FINANCIAL ACCOUNTING BOOK

ACCOUNTING PROFESSION OPTION

for Rwandan Schools

Senior 6 Student Book

Experimental Version

Kigali, 2023

FOREWORD

Dear Student,

Rwanda Basic Education Board (REB) is honored to present Senior 6 Financial Accounting book for the students of Accounting Profession Option which serves as a guide to competence-based teaching and learning to ensure consistency and coherence in the learning of the Financial Accounting. The Rwandan educational philosophy is to ensure that you achieve full potential at every level of education which will prepare you to be well integrated in society and exploit employment opportunities.

The government of Rwanda emphasizes the importance of aligning teaching and learning materials with the syllabus to facilitate your learning process. Many factors influence what you learn, how well you learn and the competences you acquire. Those factors include the relevance of the specific content, the quality of teachers' pedagogical approaches, the assessment strategies and the instructional materials available. In this book, we paid special attention to the activities that facilitate the learning process in which you can develop your ideas and make new discoveries during concrete activities carried out individually or in groups.

In competence-based curriculum, learning is considered as a process of active building and developing knowledge and meanings by the learner where concepts are mainly introduced by an activity, situation or scenario that helps the learner to construct knowledge, develop skills and acquire positive attitudes and values.

For efficiency use of this textbook, your role is to:

- Work on given activities which lead to the development of skills;
- Share relevant information with other learners through presentations, discussions, group work and other active learning techniques such as role play, case studies, investigation and research in the library, on internet or outside;
- Participate and take responsibility for your own learning;
- Draw conclusions based on the findings from the learning activities.

To facilitate you in doing activities, the content of this book is self-explanatory so that you can easily use it yourself, acquire and assess your competences. The book is made of units as presented in the syllabus. Each unit has the following structure: the unit title and key unit competence are given and they are followed by the introductory activity before the development of Financial Accounting and concepts that are connected to real world problems more especially to production, finance and economics.

The development of each concept has the following points:

- Learning activity which is a well set and simple activity to be done by students in order to generate the concept to be learnt ;
- Main elements of the content to be emphasized;
- Worked examples; and
- Application activities to be done by the user to consolidate competences or to assess the achievement of objectives.

Even though the book has some worked examples, you will succeed on the application activities depending on your ways of reading, questioning, thinking and handling calculations problems not by searching for similar-looking worked out examples.

Furthermore, to succeed in Financial Accounting, you are asked to keep trying; sometimes you will find concepts that need to be worked at before you completely understand. The only way to really grasp such a concept is to think about it and work related problems found in other reference books.

I wish to sincerely express my appreciation to the people who contributed towards the development of this book, particularly, REB staff, development partners, Universities Lecturers and Secondary School Teachers for their technical support. A word of gratitude goes to Secondary Schools Head Teachers, Administration of different Universities (Public and Private Universities) and development partners who availed their staff for various activities.

Any comment or contribution for the improvement of this textbook for the next edition is welcome.

Dr. MBARUSHIMANA Nelson

Director General, REB

ACKNOWLEDGEMENTS

I wish to express my appreciation to the people who played a major role in the development of this financial Accounting book for Senior 6 students in Accounting Profession Option. It would not have been successful without active participation of different education stakeholders.

I owe gratitude to different universities and schools in Rwanda that allowed their staff to work with REB in the in-house textbooks production initiative.

I wish to extend my sincere gratitude to Universities Lecturers, Secondary school teachers and staff from different education partners whose efforts during writing exercise of this book were very much valuable.

Finally, my word of gratitude goes to the Rwanda Basic Education Board staffs who were involved in the whole process of in-house textbook Elaboration.

Joan MURUNGI

Head of CTLR Department

ACRONYMS AND ABBREVIATIONS

b/f: Brought Forward

CIF: Cost Insurance and Freight

CMS: Clients' Management System

CoGAS: Cost of Goods Available for Sale

CoGS: Cost of Goods Sold

FASB: Financial Accounting Standard Board

FIFO: First in First out

FRW: Francs Rwandais

GAAP: Generally Accepted Accounting Principles

IASB: International Accounting Standard Board

IASC: International Accounting Standards Committee

IASCF: International Accounting Standards Committee Foundation

ICPAR: Institute of Certified Public Accountant of Rwanda

IFRIC: International Financial Reporting Interpretations Committee

IFRS: International Financial Reporting Standards)

KEB: Kigali education board

LIFO: Last in First out

NRV: Net Realizable Value

PPE: Personal Protective Equipment

SAC: Standards Advisory Council

SMEs: Small-and medium-sized entities

UK: United Kingdom

USA: United States

TABLE OF CONTENT

UNIT 1 REGULATORY FRAMEWORK

Key unit competence: To be able to explain the Regulatory Framework of Accounting

Introductory activity

Last time, the accounting was not well prepared; it was planned on each personal understanding without respecting common rules and regulations to conduct things in the same direction. As the time are replaced, accounting preparation has been improved so that it was not prepared based on a particular country's rules and regulations but it was prepared in the same manner through the world where the regulatory framework exists on national and international levels.

Required: What accounting bodies should do in order to standardize the different accounting policies and practices followed by different business concerns?

1.1 Regulatory System

Learning Activity 1.1

Many figures in financial statements are derived from the application of judgment in applying fundamental accounting assumptions and conventions. This can lead to subjectivity.

Required: In attempt to deal with this subjectivity, and to achieve comparability between different organizations, what can you develop?

In Accounting, the regulatory framework provides a set of rules and regulations for accounting. Compliance and regulatory frameworks are sets of guidelines and best practices. Organizations follow these guidelines to meet regulatory requirements, improve processes, strengthen security, and achieve other business objectives (such as becoming a public company, or selling cloud solutions to government agencies).

Regulatory framework of accounting refers to the **collection of accounting standards, Laws, Codes, rules and regulations** that are issued by accounting bodies, government and regulatory units, which qualified accountant must abide by. Remember, the IASB and FASB I mentioned earlier. They are accounting standards setting bodies.

1.1.1 Introduction

Although new to the subject, you will be aware from your reading of the press that there have been some considerable upheavals in financial reporting, mainly in response to criticism. The details of the regulatory framework of accounting, and the technical aspects of the changes made, will be covered later in this unit and in your more advanced studies. The purpose of this unit is to give a general picture of some of the factors which have shaped Financial Accounting. We will concentrate on the accounts of limited liability companies, as these are the accounts most closely regulated by statute or otherwise.

The following factors that have shaped Financial Accounting can be identified:

- National/local legislation
- Accounting concepts and individual judgment
- Accounting standards
- Other international influences
- Generally Accepted Accounting Principles (GAAP)
- Fair presentation

1.1.2 National/local legislation

In most countries, limited liability companies are required by law to prepare and publish accounts annually. The form and content of the accounts is regulated primarily by national legislation. In Rwanda, the main legislation is the Law Governing Companies 17/2018

1.1.3 Accounting concepts and individual judgment

Many figures in financial statements are derived from the application of judgment in applying fundamental accounting assumptions and conventions. This can lead to subjectivity. Accounting standards were developed to try to address this subjectivity.

Financial statements are prepared on the basis of a number of fundamental accounting assumptions and conventions. Many figures in financial statements are derived from the application of judgment in putting these assumptions into practice.

It is clear that different people exercising their judgment on the same facts can arrive at very different conclusions.

Case study

An accountancy training firm has an excellent reputation among students and employers. How would you value this? The firm may have relatively little in the form of assets that you can touch; perhaps a building, desks and chairs. If you simply drew up a statement of financial position showing the cost of the assets owned, then the business would not see to be worth much, yet its income earning potential might be high. This is true of many service organizations where the people are among the most valuable assets.

Other examples of areas where the judgment of different people may vary are as follows.

- Valuation of buildings in times of rising property prices
- Research and development: is it right to treat his only as an expense? In a sense it is an investment to generate future revenue
- Accounting for inflation
- Brands such as 'Coca-Cola' and 'High Land Tea'. Are they assets in the same way that a fork lift truck is an asset?

Working from the same data, different groups of people produce very different financial statements. If the exercise of judgment is completely unfettered, there will be no comparability between the accounts of different organizations. This will be all the more significant in cases where deliberate manipulation occurs, in order to present accounts in the most favorable light.

1.1.4 Accounting standards

In an attempt to deal with some of the subjectivity, and to achieve comparability between different organizations, accounting standards were developed. These are developed at both a national level (in most countries) and an international level. The Financial Accounting syllabus is concerned with **International Financial Reporting Standards** (IFRS Standards).

IFRS Standards are produced by the **International Accounting Standards Board (IASB).**

Accounting is a vital part of business operations that involves managing and reporting the financial operations of companies. Accounting standards allow accounting departments nationally and internationally to use similar practices and produce similar quality accounting. If you work or plan to work in the accounting field, it may be helpful to learn about accounting standards and why they matter. In this article, we explain what accounting standards are, discuss why they are important and describe how organizations use them.

Definition

Accounting standards are a set of procedures and measures that inform how businesses conduct their accounting activities. They contain best practices for recording, measuring and disclosing financial transactions. They apply to all parts of a company's activities, including revenue, expenses, noncash expenses, assets, liabilities, equity and reporting. The primary purpose of accounting standards is to provide accurate financial information that banks, government agencies and investors can use when interacting with private companies.

Objectives of accounting standards

Primary objectives of accounting standards are:

- To provide a standard for the diverse accounting policies and principles.
- To put an end to the non-comparability of financial statements.
- To increase the reliability of the financial statements.
- To provide standards which are transparent for users.
- To define the standards which are comparable over all periods presented.
- To provide a suitable starting point for accounting.
- It contains high quality information to generate the financial reports. This can be done at a cost that does not exceed the benefits.

- For the eradication the huge amount of variation in the treatment of accounting standards.
- To facilitate ease of both inter-firm and intra-firm comparison.

Main objective of accounting standards is to standardize the different accounting policies and practices followed by different business concerns.

Importance of Accounting Standards

Accounting standards play a very efficient role in the whole accounting system. Some of its important roles are discussed below:

- Brings uniformity in accounting system
- Easy comparability of financial statements
- Assists auditors
- Makes accounting informative easy and simple
- Avoids frauds and manipulations
- Provides reliability to financial statements
- Measures management performance

Relevance of accounting standards

An accounting standard is a standardized guiding principle that determines the policies and practices of financial accounting. Accounting standards not only improve the transparency of financial reporting but also facilitates financial accountability. An accounting standard is relevant to a company's financial reporting.

Accounting standards ensure the financial statements from multiple companies are comparable. Because all entities follow the same rules, accounting standards make the financial statements credible and allow for more economic decisions based on accurate and consistent information.

Generally Accepted Accounting Principles (US GAAP or GAAP)

Generally Accepted Accounting Principles refers to the standards framework, principles and procedures used by the companies for financial accounting. The principles are issued by Financial Accounting Standard Board (FASB). It is a set of accounting standards that consist of standard ways and rules for recording and reporting of the financial data, that is, balance sheet, income statement, cash flow statement, etc. The framework is adopted by publicly traded companies and a maximum number of private companies in the United States.

GAAP principles are updated at periodical intervals to meet with current financial requirements. It ensures the transparency and consistency of the financial statement. The information provided as per GAAP by the financial statement is helpful to the economic decision makers such as investors, creditors, shareholders, etc.

Key differences between GAAP and IFRS

The important difference between GAAP and IFRS are explained as under:

- GAAP stands for Generally Accepted Accounting Principles. IFRS is an abbreviation for International Financial Reporting Standards.
- GAPP is a set of accounting guidelines and procedures, used by the companies to prepare their financial statements. IFRS is the universal business language followed by the companies while reporting financial statements.
- Financial Accounting Standard Board (FASB) issues GAAP whereas International Accounting Standard Board (IASB) issued IFRS (i.e GAAP is developed by FASB whereas IFRS is developed by IASB.
- Use of Last in First out (LIFO) in inventory valuation is not permissible as per IFRS which is not in the case of GAAP, that is, GAAP uses LIFO, FIFO and Weighted Average Method but IFRS uses FIFO and Weighted Average Method only.
- Extraordinary items are shown below the statement of income in case of GAAP. Conversely, in IFRS, such items are not segregated in the statement of income.
- Development Cost is treated as an expense in GAAP, while in IFRS, the cost is capitalized provided the specified conditions are met.
- Inventory reversal is strictly prohibited under GAAP, but IFRS allows inventory reversal subject to specific conditions.
- IFRS is based on principles, whereas GAAP is based on rules.

Note that as efforts are continuously made to converge these two standards, so it can be said that there is no comparison between GAAP and IFRS. Moreover, the differences between the two are as per a particular point of time that may get a change in the future.

www.accounting.com/resources/gaap/

Similarities

Both are guiding principles that help in the preparation and presentation of a statement of accounts. A professional accounting body issues them, and that is why they are adopted in many countries of the world. Both of the two provides relevance, reliability, transparency, comparability, understandability of the financial statement.

Application activity 1.1

1. Mention the main objectives of the IASB when it develops IFRS Standards.
2. Which of the following is not an objective of the accounting standards?
   a) Standardize the different accounting policies and practices followed by different business concerns.
   b) Provide a standard for the diverse accounting policies and principles.
   c) Increase the reliability of the financial statements.
   d) Put an end to the non-comparability of financial statements.
   e) Increase the huge amount of variation in the treatment of accounting standards.
3. Explain the important difference between GAAP and IFRS.
4. Explain how there is subjectivity in financial statements.
5. Discuss the important roles of accounting standards in the whole accounting system.

1.2 Structure of International Accounting Standards Committee (IASC) Foundation

Learning Activity 1.2

Accounting standards are developed at both national and international levels in order to raise the standard of financial reporting and eventually bring about global harmonization of accounting standards.

Required: Mention at least two international bodies in charge of developing these accounting standards.

1.2.1 History and structure of IASC Foundation

History of IASC Foundation

The IASC Foundation is an independent body, not controlled by any particular Government or professional organization. Its main purpose is to oversee the IASB in setting the accounting principles which are used by business and other organizations around the world concerned with financial reporting.

The IASC was formed in June 1973 in London through an agreement made by professional accountancy bodies from Australia, Canada, France, Germany, Ireland, Japan, Mexico, the Netherlands, the UK and the USA with a view to harmonizing the international diversity of company reporting practices. Between its founding in 1973 and its dissolution in 2001, it developed a set of International Accounting Standards (IAS) that gradually acquired a degree of acceptance in countries around the world. Although the IASC came to include some organizations representing preparers and users of financial statements, it largely remained an initiative of the accountancy profession. On 1 April 2001, it was replaced by the International Accounting Standards Board (IASB), an independent standard-setting body. The IASC Foundation is the parent entity of the International Accounting Standards Board, an independent accounting standard-setter based in London, UK. The IASB adopted the extant corpus of IAS which it continued to develop as International Financial Reporting Standards.

The structure of IASC Foundation

- The IASC Foundation is an independent organization having two main bodies, the Trustees and the IASB, as well as a Standards Advisory Council and the International Financial Reporting Interpretations Committee.
- The IASC Foundation Trustees appoint the IASB members, exercise oversight and raise the funds needed, but the IASB has sole responsibility for setting accounting standards.

1.2.2 International Accounting Standards Board (IASB)

The IASB develops International Financial Reporting Standards (IFRS Standards). The main objectives of the IFRS Foundation are to raise the standard of financial reporting and eventually bring about global harmonization of accounting standards. The IASB is an independent, privately funded body that develops and approves IFRS Standards.

Prior to 2003, standards were issued as International Accounting Standards (IAS Standards). In 2003 IFRS 1 was issued and all new standards are now designated as IFRS Standards. Therefore, IFRS Standards encompass both IFRS Standards, and IAS Standards still in force (eg: IAS 7).

Note: Throughout this text, we will use the abbreviation IFRS Standards to include both IFRSs and IAS Standards.

The members of the IASB come from several countries and have a variety of backgrounds, with a mix of auditors, preparers of financial statements, users of financial statements and academics. The IASB operates under the oversight of the IFRS Foundation.

The IFRS Foundation

IFRS standards are International Financial Reporting Standards (IFRS) that consist of a set of **accounting rules** that determine how transactions and other accounting events are required to be reported in financial statements. They are designed to maintain credibility and transparency in the financial world, which enables users, such as, investors and business operators to make informed financial decisions or rational economic decisions with information about the financial position, performance, profitability and liquidity of the company.

IFRS standards are issued and maintained by the International Accounting Standards Board. Formerly, they are known as International Accounting Standards (IAS). The standards are used for the preparation and presentation of the financial statement that is, balance sheet, income statement, cash flow statement, changes in equity and footnotes, etc. I FRS were created to establish a common language so that **financial statements** can easily be interpreted from company to company and country to country.

The IFRS Foundation (formally called the International Accounting Standards Committee Foundation or IASCF) is a not for profit, private sector body that oversees the IASB.

