be misleading. Entities can operate in different markets (for example, high volume/low margin sales and low volume/high margin sales). The size of an entity can affect the way it operates and therefore its ratios. For example, large entities can often negotiate more favourable terms with suppliers than small ones.
- □ Financial statements are published infrequently. If ratios are used to study trends and developments over time, they are only useful for trends or changes over one year or longer, and not changes in the short term.
- Ratios can only indicate **possible** strengths or weaknesses in financial position and financial performance. They might raise questions about performance, but do not provide answers. They are not easy to interpret, and changes in financial ratios over time might not be easy to explain.

It can be argued that financial position and financial performance should be analysed using market values rather than accounting values. For example, it can be argued that investment yield is more relevant for the assessment of financial performance than return on capital employed.

7.3 Using historical information

Financial statements are often used to predict the future performance of an entity. Where comparative figures are available for several years it may be possible to extrapolate trends and to base forecasts on these. If comparative figures are only available for one or two years, predictions may be unreliable.

There may be some limited information about future transactions in the notes to the financial statements. For example, details of contingent liabilities and nonadjusting events after the reporting period must be disclosed. However, published financial statements present historical information.

Generally, financial statements do not reflect future transactions or events. They do not anticipate the effect of significant changes to the entity after the financial statements have been authorised for issue. These may include events beyond the control of management (for example, the liquidation of a major customer) or events that could not possibly have been foreseen at the time the most recent financial statements were issued.

It should also be remembered that financial statements are not normally published until several months after the year end. The financial statements are often out of date by the time that they become available.

7.4 Creative accounting

Management may use various forms of **creative accounting** to manipulate the view given by the financial statements while complying with all applicable accounting standards and regulations.

Some of the techniques that can be used have been discussed in earlier chapters. They include:

- Window dressing: an entity enters into a transaction just before the year end and reverses the transaction just after the year end. For example, goods are sold on the understanding that they will be returned immediately after the year end; this appears to improve profits and liquidity. The only reason for the transaction is to artificially improve the view given by the financial statements.
- Off balance sheet' finance: transactions are deliberately arranged so as to enable an entity to keep significant assets and particularly liabilities out of the statement of financial position (= 'off balance sheet'). This improves gearing and return on capital employed. Examples include sale and repurchase agreements and some forms of leasing.
- ❑ Changes to accounting policies or accounting estimates: for example, an entity can revalue assets (change from the cost model to the revaluation model) to improve gearing or change the way in which it depreciates assets to improve profits.
- Profit smoothing: manipulating reported profits by recognising (usually) artificial assets or liabilities and releasing them to profit or loss as required.
- Aggressive earnings management: artificially improving earnings and profits by recognising sales revenue before it has been earned.
- Capitalising expenses: recognising 'assets' which do not meet the definition in the IASB Conceptual Framework or the recognition criteria. Examples include: human resources, advertising expenditure and internally generated brand names.

Most of these are now effectively prevented by accounting standards. However, management may still attempt 'creative accounting', especially if the entity is suffering falling profits or poor cash flow.

If directors' salaries or bonuses are based on profits or on particular measures, (such as earnings per share), they may try to manipulate that particular measure so that it is as favourable to them as possible.

7.5 Related party relationships and transactions

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, an entity might sell an asset such as a property to another company owned by one of its directors on more favourable terms than it would sell to a third party.

In this situation, the financial performance or financial position reported by the financial statements would be misleading. There is a special relationship between the parties to the business transactions. This is referred to as a 'related party relationship'.

Related parties of an entity can include:

- Parents, subsidiaries and fellow subsidiaries
- Associates
- □ Key management personnel (such as directors)
- Close family members of any of the above.

A related party transaction is:

- A transfer of resources, services, or obligations between related parties
- U Whether or not a price is charged.

Examples of related party transactions include:

- Purchases or sales of goods
- Purchases or sales of property and other assets
- Rendering or receiving of services
- Leases
- □ Finance arrangements (such as loans or contributions to equity).

Related party relationships and transactions are a normal part of business and there is nothing wrong with entering into them. However, a related party relationship can 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. For example, where an entity sells goods to a related party, its profits may not be comparable with those of a similar entity that only trades with third parties on normal commercial terms.

7.6 Using figures from the statement of financial position

In practice, ratio calculations are often based on figures in the year-end statement of financial position. These may be very similar to average values for the period, but this is not always the case.

Some businesses are seasonal and make a high proportion of their sales at a specific time of year (for example, in the few months before a national holiday period). Seasonal businesses often arrange their year-ends so that they fall when inventories and receivables are at their lowest (probably just after the main period for sales). Where this happens, ratios such as inventory turnover will be lower than they would be if they were based on the average figure for the year. This means that ratios may not be strictly comparable with those of other businesses or with industry averages.

Major purchases of assets can have a significant effect on figures in the statement of financial position and on ratios if they take place near the end of the accounting period.

- □ The carrying value of non-current assets is unusually high, because cost has increased, but a full year's depreciation has not been charged.
- Return on capital employed and asset turnover are reduced, because assets have increased but revenue and profits have not. New assets should generate increased profits, but they have not yet been owned for long enough to do so.

8 CHAPTER REVIEW

Chapter review

Before moving on to the next chapter check that you are able to:

- Calculate and interpret return on capital employed and similar ratios
- Calculate and interpret profitability ratios, working capital ratios, liquidity ratios, debt ratios and gearing ratios
- Analyse performance of a company from information provided
- Explain the limitations of financial statements and interpretation

Skills level Financial reporting



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