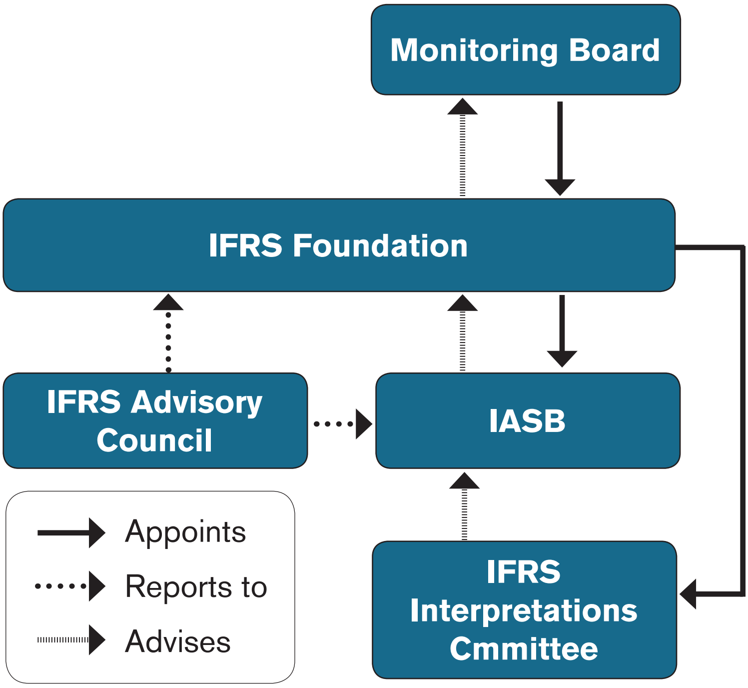
The objectives of the IFRS Foundation, summarized from its document IFRS Foundation Constitution, are to:

- Develop a single set of high quality, understandable, enforceable and globally accepted IFRS Standards through its standard-setting body, the IASB;
- Promote the use and rigorous application of those standards;
- Take account of the financial reporting needs of emerging economies and small-and medium-sized entities (SMEs); and
- Bring about convergence of national accounting standards and IFRS Standards to high quality solutions.

In late 2018, the IFRS Foundation Constitution had been amended mainly regarding the tenure terms which the Trustee Chair and Vice-Chairs may hold their positions for, and how they can be appointed. The main four objectives have not changed.

As at January 2019, the IFRS Foundation is made up of 22 named trustees, who essentially monitor and fund the IASB, the IFRS Advisory Council and the IFRS Interpretations Committee. The Trustees are appointed from a variety of geographical and functional backgrounds.

The structure of the IFRS Foundation and related bodies is shown below.



- **IFRS Advisory Council**

The IFRS Advisory Council (formally called the Standards Advisory Council or SAC) is essentially a forum used by the IASB to consult with the outside world. It consults with national standard setters, academics, user groups and a host of other interested parties to advise the IASB on a range of issues, from the IASB's work program for developing new IFRS Standards to giving practical advice on the implementation of particular standards.

The IFRS Advisory Council meets the IASB at least three times a year and puts forward the views of its members on current standard-setting projects.

- **IFRS Interpretations Committee**

The IFRS Interpretations Committee (formally called the International Financial Reporting Interpretations Committee or IFRIC) was set up in March 2002 and provides guidance on specific practical issues in the interpretation of IFRS Standards. Note that despite the name change, interpretations issued by the IFRS Interpretations Committee are still known as IFRIC Interpretations. In your exam, you may see the IFRS Interpretations Committee referred to as the IFRSIC.

The IFRS Interpretations Committee has two main responsibilities:

i. To review, on a timely basis, newly identified financial reporting issues not specifically addressed in IFRS Standards.

ii. To clarify issues where unsatisfactory or conflicting interpretations have developed, or seem likely to develop in the absence of authoritative guidance, with a view to reaching a consensus on the appropriate treatment.

Application activity 1.2

1. What is the purpose of IAS 37?
2. What is IFRS?
3. Discuss the main objectives of IFRS Foundation.
4. What are the objectives of the IFRS Foundation as they are included in the document of the IFRS Foundation Constitution?
5. Explain the two main responsibilities of the IFRS Interpretations Committee.

1.3 International Financial Reporting Standards (IFRS Standards)

Learning Activity 1.3

International Financial Reporting Standards (IFRS) that consist of a set of accounting rules that determine how transactions and other accounting events are required to be reported in financial statements.

Required: Mention any two IFRS Standards or IAS that you know.

IFRS Standards are created in accordance with due process. There are currently 25 IAS Standards and 16 IFRS Standards in issue.

1.3.1 The use and application of IFRS Standards

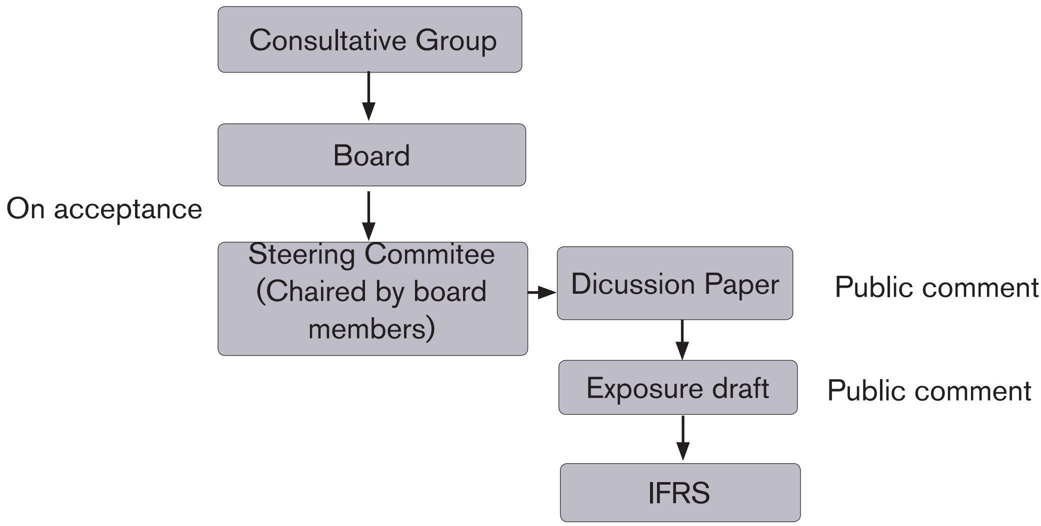
The IFRS Standards have helped to both improve and harmonize financial reporting around the world. The standards are used in the following ways:

- As **national requirements**
- As the **basis** for **all** or **some national requirements**
- As an **international benchmark** for those countries which develop their own requirements
- By **regulatory authorities** for domestic and foreign companies
- **By companies** themselves

1.3.2 Standards-setting process

The IASB prepares IFRS Standards in accordance with due process. You do not need this for your exam, but the following diagram may be of interest.

The procedure can be summarized as follows.



Current IFRS Standards

The current list is as follows. Those examinable in Financial Accounting are marked with a *.

Conceptual Framework for Financial Reporting 2018 *

IFRS 1	First-time adoption of International Financial Reporting Standards
IFRS 2	Share-based payment
IFRS 3 *	Business combinations
IFRS 4	Insurance contracts
IFRS 5	Non-current assets held for sale and discontinued operations
IFRS 6	Exploration for the evaluation of mineral resources
IFRS 7	Financial instruments: disclosures
IFRS 8	Operating segments
IFRS 9	Financial instruments
IFRS 10 *	Consolidated financial statements
IFRS 11	Joint arrangements
IFRS 12	Disclosure of interests in other entities
IFRS 13	Fair value measurement
IFRS 14	Regulatory deferral accounts
IFRS 15	Revenue from contracts with customers
IFRS 16 *	Leases
IAS 1 *	Presentation of financial statements
IAS 2 *	Inventories
IAS 7 *	Statement of cash flows
IAS 8	Accounting policies, changes in accounting estimates and errors
IAS 10 *	Events after the reporting period
IAS 12	Income taxes
IAS 16 *	Property, plant and equipment
IAS 19	Employee benefits (2011)
IAS 20	Accounting for government grants and disclosure of government assistance

IAS 21 The effects of changes in foreign exchange rates

IAS 23 Borrowing costs

IAS 24 Related party disclosure

IAS 26 Accounting and reporting by retirement benefit plans

IAS 27 * Separate financial statements (2011)

IAS 28 * Investments in associates and joint ventures (2011)

IAS 29 Financial reporting in hyperinflationary economies

IAS 32 Financial instruments: presentation

IAS 33 Earnings per share

IAS 34 Interim financial reporting

IAS 36 Impairment of assets

IAS 37 * Provisions, contingent liabilities and contingent assets

IAS 38 * Intangible assets

IAS 39 Financial instruments: recognition and measurement

IAS 40 Investment property

IAS 41 Agriculture

Various exposure drafts and discussion papers are currently at different stages within the IFRS process, but these are not concern to you at this stage.

1.3.3 Scope and application of IFRS Standards

Scope

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

Application

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

Application activity 1.3

1. How many IAS Standards and IFRS Standards are currently in issue?
2. In which ways the IFRS Standards are used?

Skills Lab

Students must visit any company and analyze operating environment, they will then discuss if the company applies any regulatory system, accounting standards developed by International Accounting Standards Committee (IASC) Foundation and International Financial Reporting Standards (IFRS Standards) arising from their operations.

End unit assessment

1. Which of the following is not an objective of the IFRS Foundation?

   a) To enforce IFRS Standards in most countries

   b) To develop IFRS Standards through the IASB

   c) To bring about convergence of accounting standards and IFRS Standards

   d) To take account of the financial reporting needs of SMEs
2. Fill in the blanks.

   The IFRS……………………………………issues……………………..

   ……………. which aid users' interpretation of IFRS Standards.
3. How many IAS Standards and IFRS Standards are currently in issue?
4. The IFRS Foundation is a government-controlled body, based in the EU. True or False?
5. The IASB is responsible for the standard-setting process. True or False?

6. Olivier is a trainee accountant with ICPAR. One of his friends, who works in a local supermarket, said the following: "I don't know why you waste your time getting qualified-everyone does whatever they like when it comes to accounting. Everybody knows that!". Olivier know that his friend is wrong and that you can't do "whatever you like" when it comes to accounting.

   Required:

   List and describe the various regulations that need to be considered when performing the financial accounting function within a business.

7. There are those who suggest that any standard-setting body is redundant because accounting standards are unnecessary.

   Required:

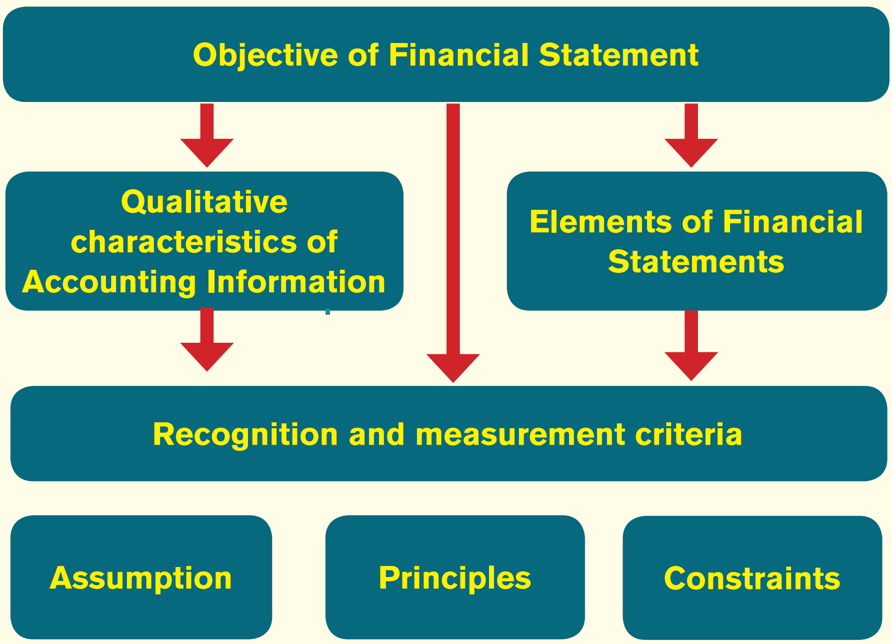
   Discuss the statement that accounting standards are unnecessary for the purpose of regulating financial statements.

UNIT 2 CONCEPTUAL FRAMEWORK FOR FINANCIAL REPORTING

Key unit competence: To be able to apply the conceptual framework in preparation of financial statements.

Introductory activity

Conceptual Framework



a) Describe the picture above and list elements of Financial Statements

b) How to recognize and derecognize elements of Financial Statements?

2.1 Introduction

Learning Activity 2.1

Conceptual framework Assist preparers to develop consistent accounting policies, standard applies to particular transaction or other event, and assist all parties to understand and interpret the standard.

Required: Why is necessary to follow a certain guidance and accounting standards in accountant field.

2.1.1 Definition of conceptual framework

- **Going concern concept**

Going concern is explained in the way that the financial statements are normally prepared on the assumption that company will continue in operation for the foreseeable future. Hence, it is assumed that the entity has neither the intention nor the need to enter into liquidation or to cease trading. If such an intention or need exists, the financial statements may have to be prepared on a different basis. If so, the financial statements describe the basis used. This concept assumes that, when entity preparing a normal set of accounts, the business will **continue to operate** in approximately the same manner for the foreseeable future (at least the next 12 months). In particular, the entity will not go into liquidation or scale down its operations in a material way.

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

Example

A retailer commences business on 1 January and buys inventory of 20 washing machines, each costing FRW 800,000. During the year they sold 17 machines at FRW 1,000,000 each. How should the remaining machines be valued at 31 December in the following circumstances?

i) They are forced to close down their business at the end of the year and the remaining machines will realize only FRW 600,000 each in a forced sale

ii) They intend to continue their business into the next year.

Answer

i) If the business is to be closed down, the remaining three machines must be valued at the amount they will realize in a forced sale, i.e. 3*FRW 600,000 = FRW 1,800,000.

ii) If the business is regarded as a going concern, the inventory unsold at 31 December will be carried forward into the following year, when the cost of the three machines will be matched against the eventual sale proceeds in computing that year's profits. The three machines will therefore be valued at cost, 3*FRW 800,000 = FRW 2,400,000.

If the going concern assumption is not followed, that fact must be disclosed, together with the following information.

i) The basis on which the financial statements have been prepared Accruals

ii) The reasons why the entity is not considered to be a going concern

- **Accrual basis.**

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

The accruals basis is not an underlying assumption, the Conceptual Framework for Financial Reporting makes it clear that financial statements should be prepared on an accruals basis. Entities should prepare their financial statements on the basis that transactions are recorded in them, not as the cash is paid or received, but as the revenues or expenses are earned or incurred in the accounting period to which they relate.

According to the accruals assumption, in computing profit revenue earned must be **matched against** the expenditure incurred in earning it. This is also known as the **matching convention**.

Example

Accrual basis KAMARIZA purchases 20 T-shirts in her first month of trading (May) at a cost of FRW 5,000 each. She then sells all of them for FRW 10,000 each.

KAMARIZA has therefore made a profit of FRW 100,000, by matching the revenue (FRW 200,000) earned against the cost (FRW 100,000) of acquiring them. All of KAMARIZA's sales and purchases are on credit and no cash has been received or paid.

If, however, KAMARIZA only sells 18 T-shirts, it is incorrect to charge her statement of profit or loss with the cost of 20 T-shirts, as she still has two T-shirts in inventory. Therefore, only the purchase cost of 18 T-shirts (18*FRW 5,000 = FRW 90,000) should be matched with her sales revenue (18 units*FRW 10,000 = FRW 180,000), leaving her with a profit of FRW 90,000.

Her statement of financial position will look like this		"000" FRW
Assets		
Inventory (at cost, i. e 2 * FRW 5,000)	10	
Account receivable (18*FRW 10,000)	180	
		190
Capital and liabilities		
Proprietor's capital (profit for the period)	90	
Accounts payables (20*FRW 5,000)	100	
		190

However, if KAMARIZA had decided to give up selling T-shirts, then the going concern assumption no longer applies and the value of the two T-shirts in the statement of financial position is their break-up valuation, not cost. Similarly, if the two unsold T-shirts are unlikely to be sold at more than their cost of FRW 5,000 each (say, because of damage or a fall in demand) then they should be recorded on the statement of financial position at their net realizable value (i.e. the likely eventual sales price less any expenses incurred to make them saleable) rather than cost. This shows the application of the prudence concept. The Conceptual Framework views prudence as a component of neutrality, which is a characteristic of faithful representation.

Prudence is described as:

The exercise of caution when making judgments under conditions of uncertainty. The exercise of prudence means that assets and income are not overstated and liabilities and expenses are not understated, as an accountant, it is important to exercise caution when making accounting estimates. In the example above, the concepts of going concern and accruals are linked. Since the business is assumed to be a going concern, it is possible to carry forward the cost of the unsold T-shirts as a charge against profits of the next period.

- **The business entity concept**

Financial statements always treat the business as a separate entity. It is crucial that you understand that the convention adopted in preparing accounts (the business entity concept) is always to treat a business as a separate entity from its owner(s). This means the transactions of the owner should never be mixed with the business's transactions. This applies whether or not the business is recognized in law as a separate legal entity.

2.1.2. The objective of general purpose of financial reporting

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

a) Buying, selling or holding equity and debt instrument

b) Providing or settling loans and other forms of credit

c) Exercising rights to vote on, or otherwise influence, management's actions that affect the use of the entity's economic resources.

The decisions described depend on the returns that existing and potential investors, lenders and other creditors expect, for example, dividends, principal and interest payment or market price increases. Investors, lenders and other creditors' expectation about returns depend on their assessment of the amount, timing and uncertainty of (the prospects for) future net cash inflows to the entity on their assessment of management's stewardship of the entity's economic resources. Existing and potential investors, lenders and other creditors need information to help them make those assessments.

Application activity 2.1

1) Explain the objective of financial statements
2) Explain 5 elements of Financial Statements as per IAS1.
3) Briefly explain (4) different users of the Financial information and their needs in the Financial information.

2.2 Qualitative characteristics of useful financial information

Learning Activity 2.2

Financial Accounting states that accounting source documents must contain information that is certain and trusted.

Required: Explain when information is certain and trusted.

2.2.1 Two fundamental qualitative characteristics

For financial reporting purposes, fundamental qualitative characteristics are two;

- **Relevance**

Only relevant information can be useful. Information should be released on a timely basis to be relevant to users.

Relevant financial information is capable of making a difference in the decisions made by user. Financial information is capable of making a difference in decisions if it has predictive value, confirmatory value or both.

The predictive and confirmatory roles of information are interrelated. Information on financial position and performance is often used to predict future position and performance and other things of interest to the user, eg likely dividend, wage rises. The manner of showing information will enhance the ability to make predictions, eg by highlighting unusual items.

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

- **Materiality**

Information is material if omitting it or misstating it could influence decisions that the primary users of general-purpose financial reports make on the basis of those reports which provide financial information about a specific reporting entity.

Information may be judged relevant simply because of its nature. In other cases, both the nature and materiality of the information are important. An error which is too trivial to affect anyone's understanding of the accounts is referred to as immaterial.

In preparing accounts, it is important to assess what is material and what is not, so that time and money are not wasted in the pursuit of excessive detail.

Determining whether or not an item is material is a very subjective exercise. There is no absolute measure of materiality. It is common to apply a convenient rule of thumb (for example, material items are those with a value greater than 5% of net profits). However, some items disclosed in the accounts are regarded as particularly sensitive and even a very small misstatement of such an item is taken as a material error. An example, in the accounts of a limited liability company, is the amount of remuneration (salaries and other rewards) paid to directors of the company.

The assessment of an item as material or immaterial may affect its treatment in the accounts. For example, the statement of profit or loss of a business shows the expenses incurred grouped under suitable captions (administrative expenses, distribution expenses etc); but in the case of very small expenses, it may be appropriate to lump them together as 'sundry expenses', because a more detailed breakdown is inappropriate for such immaterial amounts.

In assessing whether or not an item is material, it is not only the value of the item which needs to be considered. The context is also important.

a) If a statement of financial position shows non-current assets of FRW 2,000 million and inventories of FRW30 million an error of FRW 200,000 in the depreciation calculations might not be regarded as material. However, an error of FRW 20 million in the inventory valuation would be material. In other words, the total of which balance the error forms, must be considered.

b) If a business has a bank loan of FRW 50 million and a FRW 55 million balance on bank deposit account, it will be a material misstatement if these two amounts are netted off on the statement of financial position as 'cash at bank FRW 5 million. In other words, incorrect presentation may amount to material misstatement even if there is a very small or even no monetary error.

2.2.2 Faithful representation

Faithful representation: Financial reports represent economic phenomena in words and numbers. To be useful, financial information must not only represent relevant phenomena but must **faithfully** represent the substance of the phenomena that it purports to represent. To be a faithful representation, information must be **complete, neutral** and **free from error**

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

A **neutral** depiction is without bias in the selection or presentation of financial information. A neutral depiction is not slanted, weighted, emphasized or otherwise manipulated to increase the probability that financial information will be received favorably or unfavorably by users.

Neutrality is supported by the exercise of prudence. **Prudence** is the exercise of caution when making judgments under conditions of uncertainty

Free from error means 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. In this context free from error does not mean perfectly accurate in all respects.

Prudence was removed from the 2010 Conceptual Framework as it was deemed to be implied within the depiction of neutrality, and that the term was being interpreted in different ways. However, it was felt that the exercise of prudence, along with understanding the substance of the transitions, rather than the pure legality of them, was required to be explicitly stated.

2.2.3 Enhancing qualitative characteristics

- **Comparability**

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

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

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

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

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

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

- **Verifiability**

Verifiability helps assure users that information faithfully represents the economic phenomena it purports to represent. It means that different knowledgeable and independent observers could reach consensus, although not necessarily complete agreement, that a particular depiction is a faithful representation.

Information that can be independently verified is generally more decision-useful than information that cannot.

- **Timeliness**

Timeliness means having information available to decision-makers in time to be capable of influencing their decisions. Generally, the older information is the less useful it is Information may become less useful if there is a delay in reporting it. There is a balance between timeliness and the provision of reliable information.

If information is reported on a timely basis when not all aspects of the transaction are known, it may not be complete or free from error. Conversely, if every detail of a transaction is known, it may be too late to publish the information because it has become irrelevant. The overriding consideration is how best to satisfy the economic decision-making needs of the users.

- **Understandability**

Understandability classifying, characterizing and presenting information clearly and concisely makes it understandable financial reports are prepared for users who have a reasonable knowledge of business and economic activities and who review and analyses the information diligently.

Some phenomena are inherently complex and cannot be made easy to understand. Excluding information on those phenomena might make the information easier to understand, but without it those reports would be incomplete and therefore misleading. Therefore, matters should not be left out of financial statements simply due to their difficulty, as even well-informed and diligent users may sometimes need the aid of an adviser to understand information about complex economic phenomena.

- **Reliability**

Reliable information is the information free from material error and bias and can be depended upon by users. The following factors contribute to reliability:

i) Faithful representation

ii) Substance over form

iii) Neutrality

iv) Prudence

v) Completeness

Application activity 2.2

Explain qualitative characteristics of financial information

2.3 Elements of financial statements

Learning Activity 2.3

ABC company ltd produce and sell the following items water, Juice and Milk, it has invested money in purchasing the asset, including premises and motor vehicles, some transactions are by cash, bank and others on credit, in the second year of trading it has enjoyed an increased number of customer. But accountant is not aware of the documents to be prepared at the end of the year.

What kind of financial statement that accountant should prepare at the end of the year.

2.3.1 Conceptual Framework of Financial statements

The Conceptual Framework outlined the following elements of financial statements:

Elements of financial statement

Measurement of financial position in Statement of finacial position

- Assets
- Liability
- Equity

Measurement of performance in statement of profit or loss and other comprehensive income

- Income
- Expenses

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

• Statement of Financial position

The elements affecting financial position are assets, liabilities and equity

i. Assets

Asset is a present economic resource controlled by the entity as a result of past events. An economic resource is a right that has the potential to produce economic benefits. Assets are usually employed to produce goods or services for customers; customers will then pay for these. Cash itself renders a service to the entity due to its command over other resources

The economic benefits can come in various forms, including:

a) Cash flows, such as returns on investment sources

b) Exchange of goods, such as by trading, selling goods, provision of services

c) Reduction or avoidance of liabilities, such as paying loans.

ii. Liabilities

Liability is a present obligation of the entity to transfer an economic resource as a result of past events.

For a liability to exist, three criteria must all be satisfied:

a) The entity has an obligation

b) The obligation is to transfer an economic resource

c) The obligation is a present obligation that exists as a result of past events

Obligation- A duty or responsibility that the entity has no practical ability to avoid, an essential characteristic of a liability is that the entity has an obligation.

A present obligation exists as a result of past events if the entity has already obtained economic benefits or taken an action, and as a consequence, the entity will or may have to transfer an economic resource that it would not otherwise have had to transfer.

It is important to distinguish between a present obligation and a future commitment. A management decision to purchase assets in the future does not, in itself, give rise to a present obligation.

Example

Consider the following situations in each case do we have an asset or liability within the definitions given by the Conceptual Framework? Give reasons for your answer.

a) Mucyo Ltd has purchased a patent for FRW 20,000,000. The patent gives the company sole use of a particular manufacturing process which will save FRW 3,000,000 a year for the next five years.

b) Kalisa Ltd paid René Gatera FRW 10,000,000 to set up a car repair shop, on condition that priority treatment is given to cars from the company's fleet.

c) Deals on Wheels Ltd provides a warranty with every car sold.

Answer

a) This is an asset, an intangible one. There is a past event, control and future economic benefit (through cost savings)

b) This cannot be classified as an asset. Kalisa Ltd has no control over the car repair shop and it is difficult to argue that there are 'future economic benefits'.

c) The warranty provided constitutes a liability; the business has taken on an obligation. It would be recognized when the warranty is issued rather than when a claim is made:

iii. Equity

Equity is the residual interest in the assets of the entity after deducting all its liabilities or Equity represents the net assets owned by the owners (the shareholders).

Thought equity is defined above as a residual, but it may be sub-classified in the statement of financial position. This will indicate legal or other restrictions on the ability of the entity to distribute or otherwise apply its equity. Some reserves are required by statute or other law, eg for the future protection of creditors. The amount shown for equity depends on **the measurement of assets and liabilities**. It has nothing to do with the market value of the entity's shares.

- **Statement of financial performance**

The elements affecting financial performance are **income** and **expenses.**

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

The elements of income and expense are therefore defined as below:

i. Income

'Increases in assets, or decreases in liabilities, that result in increases in equity, other than those relating to contributions from holders of equity claims.'

Revenue arises in the course of ordinary activities of an entity. 'Increases in assets' include those arising on the disposal of non-current assets. The definition of income also includes **unrealized gains**, e.g on revaluation of marketable securities

ii. Expenses

Expense stand for decreases in assets, or increases in liabilities, that result in decreases in equity other than those relating to distributions to holders of equity claims.' Expenses include losses as well as those expenses that arise in the course of ordinary activities of an entity. Losses will include those arising on the disposal of non-current assets. The definition of expenses will also include unrealized losses, e.g the fall in value of an investment.

Income and expenses can be **presented in different ways** in the statement of profit or loss and other comprehensive income, to provide information relevant for economic decision making. For example, income and expenses which relate to continuing operations are distinguished from the results of discontinued operations.

2.3.2 Recognition and derecognition of element of financial statement

Recognition of element of financial statement

Only items that meet the definition of an asset, a liability or equity are recognized in the statement of financial position. Similarly, only items that meet the definition of income or expenses are recognized in the statement(s) of financial performance. However, not all items that meet the definition of one of those elements are recognized

Recognition

The process of capturing for inclusion in the statement of financial position or statement(s) of profit or loss and other comprehensive income an item that meets the definition of one of the elements of financial statements

- An asset,
- Liability,
- Equity,
- Income
- Expense.

An asset or liability should be recognized if it will be both relevant and provide users of the financial statements with a faithful representation of the transactions of that entity. The Conceptual Framework takes these fundamental qualitative characteristics along with the definitions of the elements of the financial statements as the key components of recognition.

Previously, recognition of elements would have been affected by the probability of whether the event was going to happen and the reliability of the measurement. The International accounting standards Board (IASB) has revised this as they believed this set too rigid criteria as entities may not disclose relevant information which would be necessary for the user of the financial statements because of the difficulty of estimating both the likelihood and the amount of the element.

Even if an item is not recognized, then the preparers of the financial statements should consider whether, in order to meet the faithful representation requirement, there should be a description in the notes to the financial statements.

- **Assets**

An asset is recognized in the balance sheet when it is probable that the future economic benefits will flow to the entity and the asset has a cost or value that can be measured reliably. The economic benefits contribute, directly or indirectly, in the form of cash or cash equivalents.

Even though many assets are in physical form, such as machinery, the physical form is not essentials. For example, patents and intellectual property are assets controlled by the entity and have future economic benefits.

- **A liability**

Liability is recognized in the balance sheet when it is probable that an outflow of resources embodying economic benefits will result from the settlement of a present obligation and the amount at which the settlement will take place can be measured reliably. For example, accounts payables are present obligations, which will result in an outflow of resources embodying economic benefit.

- **Income**

Income is recognized in the income statement when an increase in future economic benefit related to an increase in an asset or a decrease of a liability has arisen that can be measured reliably. In effect, the recognition of income occurs simultaneously with the recognition of increases in assets or decreases in liabilities. For example, when a sale is made, it results in a net increase in assets (cash). Income includes both revenues and gains, such as from sale of assets that are not a part of the normal business activity.

- **Expenses**

Expense is recognized when a decrease in future economic benefit related to a decrease in an asset or an increase of a liability has arisen that can be measured reliably. In effect, the recognition of expenses occurs simultaneously with the recognition of an increase in liabilities or a decrease in assets. For example, the depreciation of an asset decreases the asset and the expense is recognized. Expenses include both expenses and losses.

Derecognition of elements of financial statement

Derecognition is the removal of all or part of a recognized asset or liability from an entity's statement of financial position. Derecognition normally occurs when that item no longer meets the definition of an asset or liability.

The Conceptual Framework considers derecognition to be a factor when the following occurs:

- Loss of control or all or part of the recognized asset
- The entity no longer has an obligation for a liability. The International accounting standards boards (IASB) has brought these concepts of recognition and derecognition into the Conceptual Framework so that they can be revisited when visiting new standards or revising existing ones.

Derecognition of Property, Plant, and Equipment-PPE

Property, Plant, and Equipment is derecognized (that is, the cost and any related accumulated depreciation are removed from the accounting records) when it is sold or when no future economic benefit is expected. To account for the disposal of a PPE asset, the following must occur.

If the disposal occurs part way through the accounting period, depreciation must be updated to the date of disposal by

General Journal				
Date	Account/Explanation	PR	Debit	Credit
	Depreciation Expense		XXX	
	Accumulated Depreciation			XXX
	To update depreciation for partial period.			

Record the disposal including any resulting gain or loss by

General Journal				
Date	Account/Explanation	PR	Debit	Credit
	Cash (if any, or other assets received)		XXX	
	Accumulated Depreciation		XXX	
	Loss on Disposal		XXX	
	OR Gain on Disposal			XXX
	PPE Asset (such as Equipment)			XXX
	To record disposal of PPE asset.			

A loss arises whenever the carrying amount of the asset is greater than the proceeds received. A gain results when the carrying amount is less than any proceeds received.

2.3.3 Measurement of elements of financial statements

Measurement is the process of determining the monetary amounts at which the elements of the **financial statements** are to be recognized and carried in the balance sheet and income statement. This involves the selection of the particular basis of measurement.

i. Cost Model

After recognition, the asset should be carried in the Statement of Financial Position at:

a) Cost

b) Less Accumulated Depreciation

c) Less Accumulated Impairment Losses.

ii. Revaluation Model

After recognition, an asset, whose fair value can be measured reliably, should be carried at a revalued amount. The revalued amount is the fair value of the asset at the date of revaluation less subsequent accumulated depreciation and impairment losses

The fair value of property is based on its market value, as assessed by a professionally qualified value. The fair value of plant and equipment is usually their market value, determined by appraisal.

If there is no market-based evidence of fair value because the asset is of a specialized nature and is rarely sold, then the fair value of that asset will have to be estimated using an income or a depreciated replacement cost approach.

All revaluations should be made at such a frequency that the carrying amount does not differ materially from the fair value at the Statement of Financial Position date.

If an item of property, plant and equipment is revalued, then the entire class of property, plant and equipment to which the asset belongs shall be revalued.

Treatment of revaluation surplus

If an asset is revalued upwards:

Debit: Asset

Credit; Revaluation Surplus

With the amount of the increase

However, if the revaluation gains reverse a previous revaluation loss, which was recognized as an expense, then the gain should be recognized in the income statement (but only to the extent of the previous loss of the same asset). Any excess over the amount of the original loss goes to the Revaluation Surplus.

Example:

GJ Limited has land in its books with a carrying value of FRW 14 million. Two years ago, the land was worth FRW 16 million. The loss was recorded in the Income Statement. This year the land has been valued at 20 million FRW.

Dr	Land	FRW 6 million	
Cr	Income statement		FRW 2 million
Cr	Revaluation surplus		FRW 4 million

Treatment of revaluation deficit

Debit: income statement

Credit; asset

With the amount of the decrease

However, the decrease should be debited directly to the revaluation surplus to the extent of any credit balance existing in the revaluation surplus in respect of that asset.

Example:

G J Limited has land in its books with a carrying value of FRW 20 million. Two years ago, the land was worth FRW 15 million. The gain was credited to the Revaluation Surplus. This year the land has been valued at FRW 13 million.

Dr	Income statement	FRW 5 million	
Dr	Revaluation surplus	FRW 2 million	
Cr	Land		FRW 7 Million

Note that the Revaluation Surplus is part of owners' equity.

A number of different measurement bases are employed to different degrees and in varying combinations in financial statements. They include the following:

a. Historical cost.

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

b. Current cost.

Assets are carried at the amount of cash or cash equivalents that would have to be paid if the same or an equivalent asset was acquired currently.

Liabilities are carried at the undiscounted amount of cash or cash equivalents that would be required to settle the obligation currently.

c. Realizable (settlement) value.

Assets are carried at the amount of cash or cash equivalents that could currently be obtained by selling the asset in an orderly disposal.

Liabilities are carried at their settlement values; that is, the undiscounted amounts of cash or cash equivalents expected to be paid to satisfy the liabilities in the normal course of business.

d. Present value.

Assets are carried at the present discounted value of the future net cash inflows that the item is expected to generate in the normal course of business. Liabilities are carried at the present discounted value of the future net cash outflows that are expected to be required to settle the liabilities in the normal course of business. The measurement basis most commonly adopted by entities in preparing their financial statements is historical cost. This is usually combined with other measurement bases.

For example, inventories are usually carried at the lower of cost and net realizable value, marketable securities may be carried at market value and pension liabilities are carried at their present value.

2.3.4 Presentation and disclosures of financial statement

A reporting entity communicates information about its assets, liabilities, equity, income and expenses by presenting and disclosing information in its financial statements.

Effective communication of information in financial statements makes that information more relevant and contributes to a faithful representation of an entity's assets, liabilities, equity, income and expenses.

It also enhances the understandability and comparability of information in financial statements.

Effective communication of information in financial statements requires:

- Focusing on presentation and disclosure objectives and principles rather than focusing on rules.
- Classifying information in a manner that groups similar items and separates dissimilar items

Just as cost constrains other financial reporting decisions, it also constrains decisions about presentation and disclosure. Hence, in making decisions about presentation and disclosure, it is important to consider whether the benefits provided to users of financial statements by presenting or disclosing particular information are likely to justify the cost of providing and using that information.

Classification

Classification is the sorting of assets, liabilities, equity, income or expenses on the basis of shared characteristics for presentation and disclosure purposes. Such characteristics include—but are not limited to the nature of the item, its role (or function) within the business activities conducted by the entity, and how it is measured.

Classifying dissimilar assets, liabilities, equity, income or expenses together can obscure relevant information, reduce understandability and comparability and may not provide a faithful representation of what it purports to represent.

- **Classification of assets and liabilities**

Classification is applied to the unit of account selected for an asset or liability. However, it may sometimes be appropriate to separate an asset or liability into component that have different characteristics and to classify those components separately. That would be appropriate when classifying those components separately.

For example, it could be appropriate to separate an asset or liability into current and non-current components and to classify those components separately.

Offsetting

Offsetting occurs when an entity recognizes and measures both an asset and liability as separate units of account, but groups them into a single net amount in the statement of financial position. Offsetting classifies dissimilar items together and therefore is generally not appropriate.

Offsetting assets and liabilities differs from treating a set of rights and obligations as a single unit of account

- **Classification of equity**

To provide useful information, it may be necessary to classify equity claims separately if those equity claims have different characteristics.

Similarly, to provide useful information, it may be necessary to classify components of equity separately if some of those components are subject to particular legal, regulatory or other requirements. For example, in some jurisdictions, an entity is permitted to make distributions to holders of equity jurisdictions, an entity is permitted to make distributions to holders of equity. Separate presentation or disclosure of those reserves may provide useful information.

- **Classification of income and expenses**

Classification is applied to: components of such income and expenses if those components have different characteristics and are identified separately. For example, a change in the current value of an asset can include the effects of value changes and the accrual of interest. It would be appropriate to classify those components separately if doing so would enhance the usefulness of the resulting financial information.

- **Profit or loss and other comprehensive income**

Income and expenses are classified and included either:

a) in the statement of profit or loss or

b) Outside the statement of profit or loss, in other comprehensive income.

The statement of profit or loss is the primary source of information about an entity's financial performance for the reporting period. That statement contains a total for profit or loss that provides a highly summarized depiction of the entity of the financial performance for the period. Many users of financial statements incorporate that total in their analysis either as a starting point for that analysis or as the main indicator of the entity's financial performance for the period.

The statement of profit or loss is primary source of information about an entity's financial performance for the period, all income and expenses are, in principle, included in that statement. However, in developing standards the board may decide in exceptional circumstance that income or expenses arising from a change in the current value of an asset or liability are to be statement of profit or loss providing more relevant information, or providing more faithful representation of the entity's financial performance for that period.

2.3.5 The reporting entity

A reporting entity is an entity that is required, or chooses, to prepare financial statements

A reporting entity can be a single entity or a portion of an entity can comprise more than one entity. A reporting entity is not necessarily a legal entity. Sometimes one entity (parent) has control over another entity (subsidiary). If a reporting entity comprises both the parent and its subsidiaries, the reporting entity's financial statements are referred to as 'consolidated financial statements.

If the reporting entity is the parent a reporting a lone, the reporting entity's financial statements are referred to as "unconsolidated financial statements"

If a reporting entity comprises two or more entities that are not all linked by a parent-subsidiary relationship, the reporting entity's financial statements are referred to as 'combined financial statements

2.3.6 Concepts of capital and capital maintenance concepts of capital

a. Concepts of capital

A financial concept of capital is adopted by most entities in preparing their financial statement. Under a financial concept of capital, such as invested money or invested purchasing power, capital is synonymous with the *net asset* or *equity of the entity*.

Under physical concept of capital, such as operating activity, capital is regarded as **productive capacity of the entity** based on for example, units of output per day.

The selection of the appropriate concept of capital by an entity should be based on the needs of the **users of its financial statements**. Thus, a financial concept of capital should be adopted if the users of financial statement are primarily concerned with maintenance of nominal invested capital or the purchasing power of invested capital.

If, however, the main concern of the users is with the operating capability of the entity, physical concept of capita should be used.

The concept chosen indicates the goal to be attained in determining profit, even though there may be some measurement difficulties in making the concept operational.

b. Concepts of capital maintenance

The concept of capital gives the following concepts of capital maintenance:

Physical capital maintenance: under this concept a profit is earned only if the physical productive capacity (operating capacity) of the entity (resources or funds needs to achieve that capacity) at the end of the period exceeds the physical productive capacity at the beginning of the period, after excluding any distributions to, and contributions from, owners during the period.

Financial capital maintenance: under this concept a profit is earned only if financial (or money) amount of net assets at the end of the period exceeds the financial (or money) amount of net assets at the beginning of the period after excluding any distribution to, and contribution from owners during the period.

Financial capacity maintenance can be measured in their normal monetary units or units of constant purchasing power.

The concept of capital maintenance is concerned with how an entity defines the capital that it seeks to maintain.

It provides the linkages between the concept of capital and the concept of profit because it provides the point of reference by which profit is measured, it is prerequisite for distinguishing between an entity's return on capital and its return of capital, only in flow of assets in excess of amount needed to maintain capital may be regarded as profit and therefore as a return on capital. Hence, profit is the residual amount that remains after expenses (including capital maintenance, adjustment, where appropriate) have been deducted from income. If expenses exceed income the residual amount is loss.

The principal difference between the two concepts of capital maintenance is the treatment of the effects of changes in the prices of assets and liabilities of the entity. In general terms, an entity has maintained its capital if it has as much capital at the end of the period as it had at the beginning of the period

Any amount over and above that required to maintain the capital at the beginning of the period is profit.

Example of the physical concept of capital:

An entity is established on 1 January 2022 with 20,000 ordinary shares at FRW 1,000 each.

It then buys FRW 20,000,000 worth of stock, which they sold it during the year for FRW 25,000,000.

At the end of the year the purchase price of the stock increased on FRW 23,000,000.

Required: Compute profit using capital maintenance concept

Using the physical capital maintenance concept, the profit for the reporting period is: FRW 2,000,000 i.e FRW 25,000,000 - FRW 23,000,000.

If the financial capital maintenance concept is used, the profit for the year is: FRW 5,000,000, but if the company paid out the FRW 5,000,000 profit to shareholders, it would be unable to buy the same stock again as the purchase price arisen.

Note: Most entities use the financial capital maintenance concept as it is the easiest to apply because it uses actual prices paid for goods, rather than making adjustments.

Investors prefer to use the financial capital maintenance concept as they allow them to assess increasing and maximizing the returns they get on their investment.

Application activity 2.3

a) Fill in the blanks.

i) The elements affecting Financial position are:…...., ……….. and ……….

ii) The elements affecting financial performance are ………… and ……………….

iii) ………………. .is a present economic resource controlled by the entity as a result of past events. An economic resource is a right that has the potential to produce economic benefits.

iv) ……………………is a present obligation of the entity to transfer an economic resource as a result of past events.

v) ……………. is the residual interest in the assets of the entity after deducting all its liabilities?

b) Explain derecognition as used in accounting

c) Explain when to recognize the elements of statements of financial performance

Skills Lab

Visit small business located near the school and request for a trial balance. From the trial balance select elements to appear in financial performance and element to appear in financial position.

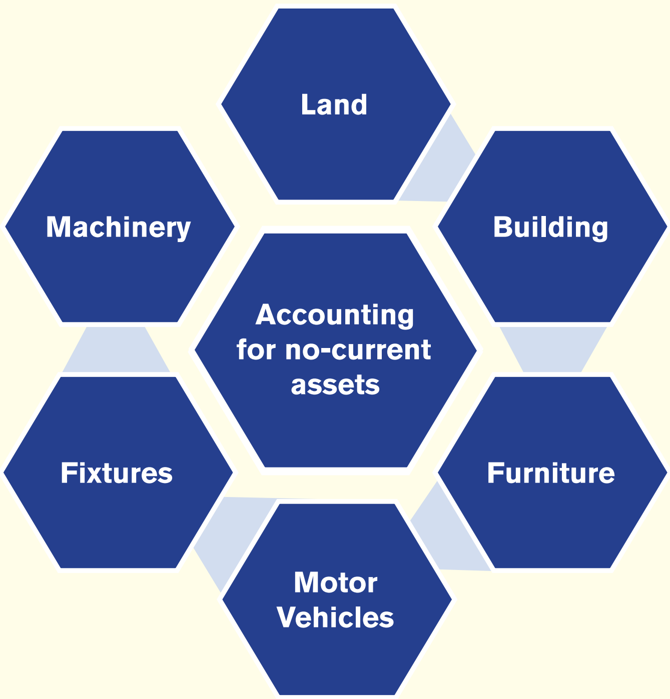
End unit assessment

1. Making an allowance for receivables is an example of which concept?
   a) Accruals
   b) Going concern
   c) Materiality
   d) Fair presentation
2. What does 'relevance' mean in the context of financial statements?
3. Based on Conceptual Framework, identify the fundamental characteristics and the enhancing qualitative characteristics of financial statements.
4. An obligation may be recognized when:
   a) The obligation is fulfilled
   b) When an obligation meets the definition of a liability
   c) When it is probable that economic benefits will be received
   d) When the obligation can be faithfully represented, even if it is irrelevant to a user
5. An entity is established on 1 January 2022 with 40,000ordinary shares at FRW 2,000 each. They then bought FRW 40,000,000 worth of stock, which generated sales during the year of FRW 50,000,000. At the end of the year the purchase price of the stock increased on FRW 46,000,000. Calculate profit under financial capital maintenance concept and physical capital maintenance concept.

UNIT 3 | ACCOUNTING FOR TANGIBLE NON-CURRENT ASSETS

Key unit competence: To be able to measure and record tangible non-current assets

Introductory activity



Observe the above picture and answer the following questions:

Based on International Accounting Standard (IAS) 16,

1) Why is it necessary to account for tangible fixed assets? Justify your answer.
2) What is the meaning of carrying amount of fixed asset?
3) What is Residual value of tangible fixed asset?.

3.1 Determination of the cost for non-current assets

Learning Activity 3.1

ALLELUA LTD has acquired a machine at the following information:

	FRW
Acquisition cost	7,000,000
Installation cost	300,000
Service cost before use	200,000
Service cost after use for one year	100,000
Estimated residual value	300,000
Estimated service life	3 years

Required:

Is it necessary to recognize for this new asset in the books of ALLERUA LTD? If yes, what is the meaning of recognition of intangible fixed asset?

3.1.1 International Accounting Standard (IAS) 16

IAS 16 covers keys aspect of accounting for property, plant and equipment. This represents the bulk of items which are "tangible non-current assets".

- **Objective**

IAS 16 Property, Plant and Equipment outlines the accounting treatment for most types of property, plant and equipment. The Standard addresses the recognition, measurement and disclose of all property, plant and equipment pertaining to the entity.

- **Scope**

Property, plant and equipment are tangible assets that:

i. Are held for use in the production or supply of goods or services, for rental to others, or for administrative purposes.

ii. Are expected to be used during more than one period

Carrying amount is the amount at which an asset is recognized in the statement of financial position after deducting any accumulated depreciation and accumulated impairment losses.

IAS 16 should be followed when accounting for property, plant and equipment unless another international accounting standard requires a **different treatment**

IAS 16 does not apply to the following:

a) Biological assets related to agricultural activity, apart from bearer biological assets

b) Mineral rights and mineral reserves, such as oil, gas and non-regenerative resources

c) Property, plant and equipment classified as held for sale.

However, the standard applies to property, plant and equipment used to develop these assets.

A bearer biological asset is living plant that:

a) Is used in the production or supply of agricultural produce

b) Is expected to bear produce for more than one period; and

c) Has a remote likelihood of being sold as agricultural produce, except for incidental scrap sales?

- **Recognition**

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

i. It is probable that future economic benefits associated with the asset will flow to the entity;

ii. The cost of the asset to the entity can be **measured reliably**.

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.

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

First criterion: Future economic benefits

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

Second criterion: cost measured reliably

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

3.1.2 Measurement

- **Initial measurement**

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

i. Components of cost

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

a) **Purchase price,** less any trade discount or rebate

b) **Import duties** and non-refundable purchase taxes

c) **Direct attributable costs** of bringing the asset to working condition for its intended use, eg:
   - The cost of site preparation
   - Initial delivery and handling costs
   - Installation costs
   - Testing (net of any proceeds on the sale of items produced)
   - Professional fees (architects, engineers)

Initial estimate of unavoidable cost of dismantling and removing the asset and restoring the site on which it is located

IAS 16 provides guidance on directly attributable costs included in the cost of an item of property, plant and equipment.

a) The cost bringing the asset to the location and working conditions necessary for it to be capable of operating in manner intended by management, including those costs to test whether the asset is functioning properly.

b) They are determined after deducting the net proceeds from selling any items produced when bringing the asset to its location and condition.

Income and related expenses of operations that are **incidental** to the construction or development of an item of property, plant and equipment should be **recognized** in profit or loss.

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

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

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

In the case of **self-constructed assets**, the same principles are applied as for acquired assets. If the entity's normal course of business is to make these assets and sell them externally, then the cost of the asset will be the cost of its production. This also means that abnormal costs (wasted material, labor or downtime costs) are excluded from the cost of the asset. An example of a self-constructed asset is when a building company builds its own office.

ii. Subsequent expenditure

The recognition criteria apply to subsequent expenditure as well as costs incurred initially. There are no separate criteria for recognizing subsequent expenditure. For example, if a shop building is extended to include a new café as revenue source, then this meets the criteria of probable future economic benefits, and so should be recognized as property, plant and equipment.

However, if the shop building is maintained or repaired, it does not enhance the future economic benefits, it merely sustains the existing economic benefits and therefore the costs must be expensed.

iii. Exchanges of assets

IAS 16 specifies that exchange of items of property, plant and equipment, regardless of whether the assets are similar, are measured at **fair value, unless the exchange transaction lacks commercial substance** or the fair value of neither of the assets exchanged can be **measured reliably**. If the acquired item is not measured at fair value, its cost is measured at the carrying amount of the asset given up.

- **Measurement subsequent to initial recognition**

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

i. Cost model. Carry the asset at its cost less depreciation and any accumulated impairment loss.

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

Revaluations

The **market value** of land and buildings usually represents fair value, assuming existing use and line of business. Such valuations are usually carried out by professionally qualified valuers

In the case of **plant and equipment**, fair value can also be taken as **market value**. Where a market value is not available, however, depreciated replacement cost should be used. There may be not market value where types of plant and equipment are sold only rarely or because of their specialised nature (i.e they would normally only be sold as part of an ongoing business).

The frequency of valuation depends on the **volatility of the fair values** of individual items of property, plant and equipment, the more volatile the fair value, the more frequently revaluations should be carried out. Where the current fair value is very different from the carrying amount then a revaluation should be carried out.

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

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

Accounting for revaluations

How should any increase in value be treated when a revaluation takes place? The debit will be the increase in value in the statement of financial position, but what about the credit? IAS 16 requires the increase to be credited to other comprehensive income and accumulated in a revaluation surplus (ie part of owner's equity), unless there was previously a decrease on the revaluation of the same asset.

DEBIT Carrying amount (statement of financial position)

CREDIT Other comprehensive income (revaluation Surplus)

Reversing a previous decrease in value

If the asset has previously suffered a decrease in value that was charged to profit or loss, any increase in value on subsequent revaluation should be recognized in profit or loss to the extent that it reverses the previous decrease. The amount of the reversal is not necessarily the same as the amount of previous decrease- the cumulative effect of differences in depreciation charged to profit or loss as a result of the previous decrease must be considered. Any excess is then recognized in other comprehensive income and accumulated in a revaluation surplus.

Example

ABC Ltd has an item of land carried in its books at FRW 13 million as at 31 March 2018. Two years previously, at 31 March 2016, a slump in land values led the company to reduce the carrying amount from FRW 15 million. This was taken as an expense in profit or loss. There has been a surge in land prices in the current year and the land is now worth FRW 20 million.

Account for revaluation in the current year ending 31 March 2018.

Answer

The double entry is:

	FRW (Million)
Dr Carrying amount of land	7
Cr Profit or loss account	2
Cr other comprehensive income (Reserve) 7-2	5

The case is similar for a Decrease in value on revaluation. Any decrease should be recognized as an expense, except where it offsets a previous increase taken as a revaluation surplus in owners' equity. Any decease greater than the previous upwards increase in value must be taken as an expense in the profit or loss.

Example:

Let us simply swap round the example given above. The original cost was FRW 15 million, revalued upwards to FRW 20 million two years' ego, for the period ending 31 March 2016. The value has now fallen to FRW 13 million as of 31 March2018.

Account for the decrease in value.

	FRW Million
Dr Other comprehensive income (Reserve) Reversal of previous recognized surplus	5
Dr Profit or loss	2
Cr carrying amount of land	7

Remember that IAS 16 requires the initial increase here to be credited to other comprehensive income and accumulated in a revaluation surplus (i.e part of owners' equity), therefore the increase in 31 march 2016 will be taken to other comprehensive income and held in the revaluation surplus.

Once the value decreases, the **original increase in value must be reversed** and any amounts over and above that should be taken to the statement of profit or loss.

Revaluation of depreciated assets

There is a further complication when a revalued asset is being depreciated. As we have seen, an upward revaluation means that the depreciation charge will increase. Normally, a revaluation surplus is only realized when the asset is sold. However, when it is being depreciated, part of that surplus is being realized as the asset is used.

The amount of the surplus realized is the difference between depreciation charged on the revalued amount and the (lower) depreciation which would have been charged on the asset's original cost. **This amount can be transferred to retained (realized) earnings but NOT through profit or loss.**

Example:

KBG Ltd bought an asset for FRW 10 million at the beginning of 2016. It had a useful life of 5 years. On January 2018 the asset was revalued to FRW 12 million. The expected useful life has remained uncharged (i.e three years remain).

Account for the revaluation and state the treatment for depreciation from 2018 onwards.

On 1st January 2018 the carrying amount of the asset has changed to FRW 12 million. Up to 1 January 2018, the company has depreciated the asset by FRW 4 million (FRW 10 million/5years*2) to reflect that the asset has been realized through use. This means that the carrying amount was therefore FRW 6 million (FRW 10 million- FRW 4 million), which is credited to other comprehensive income.

Due to the increased value, it appears that none of the asset's original cost has been used up in the past two years; therefore, we must also reverse the accumulated depreciation:

		FRW (M)	FRW (M)
Debit	Accumulated depreciation	4	
Debit	Carrying amount	2	
Credit	Other comprehensive income (revaluation surplus)		6

The depreciation for the next three years will be FRW 12 million÷3= FRW 4million

Debit	Depreciation	4	
Credit	Accumulated depreciation		4

The new depreciation is FRW 4 million compared to depreciation on the original cost of 10m÷5= FRW 2m. So each year, the extra FRW 2 million can be treated as part of the revaluation surplus that has become realized:

Debit	Other comprehensive income (revaluation surplus)	2	
Credit	Retained earnings		2

This is the movement on owners' equity only and it will be shown in the statement of changes in equity it is not an item in profit or loss.

Complex assets

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

Example

A company purchases an aircraft for FRW 330,000 million. Show how the asset should be accounted for at the end of the first financial year if the following is a list of its component parts:

	Cost FRW (Million)	***Useful life***
Fuselage	200,000	20 years
Undercarriage	50,000	500 landings
Engines	80,000	1600 flying hours
	330,000	

Answer

Depreciation at the end of the first year, in which 150 flights totaling 400 hours were made, would then be:

	FRW (Million)
Fuselage (FRW 200,000M/20)	10,000
Undercarriage (FRW 50,000 x 150/500)	15,000
Engines (FRW 80,000 x 400/1600)	20,000
Total depreciation expense	45,000
The cost of the asset would be	330,000
Less: Accumulated depreciation	45,000
Carrying amount	285,000

Retirements and disposals

When an asset is permanently **withdrawn from use, or sold or scrapped**, and no future benefits are expected from its disposal, it should be derecognized from the statement of financial position.

Gain or losses are the difference between the estimated net disposal proceeds and the carrying amount of the asset. They should be recognized as income or expense in profit or loss.

Derecognition

An entity is required to **derecognize the carrying amount** of an item of property, plant or equipment that it disposes of on the date the criteria for the sale in IFRS 15 *Revenue from contracts with customers* would be met. This also applies to parts of an asset.

Application activity 3.1

An equipment was purchased from England at CIF Mombasa value of FRW 10,000,000. Transportation fees to Kigali Magerwa costs FRW 1,500,000; imports duties and fees amounted to FRW 1,900,000. The installation cost was FRW 2,000,000 while trial runs and commissioning amounted to FRW 2,600,000.

Required: Determine the original cost for that equipment

3.2 Compute depreciation charge and carrying amount

Learning Activity 3.2

A machine was bought at a cost of FRW 6,500,000; total non-refundable taxes paid on the purchase transaction amounted to FRW 1,500,000 while the installation cost was FRW 2,000,000. The scrap value is estimated at FRW 256,000 at the end of the estimated lifetime of 4 years.

Required*:* Based on the above information explain the following terms:

a) Capital expenditure

b) Depreciation

c) Residual value

d) Useful life

Capital and Revenue Expenditure

Capital expenditure is money spent by a business on the purchase of fixed assets for use in the business and not for immediate resale, or on their alteration or improvement; it includes any costs of delivering or installing fixed assets, and the legal costs of buying a non-current asset.

Revenue expenditure is money spent on the running expenses of a business: that is, maintenance of fixed assets, the cost of administering the business and selling and distributing goods, and the cost of stock of goods acquired with intention of resale.

Differences between capital and revenue expenditure

Expenditure	Type of expenditure
Buying van	Capital
petrol costs for van	Revenue
Repairs to van	Revenue
Putting extra headlights on van	Capital
Buying machinery	Capital
Electricity costs of using machinery	Revenue
We spent FRW 1.5 million on machinery: FRW 1million for an item (improvement) and FRW 0.5 million was for repairs	Capital FRW 1 M Revenue FRW 0.5M
Painting outside of new building	Capital
Three years later – repainting outside of building in (8)	Revenue

Depreciation

Depreciation accounting is governing by IAS 16 property, plant and equipment. These are some of IAS 16 definitions concerning depreciation.

Depreciation is the systematic allocation of the depreciable amount of an asset over its estimated useful life. Depreciation for the accounting period is charged as an expense to net profit or loss for the period either directly or indirectly.

Depreciable assets are assets which:

- Are expected to be used during more than one accounting period
- Have a limited useful life
- Are held by an entity for use in the production or supply of goods and services, for rental to others, or administrative purposes.

Useful life is one of two things:

- The period over which a depreciable asset is expected to be used by the entity; or
- The number of production or similar units expected to be obtained from the asset by the entity.

Depreciable amount of a depreciable asset is the historical cost or other amount substituted for cost in the financial statement, less its estimated residual value.

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

Residual value is the net amount which the entity expects to obtain for an asset at the end of its useful life after deducting the expected costs of disposal.

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

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

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

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

The need to depreciate non-current assets arises from the **accruals assumption**. If money is expended in purchasing an asset, then the amount expended must at some time be charged against profits. If the asset is one which contributes to an entity's revenue over a number of accounting periods it would be inappropriate to charge any single period (e.g the period in which the asset was acquired) with the whole of the expenditure. Instead, some method must be found of spreading the cost of the asset over its estimated useful life.

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

- It is sometimes thought that the carrying amount of an asset is equal to its net realizable value and that the object of charging depreciation is to reflect the fall in value of an asset over its life. This misconception is the basis of a common, but incorrect, argument which says that freehold properties need not be depreciated in times when property values are arising.

It is true that historical cost statements of financial position often give a misleading impression when a property's carrying amount is much below its market value, but in such a case it is open to a business to incorporate a revaluation into its books, or even to prepare its accounts based on current costs. This is a separate problem from that of allocating the property's cost over successive accounting periods.

- Another misconception is that depreciation is provided **so that an asset can be replaced at the end of its useful life**. This is not the case :
  - If there is no intention of replacing the asset, it could then be argued that there is no need to provide for any depreciation at all.
  - If prices are rising, the replacement cost of the asset will exceed the amount of depreciation provided.

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

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

Useful life

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

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

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

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

Land and buildings are dealt with separately when it comes to depreciation, even when they are acquired together, because land normally has unlimited life and is therefore not depreciated. In contrast buildings do have a limited life and must be depreciated. Any increase in the value of land on which a building is standing will have no impact on the determination of building; useful life.

Review of useful life

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

Example:

ABC Ltd acquired a non-current asset on 1 January 2002 for FRW 800,000. It had no residual value and a useful life of ten years. On 1 January 2005, the remaining useful life was reviewed and revised to 4 years.

What will be the depreciation charge for 2005?

Answer

	FRW
Original cost	800,000
Depreciation 2002-2004 (800,000*3/10)	(240,000)
Carrying amount at 31 December 2004	560,000
Remaining life	4 years
Depreciation charge years 2005-2008 (560,000/4)	140,000

Residual value

In most cases the residual value of an asset is **likely to be immaterial**. If it is likely to be of any significant value, that value must be estimated at the date of purchase or any subsequent revaluation. The amount of residual value estimated based on the current situation with other similar assets, used in the same way, which are now at the end of their useful lives. Any expected costs of disposal should be offset against the gross residual value.

Depreciation methods

Consistent is important. The depreciation method selected should be applied consistently from period to period unless altered circumstances justify a charge. When the method is changed, the effect should be quantified and disclosed and the reason for the change should be stated.

Various methods of allocating depreciation to accounting periods are available, but whichever is chosen must be applied consistently to ensure comparability from period to period. Change of policy is not allowed simply because of the profitability situation of the entity.

Depreciation methods were covered extensively in senior 5. The most common accepted methods of allocating depreciation are straight-line method and reducing balance method.

Under straight-line method, the depreciable amount is charged in equal installments over the asset's expected useful life. This method is best when the business enjoys the benefits of the asset in equal measure over the asset's useful life. It is useful where there is an estimated realizable or scrap value after a set period, for example, a van may be used by a business for four years, but with the aim of selling it back to the motor company for an agreed amount of money after that time.

Under the reducing balance method, the annual depreciation charge is a fixed percentage of the carrying amount, as at the end of the accounting period. Examples include machinery which has a higher productivity in the earlier years of its usage.

The reducing balance method should be used when it is considered fair to allocate a greater proportion of the total depreciable to the earlier years and a lower amount in the later years, on the assumption that the benefits obtained by the business from using the asset decline over time. Examples would include computer hardware or production machinery that gets less efficient as it ages.

Review of depreciation method

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

Impairment of carrying amounts of non-current assets

An **impairment loss** is the amount by which the carrying amount of an asset exceeds its recoverable amount.

An **impairment loss** should be treated in the same way as **revaluation decrease** i.e the decrease should be recognized as an expense. However, a revaluation decrease (impairment loss) should be charged directly against any related revaluation surplus to the extent that the decrease does not exceed the amount held in the revaluation surplus in respect of that same asset.

A **reversal of an impairment** loss should be treated in the same way as a **revaluation increase**, i.e a revaluation increase should be recognized as an income to the extent that it reverses a revaluation decrease or an impairment loss of the same asset previously recognized as an expense.

Disclosure

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

- Measurement bases for determining the gross carrying amount (if more than one, the gross carrying amount for that basis in each category)
- Depreciation method used
- Useful lives or depreciation rates used
- Gross carrying amount and accumulated depreciation (aggregated with accumulated impairment losses) at the beginning and end of the period
- Reconciliation of the carrying amount at the beginning and end of the period showing:
  - Additions
  - Disposals
  - Acquisitions through business combinations
  - Increases/decreases during the period from revaluations and from impairment losses
  - Impairment losses recognized in profit or loss
  - Impairment losses reversed in profit or loss
  - Depreciation
  - Net exchange differences (from translation of statements of e foreign entity)
  - Any other movements

The financial statements should also disclose the following:

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

- Accounting policy disclosing the valuation bases used for determining the amounts at which depreciable assets are stated.

IAS 16 also requires the following to be disclosed for major class of depreciable asset:

Revalued assets require further disclosures:

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

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

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

Application activity 3.2

The following information relates to BGM LTD:

Extract from 31Dec 2012 balance sheet

Non-current assets	**Cost**	**Acc. Deprec**	**Book value**
	FRW (000)	**FRW (000)**	**FRW (000)**
Equipment	25,000	10,000	15,000

On Feb 2013, an additional equipment was bought at a cost of FRW 2,500,000. Due to expansion in the market for serviced plots, another equipment, was bought on 24th June 2013 at a cost of FRW 3,750,000.

On Feb 2013, an additional equipment was bought at a cost of FRW 2,500,000. Due to expansion in the market for serviced plots, another equipment, was bought on 24th June 2013 at a cost of FRW 3,750,000. However, an equipment which had been acquired at a cost of FRW 2,000,000 on 7th April2010 and was expected to have a useful life of 5years and a scrap value of FRW 125,000 could not cope up with bigger projects efficiently, as a result on 5 July 2013, management disposed it off at FRW 750,000.

Another equipment which was bought on 20th May 2010 at a cost of FRW 4,000,000 and was expected to have a residual value of FRW 250,000 at the end of tenth year broke down was disposed of at FRW 1,750,000 on 3 September 2013.

The company's policy is to charge full depreciation in the year of purchase and none at all in the year of sale (disposal).

The company followed straight line method of depreciation but changed to charge depreciation at rate of 10% on cost for the equipment which was available by the end of 31 December 2013. All transactions were by cheque.

Required:

Prepare the following accounts as at 31 December 2013:

a) Equipment A/C

b) Equipment disposal A/C

c) Accumulated depreciation-equipment A/C

End unit assessment

1) KABALISA Ltd acquired a building in KIGALI on 1st January 2011 for FRW 200 million. The building was judged to have a useful life of 50 years. On 31 December 2013, the property was revalued at FRW 210 million. On January 2016 the property was independently valued at FRW 170 million, the useful life was unchanged.

Required

Calculated the effect of the property on the statement of profit or loss for the year ended 31st December 2016.

2) The following information was got from the balance sheet of GASABO TOURS as at 31 December 2021

NUN-CURRENT ASSETS	**COST**	**ACC. DEPREC**	**NBV**
	FRW'000	**FRW'000**	**FRW'000**
Motor vehicles	200,000	50,000	150,000

Details regarding some vehicles

Vehicle	Prado	Benz	Hyundai
Cost	16,000,000	32,000,000	5,000,000
Purchase date	3 March 2017	14 August 2018	1 July 2020
Estimated useful life	10 years	10 years	5years
Salvage value	1,000,000	2,000,000	2,000,000
Disposal date	2 April 2022	3 March 2022	10 June 2022
Proceeds	5,400,000	10,000,000	500,000
Deprec. Method	straight line	straight line	SOYDM

SOYDM: Sum of Years Digits method

All transactions were by cheque. It is the company's policy to charge a full year's depreciation in the year of purchase and none in the year of disposal. All motor vehicles that are not disposed by 31December 2022 should be depreciated by 20% on cost. The company's financial year runs from 1 January to 31 December.

Required:

i. Motor vehicles A/C

ii. Motor vehicles Accumulated depreciation A/C

iii. Motor vehicles disposal A/C

UNIT 4 | INTANGIBLE ASSETS

Key unit competence: To be able to measure and record intangible assets

Introductory activity

Coca cola, Microsoft and Google are examples of the products that have given the world their best and they are biggest trade mark since their registration. The good reputation built over the years was catalyzed by innovation and advertisements in big tournaments or events streamlined through world class media.

What do you think these trademarks are in their books of accounts?

a) Company's name

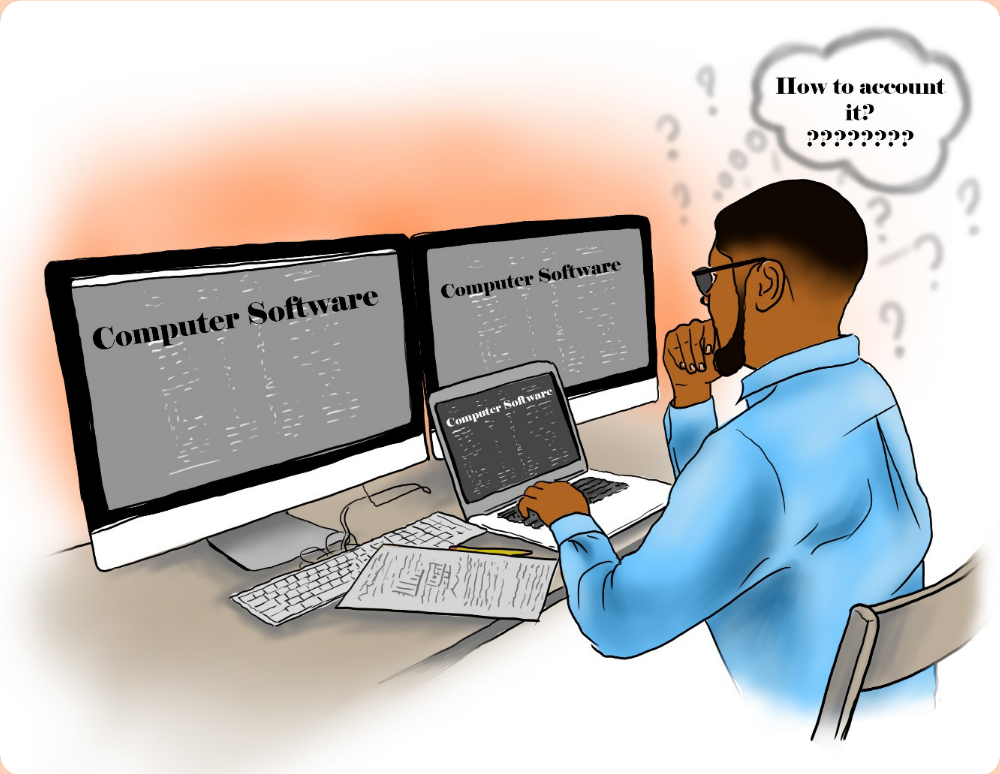
b) Asset

c) Equity

d) Revenue

4.1 Introduction

Learning Activity 4.1



Required: Analyze the above picture and answer the following questions:

1) What does the picture demonstrate?

2) Is a computer software an intangible asset ? Justify your answer.

4.1.1 Objective and scope

- **Objective**

The objective of this Standard is to prescribe the accounting treatment for intangible assets that are not dealt with specifically in another Standard.

This Standard requires an entity to recognize an intangible asset if, and only if, specified criteria are met. The Standard also specifies how to measure the carrying amount of intangible assets and requires specified disclosures about intangible assets

- **Scope**

This standard shall be applied in accounting for intangible assets except:

i. Intangible assets that are within the scope of another standard

ii. Financial assets

iii. Recognition and measurement of exploration and evaluation assets

iv. Expenditure on the development and extraction of minerals, oil, natural gas and similar non-regenerative resources.

Note: If another Standard prescribes the accounting for a specific type of intangible asset, an entity applies that Standard instead of this Standard.

a) This Standard applies to, among other things, expenditure on advertising, training, start-up, and research and development activities. Research and development activities are directed to the development of knowledge. Therefore, although these activities may result in an asset with physical substance (e.g: a prototype), the physical element of the asset is secondary to its intangible component, i.e the knowledge embodied in it.

b) Rights held by a lessee under licensing agreements for items such as motion picture films, video recordings, plays, manuscripts, patents and copyrights are within the scope of this Standard

Intangible assets that contain physical subsistence

Some intangible assets may be contained in or on a physical substance such as a compact disc (in the case of computer software), legal documentation (in the case of a license or patent) or film.

In determining whether an asset that incorporates both intangible and tangible elements should be treated under IAS 16 Property, Plant and Equipment or as an intangible asset under this Standard, an entity uses judgement to assess which element is more significant. For example, 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. When the software is not an integral part of the related hardware, computer software is treated as an intangible asset.

4.1.2 Definition and criteria to recognize intangible assets

- **Definition**

The following terms are used in this Standard with the meanings specified therein

i. **Intangible assets**: Intangible assets are non-current assets with no physical substance, but which can be recognized in the statement of financial position if they meet certain criteria.

ii. **Amortization:** is the decrease in the value of intangible asset due to its use.

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

iv. **Carrying amount** is the amount at which an asset is recognized in the statement of financial position after deducting accumulated amortization and accumulated impairment losses thereon.

v. **Depreciable amount** is the cost of an asset, or other amount substituted for cost less its residual amount

vi. **Research** is the original and planned investigation undertaken with the prospect of gaining new scientific or technical knowledge and understanding.

vii. **Development** is the application of reach findings or other knowledge to a plan or design for the production of the new or improved materials, products or system before start of commercial production or use

viii. **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 measurement date

ix. **Impairment loss**: is the amount which the carrying amount of an asset exceeds its recoverable amount

x. **Residual value of intangible assets**: is the estimated amount that an entity would currently obtain from disposal of the asset, after deducting the estimated costs of disposal.

xi. **Useful life**: Useful life is the period over which an asset is expected to be available for use by an entity.

- **Criteria necessary to recognize intangible assets**

The intangible asset is recognized if the following three criteria are fully met

i. The intangible asset should be identifiable

Intangible asset is identifiable when

a) It is separable, i.e is capable of being separated or divided from the entity and sold, transferred, licensed, rented or exchanged, either individually or together with a related contract, identifiable asset or liability, regardless of whether the entity intends to do so

b) Arises from contractual or other legal rights, regardless of whether those rights are transferable or separable from the entity or from other rights and obligations

ii. Intangible asset is controlled by entity

An entity controls an intangible asset if the entity has the power to obtain the future economic benefits flowing from the underlying resource and to restrict the access of others to those benefits.

iii. Intangible asset has expected future economic benefits

An item can only be recognized as an intangible asset if economic benefits are expected to flow in the future from ownership of the asset. This economic benefit could be revenue from the sale of products or services, cost savings, or other benefits resulting from the use of that intangible asset by the entity.

4.1.3 Exchange of asset

How to determine value of the exchanged asset?

If one intangible asset is acquired by way of exchanged for another, the cost of the intangible asset is measured at fair value unless:

- The exchange transaction lacks commercial substance i.e no way to determine market value ; or
- The fair value of neither the asset received nor the asset given up can reliably be measured.

If the acquired asset is not measured at fair value, its cost is measured **at the carrying amount of the asset given up.**

Example

Kigali Education Board is government business enterprises that comply with IFRS and IAS for reporting purpose.

On 01 January 2021, Kigali education board (KEB) decides to acquire Clients' Management System (CMS) that will serve as client management information system. With this system, the clients can register, request service, and pay through the system. Despite the need of the system, the management had no funds to finance it and they decided to exchange one of their motor vehicles into this system. The cost of this given up motor vehicle was FRW 20 million while its accumulated depreciation as of 01 January 2021 was FRW 4 million. Because the system was new in Rwanda, Kigali Education Board failed to determine market value of that system.

Required: Determine the value that will be assigned to this Client Management System in KEB's books of account

Answer

IAS 38 provides that if the acquired asset through exchange is not measured at fair value, its cost is measured at the carrying amount of the asset given up. Therefore, the fact that Kigali Education Board failed to determine fair value of the system, the carrying amount of the given-up asset which is now motor vehicle will serve the basis to determine initial value of the system.

Therefore, the value to be assigned to this Client Management System is FRW 16 million deemed to be carrying amount of motor vehicle, computed as follows FRW 20 million – FRW 4 million.

4.1.4 Types of intangible assets

- **Goodwill**

Goodwill is an intangible asset that arises when one company acquires another. Things like the value of a company name and brand, customer loyalty, or even good employee retention are examples of a goodwill asset. You can calculate a rough estimate of a goodwill asset by using this formula:

Goodwill= P - (A - L)

P = Purchase price of the target company

A = Fair market value of assets

L = Fair market value of liabilities

Goodwill acquired always makes it on to a balance sheet and will show up on a separate line than other intangible assets.

- **Brand equity:** This represents a well-recognized brand with ability to boost profit of the company. With good brand, the customers are willing to order and buy goods from you at highest price compared to similar product in the same industry
- **Intellectual properties: Example of intellectual properties includes: Copyrights, patents, franchises.**
- **Licensing**: This is another type of intangible assets whereby a company could buy license to use formula or software to make sales
- **Customer lists**

  A strong customer lists is an asset to the company that own it, because this is a tool that can increase company's profit

Application activity 4.1

Highland Ltd is a company that manufactures ink for big printers. During the year that ended 31 December 2021, the company acquired multisystem machine that will be used to produce the ink for new developed SPC360SN card printer. The machine requires software to operate and the software was successfully installed in the machine at cost of FRW 50 million. The machine could not operate without that software.

The FRW 50 million cost incurred to buy software will be treated as part of

a) IAS 38-Intangible assets

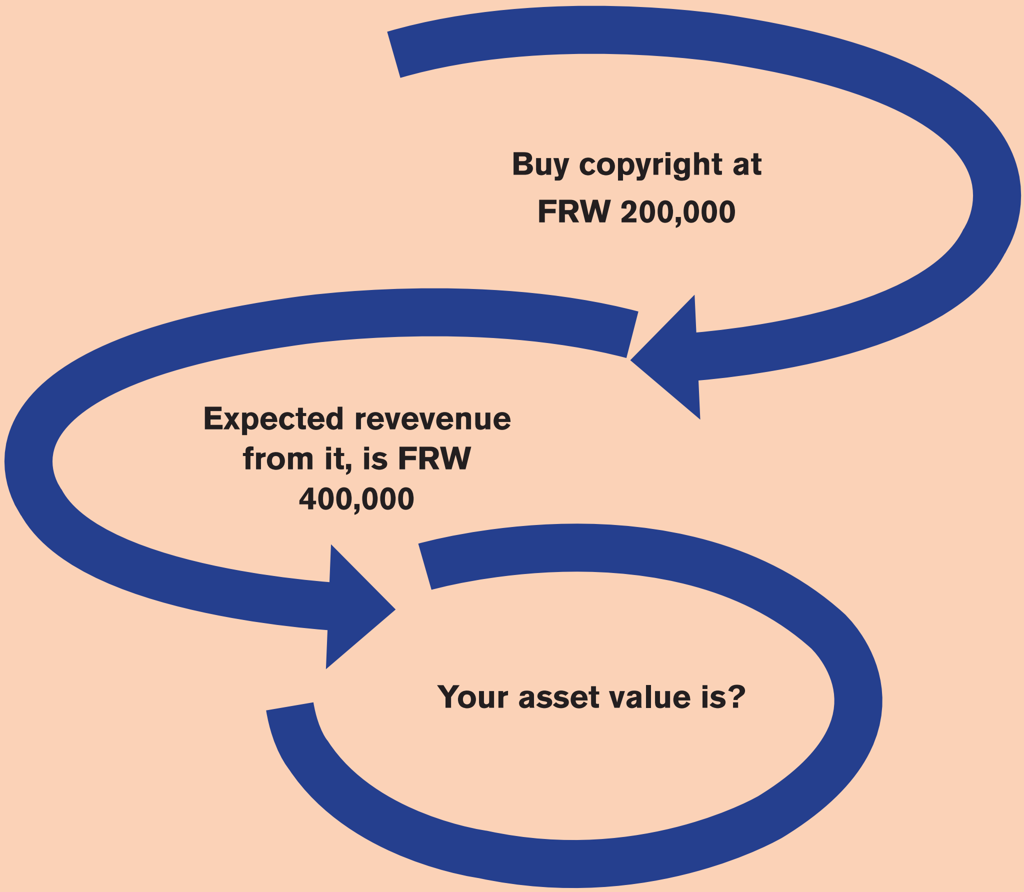
b) IAS 16-Property plant and Equipment

c) IFRS 16-Lease

d) None of the above

4.2 Measurement of Intangible asset

Learning Activity 4.2



4.2.1 Internally generated goodwill

In some cases, expenditure is incurred to generate future economic benefits, but it does not result in the creation of an intangible asset that meets the recognition criteria in this Standard. Such expenditure is often described as contributing to internally generated goodwill. Internally generated goodwill is not recognized as an asset because it is not an identifiable resource (ie it is not separable nor does it arise from contractual or other legal rights) controlled by the entity that can be measured reliably at cost.

How does internally generated goodwill arise?

In some instance, entity believes that the difference between fair value of entity's net assets and its carrying amount could represent goodwill.

However, that is wrong interpretation because the Differences between the fair value of an entity and the carrying amount of its identifiable net assets at any time may capture a range of factors that affect the fair value of the entity. Therefore, such differences do not represent the cost of intangible assets controlled by the entity

4.2.2 Initial measurement and subsequent measurement

- **Initial measurement**

Intangible assets are initially recognized at cost. This is either the purchase price, or the internally generated cost (see research and development later in this unit).

- **Subsequent measurement**

After initial recognition, the Standard allows two methods of valuation for intangible assets. The entity shall choose either:

i. Cost model and

ii. Revaluation model

The methods used for subsequent measurement of intangible assets are explained below

a) Cost Model

This method applies when an intangible asset is carried at its cost, less any accumulated amortization and less any accumulated impairment losses.

Computation of accumulated amortization is shown in learning outcome 4.2.3 of this book**.**

b) Revaluation model

The revaluation model allows an intangible asset to be carried at a revalued amount, which is its fair value at the date of revaluation, less any subsequent accumulated amortization and any subsequent accumulated impairment losses.

The standard states that there will not usually be an active market in an intangible asset; therefore, the revaluation model will usually not be available. For example, although copyrights, publishing rights and film rights can be sold, each has a unique sale value. In such cases, revaluation to fair value would be inappropriate. A fair value might be obtainable however for assets such as fishing rights or quotas or taxi cab licenses.

Treatment of Valuation surplus and deficit

Where an intangible asset is revalued upwards i.e fair value exceed carrying amount, the amount of the revaluation should be credited directly to equity under the heading of a revaluation surplus (other comprehensive income).

Dr. Intangible asset with the increased value	xxx	
Cr. Reserves under equity		xxx

Example

The intangible asset that cost FRW 10 million was revalued on 31 December 2022 at FRW 8 million. The accumulated amortization at the date of revaluation was FRW 4 million.

Required: Show how the above transaction will be treated in books of accounts

Answer: If the intangible asset is revalued, the first step you compute carrying amount of the revalued intangible asset at revaluation date. The carrying amount in this case is, FRW 6 million

i.e

	FRW million
Cost	10
Accumulated amortization	(4)
Carrying amount of the intangible asset	**6**

After determining carrying amount, next step is to compare revalued amount which is new value of the intangible asset with carrying amount. If the revalued amount exceeds carrying amount, the difference is **revaluation surplus**. Hence, based on subject matter above, the revaluation surplus is FRW 2 million

i.e

	FRW million
Revalued amount	8
Carrying amount	(6)
Revaluation surplus	**2**

With double entry,

Dr. Intangible asset	FRW 2 million	
Cr. Reserve		FRW 2 million

Where the carrying amount of an intangible asset is revalued downwards, the amount of the downward revaluation should be recognized in profit or loss, unless the asset has previously been revalued upwards in which case the revaluation decrease should be first charged against any previous revaluation surplus in respect of that asset.

Example: In our example above, let assume that the intangible asset was revalued at FRW 5 million. Therefore, this implies revaluation decrease as revalued amount falls short to carrying amount. **The deficit is FRW 1 million**

i.e

	FRW million
Revalued amount	5
Carrying amount	(6)
Revaluation deficit	**(1)**

With this deficit, profit or loss for the year will fall as follow

DR	Profit/loss	FRW 1 million	
Cr	Intangible asset		FRW 1 million

4.2.3 Useful life of intangible asset and amortization method

1. What is useful life of intangible asset

Useful life is the period over which an asset is expected to be available for use by an entity

An entity should assess the useful life of an intangible asset, which may be finite or indefinite. An intangible asset has an indefinite useful life when there is no foreseeable limit to the period over which the asset is expected to generate net cash inflows for the entity.

Many factors are considered in determining the useful life of an intangible asset, including:

- Expected usage
- Typical product life cycles
- Technical, technological, commercial or other types of obsolescence
- The stability of the industry; expected actions by competitors
- The level of maintenance expenditure required
- Legal or similar limits on the use of the asset, such as the expiry dates of related leases

2. Amortization of intangible assets

An intangible asset with a finite useful life should be amortized over its expected useful life. Amortization is calculated in the same way as depreciation for tangible assets.

When shall entity start and cease to compute amortization of intangible asset?

Amortization should start when the asset is available for use while amortization should cease at the earlier of the date the asset is classified as held for sale in accordance with IFRS 5

The residual value of an intangible asset with a finite useful life is assumed to be zero unless a third party is committed to buy the intangible asset at the end of its useful life or unless there is an active market for that type of asset (so that its expected residual value can be measured) and it is probable that there will be a market for the asset at the end of its useful life

Straight line method of amortization

The formula for straight-line amortization is shown below

$$Amortization = \frac{Cost}{useful\ life}\ or\ cost * amortization\ rate$$

Reducing balance method of amortization

$$Amortization = (Cost - Accumulated\ amortization) * amoratization\ rate$$

4.2.4 Intangible assets with indefinite useful lives

An intangible asset with an indefinite useful life should not be amortized. (IAS 36 requires that such asset is tested for impairment at least annually). However, the appropriateness of deeming the useful life of the asset as indefinite should be reviewed each year. If the useful life of the asset is deemed to be finite rather than indefinite this may indicate that the asset may be impaired and it should be tested for impairment.

4.2.5 Disposal/retirements of intangible assets

a) When to derecognize intangible asset in the accounts

An intangible asset shall be derecognized

- On disposal
- When no future economic benefits are expected from its use or disposal.

b) Treatment of gain or loss on disposal

The gain or loss arising from the derecognition of an intangible asset shall be determined as the difference between the net disposal proceeds, if any, and the carrying amount of the asset. It shall be recognized in profit or loss when the asset is derecognized.

Application activity 4.2

Mahoro supermarket has development expenditure of RWF5 million. Its policy is to amortized development expenditure at 5% per annum using straight line method. Accumulated amortization brought forward is RWF500,000

What is the charge in the statement of profit or loss for the year's amortization?

a) FRW 250,000

b) FRW 225,000

c) FRW 500,000

d) FRW 4,500,000

4.3 Internally generated intangible assets

Learning Activity 4.3

List some examples of activities that might be included in either research or development

4.3.1 Research and development cost

- **Criteria to recognize internally developed intangible asset**

To assess whether an internally generated intangible asset meets the criteria for recognition, an entity classifies the generation of the asset into:

i. research phase; and

ii. development phase.

a. Research phase

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

b. Development

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

- The technical feasibility of completing the intangible asset so that it will be available for use or sale.
- Its intention to complete the intangible asset and use or sell it.
- Its ability to use or sell the intangible asset.
- There will be future economic benefits for the entity. The entity should demonstrate the existence of a market for the output of the intangible asset or the intangible asset itself or the usefulness of the intangible asset to the business.
- The availability of technical, financial and other resources to complete the development and to use or sell the intangible asset.
- Its ability to reliably measure the expenditure attributable to the intangible asset during its development.

Note: If an entity cannot distinguish the research phase from the development phase of an internal project to create an intangible asset, the entity treats the expenditure on that project as if it were incurred in the research phase only.

- **Cost of an internally generated intangible asset**

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. The IAS 38 prohibits reinstatement of expenditure previously recognized as an expense.

The cost of an internally generated intangible asset comprises all directly attributable costs necessary to create, produce, and prepare the asset to be capable of operating in the manner intended by management.

Examples of directly attributable costs are:

i. Costs of materials and services used or consumed in generating the intangible asset;

ii. Costs of employee benefits (salaries-wages) arising from the generation of the intangible asset;

iii. Fees to register a legal right; and

iv. Amortization of patents and licenses that are used to generate the intangible asset

The following are not components of the cost of an internally generated intangible asset:

a) Selling, administrative and other general overhead expenditure unless this expenditure can be directly attributed to preparing the asset for use

b) Identified inefficiencies and initial operating losses incurred before the asset achieves planned performance; and

c) Expenditure on training staff to operate the asset.

- **Recognition of an expense**

Expenditure on an intangible item shall be recognized as an expense when it is incurred unless:

i. It forms part of the cost of an intangible asset that meets the recognition criteria

ii. The item is acquired in a business combination and cannot be recognized as an intangible asset. If this is the case, it forms part of the amount recognized as goodwill at the acquisition date

- **Past expenses not to be recognized as an asset**

Expenditure on an intangible item that was initially recognized as an expense shall not be recognized as part of the cost of an intangible asset at a later date.

Learning Activity 4.3

Igicuruzwa Ltd is developing a new production process. During 2020, expenditure incurred was RWF1,000,000 of which RWF900,000 was incurred before 1 December 2020 and RWF100,000 between 1 December 2020 and 31 December 2020. Igicuruzwa Ltd can demonstrate that, at 1 December 2020, the production process met the criteria for recognition as an intangible asset. The recoverable amount of the know-how embodied in the process is estimated to be RWF500,000

Required: How should the expenditure be treated?

Skills Lab

Visit local business center and try to identify or choose one company/ business with a good reputation compared to others and discuss on how that reputation will increase value of the business when its acquisition happen

End unit assessment

1. A business buys a patent for RWF50 million. It expects to use the patent for the next ten years, after which it will be valueless.

   Required: Calculate the amortization charge for each year and show the double entry to record it.

2. What do you think intangible assets is?

   a) Non-current asset

   b) Current asset

   c) Revenue expenditure

   d) Deferred expenditure

3. Explain the accounting treatment of internally generated goodwill

UNIT 5 ACCOUNTING FOR PROVISIONS, CONTINGENT LIABILITIES AND CONTINGENT ASSETS

Key unit competence: To be able to ensure that the appropriate recognition rules and measurement bases are applied to provisions

Introductory activity

A manufacturer company of Mercedes-Benz car, follows accounting standards developed at both national and international levels so that its business runs very well. Units of cars purchased are covered by a standard three-year warranty, whereby the company will replace any defective cars. The customer does not have to pay for this three-year warranty. At the end of the last year 31 December 2019, some amount representing a liability of uncertain timing or amount was made. During this year another amount was paid for the cost of replacing cars under warranty. At the end of this year, the company estimated that amount of liability of uncertain timing o r amount beyond the cost of replacing was needed.

REQUIRED: At the end of year 31 December 2020, what type of account used to record the cost of replacing cars under warranty? How this warranty should be recorded in financial statement?

5.1. Provisions

Learning Activity 5.1

A manufacturer of a technical equipment sells goods with a standard warranty under which customers are covered for the cost of repairs of any manufacturing defect that becomes apparent within the year of purchase.

What account that will appear in statement of financial position of a manufacturer?

A provision should be recognized:

- When an entity has incurred a present obligation
- When it is probable that a transfer of economic benefits will be required to settle it
- When a reliable estimate can be made of the amount involved

5.1.1 Objective and scope

Objective

The objective of IAS 37 Provisions is to ensure that appropriate recognition criteria and measurement bases are applied to provisions, contingent liabilities and contingent assets and that sufficient information is disclosed in the notes to the financial statements to enable users to understand their nature, timing and amount. The standard aims to ensure that only genuine obligations are dealt with in the financial statements.

Scope

IAS 37 covers provisions arising from other accounting standards, but excludes obligations and contingencies arising from financial instruments covered under IAS 39 and IFRS 9 and insurance contracts covered under IFRS 4.

5.1.2 Definitions

IAS 37 Provisions, Contingent Liabilities and Contingent Assets views a provision as a liability

'A provision is a liability of uncertain timing or amount.'

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

IAS 37 distinguishes provisions from other liabilities, such as trade payables and accruals. This is on the basis that for a provision there is uncertainty about the timing or amount of the future expenditure.

While uncertainty is clearly present in the case of certain accruals, the uncertainty is generally much less than for provisions.

An estimate is still required for an accrual but it is more reliable than provision.

Provision is only made for future expenses, whereas accrual is for both costs and revenue.

The provisions are expected and uncertain, whereas accrual is certain, probable, and easily foreseen. Accrual and provision are made before the reports of the company are reported.

Example of an accrual

If a company has a savings account that earns interest, the interest that has been earned but not yet paid would be recorded as an accrual on the company's financial statements.

Examples of provisions include bad debts, depreciation, doubtful debts, guarantees (product warranties), income taxes, inventory obsolescence, pension, restructuring liabilities and sales allowances. Often provision amounts need to be estimated.

IAS 37 states that a provision should be recognized (which simply means 'included') as a liability in the financial statements when all three of the following conditions are met.

- An entity has a present obligation (legal or constructive) as a result of a past event.
- It is probable (that is more than 50% likely) that a transfer of economic benefits will be required to settle the obligation.
- A reliable estimate can be made of the obligation.

What do we mean by a legal or constructive obligation? An **obligation** means in simple terms that the business owes something to someone else. A **legal obligation** usually arises from a contract and might, for example, include warranties sold with products to make good any repairs required within a certain time frame. A **constructive obligation** arises through past behavior and actions where the entity has raised a valid expectation that it will carry out a particular action. For example, a constructive obligation would arise if a business which doesn't offer warranties on its products has a history of usually carrying out free small repairs on its products, so that customers have come to expect this benefit when they make a purchase.

5.1.3 Provisions: Ledger accounting entries

When a business first sets up a provision, the full amount of the provision should be debited to the statement of profit or loss and credited to the statement of financial position as follows.

DEBIT	Expenses (statement of profit or loss)
CREDIT	Provisions (statement of financial position)

In subsequent years, adjustments may be needed to the amount of the provision. The procedure to be followed then is as follows.

a) Calculate the new provision required.

b) Compare it with the existing balance on the provision account (that is the balance b/f from the previous accounting period).

c) Calculate increase or decrease required.

i. If a higher provision is required now:

DEBIT	Expenses (statement of profit or loss)
CREDIT	Provisions (statement of financial position)

With the amount of the increase

ii. If a lower provision is needed now than before:

DEBIT	Provisions (statement of financial position)
CREDIT	Expenses (statement of profit or loss)

With the amount of the decrease

Example

A business has been told by its lawyers that it is likely to have to pay FRW 10,000,000 damages for a product that failed. The business duly set up a provision at 31 December 2017. However, the following year, the lawyers found that damages were more likely to be FRW 50,000,000.

Required

How is the provision treated in the accounts at

a) 31 December 2017?

b) 31 December 2018?

Answer

a) The business needs to set up provision as follows.

		FRW'000	FRW'000
DEBIT	Damages (SPL)	10,000	
CREDIT	Provision (SOFP)		10,000

Extract from statement of profit or loss

	FRW'000
Expenses	
Provision for damages	10,000

Extract from statement of financial position

	FRW'000
Non-current liabilities*	
Provision for damages	10,000

*Because it is uncertain when the amount relating to the provision will be paid, or indeed if it **definitely will** be paid, it is classified as a non-current liability.

b) The business needs to increase the provision.

		FRW'000	FRW' 000
DEBIT	Damages (SPL)	40,000	
CREDIT	Provision (SOFP)		40,000

Do not forget that the provision account already has a balance brought forward of FRW 10,000,000 so we only need to account for the **increase** in the provision.

Extract statement of profit or loss

	FRW'000
Expenses	
Provision for damages	40,000

Extract from statement of financial position

Non-current liabilities	FRW'000
Provision for damages (10,000,000 + 40,000,000)	50,000

5.1.4 Measurement of provisions

The amount recognized as a provision should be the best estimate of the expenditure required to settle the present obligation at the end of the reporting period. The estimates will be determined by the **judgment** of the entity's management supplemented by the experience of similar transactions. If the provision relates to just one item, the best estimate of the expenditure will be the most likely outcome.

When a provision is needed that involves a lot of items (for example, a warranty provision, where each item sold has a warranty attached to it), then the provision is calculated using the expected value approach. The expected value approach takes each possible outcome (ie the amount of money that will need to be paid under each circumstance) and weights it according to the probability of that outcome happening. This is illustrated in the following example.

Warranty provisions are also covered under IFRS 15 Revenue from contracts with customers. IFRS 15 will affect any warranty where there is a specific contract between the customer and the seller, for example, where the customer has paid for an extended warranty (over and above the standard manufacturer's warranty).

Here, we are only concerned with standard warranties where the organization may be expecting a certain percentage of faults and therefore set aside a sum of money to cover such costs.

Example

Garanti Ltd sells goods with a standard warranty under which customers are covered for the cost of repairs of any manufacturing defect that becomes apparent within the first six months of purchase. The company's past experience and future expectations indicate the following pattern of likely repairs. The customer does not have to pay for these warranties.

% of goods sold	Defects	Cost of repairs (FRW in Millions)
75	None	-
20	Minor	1.0
5	Major	4.0

Calculate the warranty provision that should be included in Garanti Ltd's financial statements

Answer

Garanti Ltd should provide on the basis of the **expected cost** of the repairs under warranty. The expected cost is calculated as (75% × FRW 0 million) + (20% × FRW 1.0 million) + (5% × FRW 4.0 million) = FRW 0.4 million, that is, FRW 400,000.

Garanti Ltd should include a provision of FRW 400,000 in the financial statements.

Application activity 5.1

1. What are the three conditions necessary for the recognition of a provision as a liability?
2. What are provisions of IFRS?
3. Mention the difference between provision and accrual.
4. What are the examples of IAS 37 provision?
5. How can a provision be recognized in accordance with IAS 37?
6. An entity sells goods with a warranty covering customers for the cost of repairs of any defects that are discovered within the first two months after purchase. Past experience suggests that 80% of the goods sold will have no defects, 15% will have minor defects and 5% will have major defects. If minor defects were detected in all products sold the cost of repairs would be FRW 30,000; if major defects were detected in all products sold, the cost would be FRW 150,000.

   Required: What amount of provision should be made?
7. An entity has to rectify a serious fault in a piece of equipment that it had sold to a customer. The individual most likely outcome is that the repair will succeed at the first attempt at a cost of FRW 50,000, but there is a chance that a further attempt will be necessary, increasing the total cost to FRW 80,000.

   Required: What amount of provision should be made?

8. The company's lawyer has advised that it is likely to have conscience to pay FRW 5,000,000 money compensation for defective equipment. The company respects the lawyer's advice and sets up a provision on 31 December 2020. Therefore, the lawyer discovers that damages are more likely to be FRW 25,000,000 the following year. You are asked to show how the provision is treated in the accounts at:

i) 31 December 2020.

ii) 31 December 2021.

5.2 Contingent Liabilities and Contingent Assets

Learning Activity 5.2

During 2018, KEZA Ltd borrowings from Twisungane Co. Ltd were guaranteed. At that time KEZA's financial situation was good. During 2020, the financial situation of KEZA Ltd was deteriorated due to Covid-19 negative effects. On 31 November 2020 KEZA Ltd makes its declaration for protection from its creditor.

Required: Show accounting treatment required in the KEZA Ltd financial statements at the end of the both years.

A contingent liability must not be recognized as a liability in the financial statements. Instead, it should be disclosed in the notes to the accounts, unless the possibility of an outflow of economic benefits is remote. A contingent asset must not be recognized as an asset in the financial statements. Instead, it should be disclosed in the notes to the accounts if it is probable that the economic benefits associated with the asset will flow to the entity.

5.2.1 Contingent Liabilities

Contingent liabilities are defined as follows.

IAS 37 defines a contingent liability as:

- '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 present obligation that arises from past events but is not recognized because:
  - It is not probable that a transfer of economic benefits will be required to settle the obligation; or
  - The amount of the obligation cannot be measured with sufficient reliability.'

As a general rule, probable means more than 50% likely. **If an obligation is probable, it is not a contingent liability** – instead, a **provision is needed.** If the obligation is **remote**, it does not need to be disclosed in the accounts.

Contingent liabilities **should not be recognized in financial statements** but they **should be disclosed in the notes**.

The required disclosures are:

- A brief description of the nature of the contingent liability
- An estimate of its financial effect
- An indication of the uncertainties that exist
- The possibility of any reimbursement

5.2.2 Contingent assets

IAS 37 defines a contingent asset as a possible asset 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'.

A contingent asset must not be recognized in the accounts, but should be disclosed if it is probable that the economic benefits associated with the asset will flow to the entity.

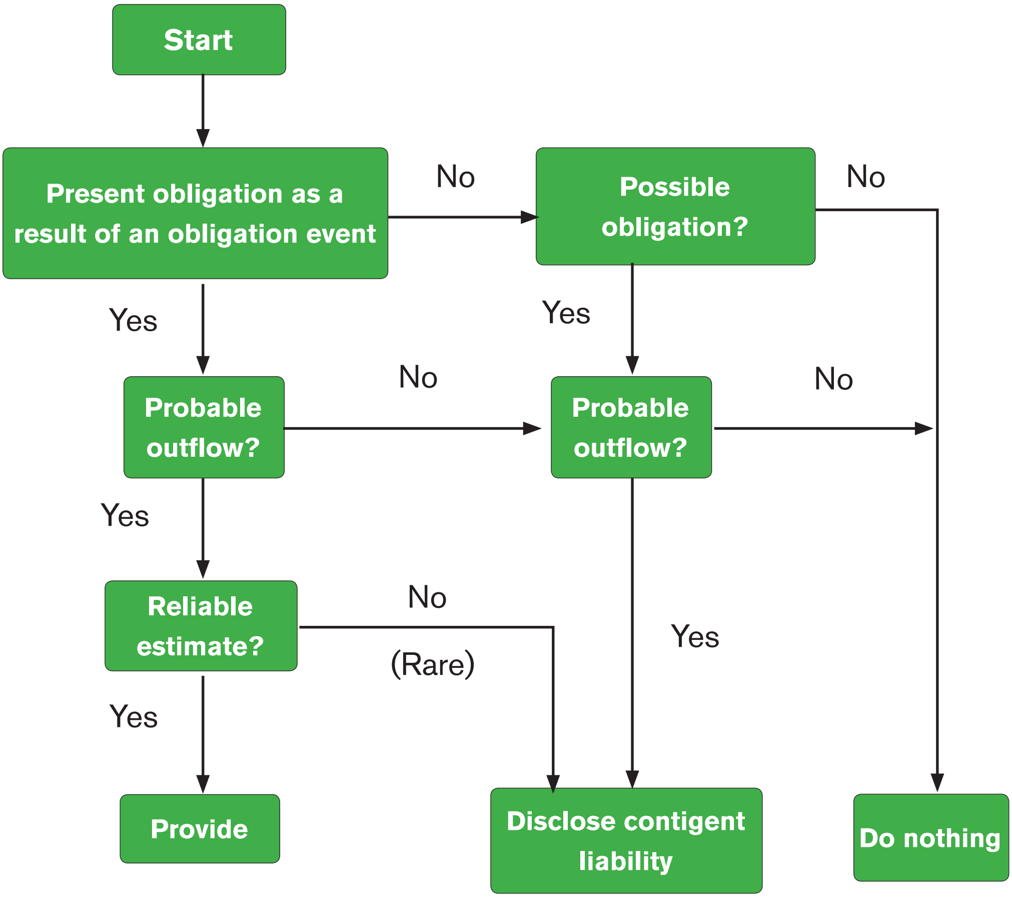
A brief description of the contingent asset should be provided, along with an estimate of its likely financial effect.

If the flow of economic benefits associated with the contingent asset becomes virtually certain, it should then be recognized as an asset in the statement of financial position, as it is no longer a contingent asset.

For example, a company expects to receive damages of FRW 1,000,000 and this is virtually certain. An asset is recognized. If, however, the company expects to probably receive damages of FRW 1,000,000, a contingent asset is disclosed.

5.2.3 IAS 37 flow chart

You must practice the questions below to get the hang of the IAS 37 rules on contingencies. But first, study the flow chart, taken from IAS 37, which is a good summary of its requirements.



Example

During 2019 Umuhigo Ltd gives a guarantee of certain borrowings of Ubuhinzi Ltd, whose financial condition at that time is sound. During 2020, the financial condition of Ubuhinzi Ltd deteriorates and at 30 June 2020 Ubuhinzi Ltd files for protection from its creditors.

What accounting treatment is required in the financial statements of Umuhigo Ltd:

a) At 31 December 2019?

b) At 31 December 2020?

Answer

a) At 31 December 2019

There is a present obligation as a result of a past obligating event. The obligating event is the giving of the guarantee, which gives rise to a legal obligation. However, at 31 December 2019 no transfer of economic benefits is probable in settlement of the obligation.

No provision is recognized. The guarantee is disclosed as a contingent liability unless the probability of any transfer is regarded as remote.

An appropriate note to the accounts would be as follows.

Contingent liability

The company has given a guarantee in respect of the bank borrowings (currently FRW 5 million) of Ubuhinzi Ltd. At the reporting date, Ubuhinzi Ltd was sound and it is unlikely that the company will be required to fulfil its guarantee.

b) At 31 December 2020

As above, there is a present obligation as a result of a past obligating event, namely the giving of the guarantee.

At 31 December 2020 it is probable that a transfer of economic benefits will be required to settle the obligation. A provision is therefore recognized for the best estimate of the obligation.

Application activity 5.2

1. What are contingent liabilities according to IAS 37?
2. What is the treatment of contingent liabilities in the financial statements?
3. How shall a contingent asset be recognized in the financial statements in line with IAS 37?
4. What is the proper treatment of contingent asset?
5. Why are contingent assets not recognized?
6. (a) Twihangirumurimo Co. Ltd issued a one-year guarantee for on equipment that it sells to its customer. At the company's year end, the company is being sued by one of its customers for refusing to repair equipment within the guarantee period.

Twihangirumurimo Co. Ltd is of the view that the fault is not covered by the guarantee as it believes that it has arisen because the customer incorrectly followed the instructions on using the equipment.

Twihangirumurimo Co. Ltd's lawyer has advised that it is more likely than not that they will be found liable. This would result in the company being forced to repair the equipment plus pay legal expenses amounting to approximately FRW 20,000,000.

(b)The company also manufactures another line of equipment which it sells to wholesalers. The company sold 2,000 items of this type this year, which also has a one-year guarantee if the equipment fails. Based on past experience, 10% of items sold are returned for repair. In each case, 40% of the items returned are able to be repaired at a cost of FRW 100,000, while the remaining 60% need significant repair at a cost of FRW 300,000.

Required: Discuss the accounting treatment of the above situations.

5.3 Disclosure in Financial Statements

Learning Activity 5.3

Kundumurimo Co. Ltd is a manufacturer of Cellular Phone TECHNO. Cellular Phones purchased on 1 January 2020 are covered by a standard one-year warranty. A condition is that the company will replace any defective Cellular Phones. The customer does not have to pay for this one-year warranty. Until the end of the year 2020 different provisions was made including the cost of replacing Cellular Phones under warranty.

a) The possibility of an outflow of economic benefits is not recognized as the liability in financial statement of Kundumurimo Co. Ltd, where this liability is included?

b) How do you call this liability?

IAS 37 requires certain items for provisions and contingent assets and liabilities to be disclosed in the financial statements.

5.3.1 Disclosures for Provisions

Disclosures required in the financial statements for provisions fall into two parts.

- Disclosure of details of the change in carrying amount of a provision from the beginning to the end of the year, including additional provisions made, amounts used and other movements.
- For each class of provision, disclosure of the background to the making of the provision and the uncertainties affecting its outcome, including:

i) A brief description of the nature of the provision and the expected timing of any resulting outflows relating to the provision

ii) An indication of the uncertainties about the amount or timing of those outflows and, where necessary to provide adequate information, the major assumptions made concerning future events

iii) The amount of any expected reimbursement relating to the provision and whether any asset that has been recognized for that expected reimbursement.

Example

Umukino Ltd is a manufacturer of golf tees. Tees purchased are covered by a standard three-year warranty, whereby the company will replace any defective tees. The customer does not have to pay for this three-year warranty.

At the end of last year on 31 March 20X6, a provision of FRW 150 million was made. During this year, FRW 75 million was paid for the cost of replacing tees under warranty. At the end of this year, the company estimated that a provision of FRW 135 million was needed.

Provide the following for the year ended 31 March 20X7:

a) Accounting entrees to record the movement in the warranty provision

b) How the warranty provision should be disclosed in the financial statements?

c) The general ledger account for the warranty provision

Answer

a) ACCOUNTING ENTRIES

The cost of replacing tees under warranty is utilization on the provision:

		FRW M	FRW M
DEBIT	Provision	75	
CREDIT	Bank		75

The increase in the provision during the year of FRW 60 million is the charge to the statement of profit or loss for the year:

		FRW M	FRW M
DEBIT	Warranty costs	60	
CREDIT	Provision		60

b) DISCLOSURE

EXTRA FROM STATEMENT OF FINANCIAL POSITION

	FRW M
Non-current liabilities	
Warranty provision	135

Below is an example of how the warranty provision might be disclosed in the notes to the financial statements.

Note X: Provisions

Warranty provision

	FRW M
At 1 April 2016	150
Increase in the provision during the year	60
Amounts used during year	(75)
At 31 March 2017	135

The warranty provision relates to estimated claims on those products sold in the year ended 31 March 2017 which come with a three-year warranty. The expected value method is used to provide a best estimate. It is expected that the expenditure will be incurred in the next three years.

The table above is essentially a T-account, as set out below.

c)

Dr WARRANTY PROVISION Cr

	FRW M		FRW M
Utilized	75	Balance b/f 1 April 2016	150
Balance c/f 31 March 2017	135	Increase during the year	60
	210		210

5.3.2 Disclosures for Contingent Liabilities

Unless remote, disclose for each contingent liability:

- A brief description of its nature, and where practicable
- An estimate of the financial effect
- An indication of the uncertainties relating to the amount or timing of any outflow
- The possibility of any reimbursement

5.3.3 Disclosures for Contingent Assets

Where an inflow of economic benefits is probable, an entity should disclose:

- A brief description of its nature, and where practicable
- An estimate of the financial effect

Application activity 5.3

1. Rwanda Tourism Company (RTC) is a company registered in 2012 to facilitate foreign tourism coming in Rwanda to visit different place.

During the year that ended 30 June 2020, 10 customers booked to visit Rwanda as they were motivated by Visit Rwanda promotion. However, due to Covid-19 outbreak, all of these 10-tourists failed to travel to Rwanda because of flight restrictions. Toward the end of fiscal year, RTC received refund request from those customers but no payment made till end of year which resulted into court case. The legal advisor of the company estimated that RTC would pay damaged totaling FRW 50 million but it is not remote.

Required: Explain disclosure requirement per IAS 37 in respect of the above pending legal case.

2. What is IAS 37 disclosure requirements?

3. What is disclosed for a contingent asset?

4. During the year to 31 December 2021, customer started legal proceedings against company, claiming that one of the food products that it manufactures had caused several members of his family to become seriously ill. The company's lawyers have advised that this action will probably not succeed.

Required: Should the company disclosure this in its financial statements?

5. Turwanyubukene Co. Ltd planted at Gakiriro is manufacturing MUVERO used for cooking. The company gives promise to the customer that the defective MUVERO will be replaced and MUVERO purchased are covered by a standard five months' warranty. Three months after purchase, at the end of last year on 31 December 2021, a provision of FRW 3 million was made. During this year, FRW 1.5 million was paid for the cost of replacing MUVERO under warranty. The company estimated that a provision of 2.5 million was needed at the end of this year.

   At the end of year on 31 December 2022, you are asked to provide the following:

   i. Accounting entrees to record the movement in the warranty provision.

   ii. How the warranty provision should be disclosed in the financial statements?

   iii. The general ledger account for the warranty provision.

Skills Lab

Students must visit any company and analyze operating environment, they will then discuss if the company has any provision, contingent liability and contingent asset arising from their operations.

End unit assessment

1. A company is being sued for FRW 10 million by a customer. The company's lawyers reckon that it is likely that the claim will be upheld. Legal fees are currently FRW 5 million.

   How should the company account for this?

2. Given the facts in 1 above, how much of a provision should be made if further legal fees, relating to the case, of FRW 2 million are likely to be incurred in the future?

   a) FRW 10 million

   b) FRW 5 million

   c) FRW 15 million

   d) FRW 12 million

3. A company has a provision for warranty claims b/f of FRW 50 million. It does a review and decides that the provision needed in future should be FRW 40 million. What is the effect on the financial statements?

	Statement of profit or loss	Statement of financial position
a)	Increase expenses by FRW 5 m	Provision FRW 50 m
b)	Increase expenses by FRW 5 m	Provision FRW 45 m
c)	Decrease expenses by FRW 5 m	Provision FRW 50 m
d)	Decrease expenses by FRW 5 m	Provision FRW 45 m

4. A contingent liability is always disclosed on the face of the statement of financial position.

   True or False?

5. How does a company account for a contingent asset that is not probable?

   a) By way of note

   b) As an asset in the statement of financial position

   c) It does nothing

   d) Offset against any associated liability

6. A company provides a two warranty on all their sales of technical equipment. During 2019, they made sales of 200,000 units of technical equipment at the value of FRW 20 million. History has shown that 5% of all sales will require repairs, averaging FRW 100 each and 1% of all sales will need to be replaced at a cost of FRW 200 each.

   What is the journal entry to reflect the warranty to be provided on the current year sales?

7. Bazizane Ltd is preparing its financial statements for the year ended 31 December 2016. A number of issues must be accounted for before they can be finalized.

   The following circumstances have arisen during the year:

   i) Bazizane Ltd has a machine that needs regular overhauls every year in order to be allowed to operate. Each overhaul costs FRW 5 million.

   ii) Bazizane Ltd has set up a new division to produce a product for which the market is still small. It expects this division to run at a loss for two years.

   iii) Bazizane Ltd sells goods with a one-year warranty. Customers are not required to pay additional amounts for the warranty. Goods may require minor or major repairs during the warranty period. If all of the goods sold during the year to 30 December 2016 were to require minor repairs, the total cost would be FRW 50 million. If all of the goods sold required major repairs the cost would be FRW 120 million. In any year Bazizane Ltd expects 5% of goods sold to be returned for major repairs and 16% to be returned for minor repairs.

   Required

   a) Which of circumstances (i) to (iii) above will give rise to a provision and why?

   b) What amount should be shown as a warranty provision in the statement of financial position of Bazizane Ltd at 31 December 2016?

8. What is the difference between a trade payable, an accrual, a provision and a contingent liability and how will they each appear in the financial statements?

UNIT 6 PREPARATION OF FINANCIAL STATEMENTS FOR A LIMITED LIABILITY COMPANY

Key unit competence: To be able to prepare financial statements for a limited liability

Introductory activity

Read the following information and answer the question that follows for the year ended 31st March 2010 from the financial records of Watt Limited:

Distribution Costs FRW 5,470; Interest Costs FRW 647; Cost of Sales FRW 18,230, Sales FRW 44,870; Income Tax Expense FRW 1,617; Administrative Expenses FRW 9,740; an asset originally cost FRW 10 ,000 and was revalued to FRW 15,000

a) Which financial statement to be prepared by Watt Limited?

b) Which parts of that statement of Watt Limited?

c) What income statement and other comprehensive?

6.1. Statement of comprehensive income

Learning Activity 6.1

KEZA is accountant of ABC ltd she has been prepared well ledger and trial balance the next step is to be sure if they obtain net profits or net loss for the period.

Required:

1. Which financial statement KEZA is going to prepare?
2. Give five examples of elements included in this financial statement.

6.1.1 Trading and Profit or loss account

Objective and scope

As well as covering accounting policies and other general considerations governing financial statements, IAS 1 Presentation of Financial Statements gives substantial guidance on the form and content of published financial statements.

IAS 1 gives guidance on the format and content of all of these, apart from the statement of cash flows, which is covered by IAS 7.

The entity should identify each component of the financial statements very clearly. IAS 1 also requires disclosure of the following information in a prominent position. If necessary it should be repeated wherever it is felt to be of use to the readers in their understanding of the information presented.

After extracting a trial balance, the next step is to determine the amount of profit or loss that the business has made during the trading period. This is done by preparing two accounts namely:

There are basically two formats that are used to prepare a trading account.

- Horizontal
- Vertical format

Horizontal T-format

ABC limited trading account for the year ending ……./……./……../

DR CR

Particular	FRW	FRW	Particular	FRW	FRW
Opening stock		Xxx	Sales	Xxx	
Purchases	Xxx		Less: sales return / return in words	(Xxx)	
Add: carriage in words	Xxx		Net sales		Xxx
Less: Return out words/ purchase return	Xxx		Cost of goods sold		Xxx
Net purchases		Xxx			
Cost of goods Available for sales		Xxx	Gross profit/loss b/d		xxx
Less: closing stock		(Xxx)			
Cost of goods sold		**Xxx**			
Gross profit/loss c/d (net sales- cost of sales)		xxx			

(Vertical format)

ABC Limited (name of company) trading account for the year ended………/…../…../

Particular	Amount	Amount	Amount
Sales			Xxx
Less Sales return			(xxx)
Net sales			xxx
Less cost of sales:			
Opening stock		Xxx	
Purchase	Xxx		
Add carriage inward	Xxx		
Less return outwards	(xxx)		
Net purchase			
Total available for sales		xxx	
		xxx	
Less: closing stock		(xxx)	
Cost of goods sold			(xxx)
Gross profit /Loss			Xxx

Trading account

- Trading account is an account which is prepared to determine the gross profit or gross loss of the business concern. It shows the revenues from sales, the cost of those sales or goods sold and the gross profit from for the specific period ended. It is prepared after the preparation of the trial balance. Trading account is where the value of the gross profit or gross loss is determined by deducting the cost of goods sold from net sales i.e Gross Profit = Net Sales – Cost of Sales, or Gross Loss= Cost of Goods Sold - Net Sales.
- **Profit and loss** Account where the value of net profit or Net loss is calculated by deducting total operating expenses from the gross profits i.e Gross profit – total expenses.

Items found in a trading account.

i. **Sales:** Refer to the value of goods which were bought for resale and have been sold by the business. It is revenue earned from goods sold. They are entered in the trading account for the purpose of calculating gross profit or loss.

ii. **Sales return**: Value of goods that were previously sold but have been returned to the business.

iii. **Net sales** = Sales – Return inwards/ Sales Return

iv. **Opening stock:** Unsold goods in the business available at the beginning of the new trading period.

v. **purchases**: Goods bought by the business for resale

vi. **Purchases return**: Goods previously bought by the business for sale but have been sent back to the suppliers. This value is treated in the trading account and it is subtracted from the purchases to get the net purchases i.e.

Net purchases = purchases – return outwards/purchase returns

vii. **Carriage in wards**: refers to the cost of transporting the goods or bring the goods up to the premises. It forms part of the goods bought hence added to purchases the trading account.

viii. **Warehouse wages:** These are payments made directly for purchases activity. Only wages paid directly for purchases in trading account to determine the gross profit or gross loss. Net purchases = Purchases + Carriage Inwards +Wages -Purchases Return.

ix. **Closing stock:** Goods not sold by the business at the end of a trading period. It's included in the trading account and it is subtracted from the goods available for sale to get cost of sales.

Cost of Goods Sold (CoGS) = Cost of Goods Available for Sale (CoGAS) – closing stock.

Operating expenses (to be found in Profit and Loss Account):

These are the expenses incurred by the business on services that help in the normal operation and running of the business. Such expenses include; transport, electricity, rent insurance/premium, carriage outwards, salaries, water bills, postage, discount allowed, advertising, communication, depreciation and bad debts. In the profit and loss account the total operating expenses are subtracted from the total income or gross income to get net profit or net loss

Operating expenses fall into three major categories, namely:

i. **Administrative expenses:** comprising of office salaries and wages, office rent and rates, office lighting, electricity and power, office stationery, telephones, insurances, etc.

ii. **Selling and distribution expenses:** comprising of motor running expenses, advertising, showroom, salesman salaries, carriage on sales etc.

iii. **General and financial expenses:** comprising of interest charges on loan, and overdraft, bank charges, discount allowed, sundry or general expenses, etc.

Managers' salaries

The salary of a sole trader or a partner in a partnership is not a charge to the statement of profit or loss but is an appropriation of profit. The salary of a manager or member of management board of a limited liability company, however, is an expense in the statement of profit or loss, even when the manager is a shareholder in the company. Management salaries are included in administrative expenses.

Taxation

Taxation affects both the statement of financial position and the statement of profit or loss. All companies pay some kind of corporate taxation on the profits they earn, which we will call income tax in line with the terminology in IAS 1, but which you may find called 'corporation tax'

Note that because a company has a separate legal personality, its tax is included in its accounts. An unincorporated business would not show personal income tax in its accounts, as it would not be a business expense but the personal affair of the proprietors.

i. The charge for income tax on profits for the year is shown as a deduction from profit for the year.

ii. In the statements of financial position, tax payable to the Government is generally shown as a current liability, as it is usually due within 12 months of the year end.

iii. For various reasons, the tax on profits in the statement of profit or loss and the tax payable in the statement of financial position are not normally the same amount

Example

A company has a tax liability brought forward of FRW 15,000. The liability is finally agreed at FRW 17,500 and this is paid during the year. The company estimates that the tax liability based on the current year's profits will be FRW 20,000.

Prepare the tax liability account for the year.

Answer

Dr **Tax liability account** **Cr**

	FRW		FRW
Cash paid	17,500	Balance b/f	15,000
Balance c/f	20,000	Statement of profit or loss	**22,500**
	37,500		37,500

Notice that the statement of profit or loss charge consists of the following.

	FRW
Under-provision for prior year (17,500 – 15,000)	2,500
Provision for current year	20,000
	22,500

Inter-relationship of statement of profit or loss and statement of financial position

When we were dealing with the financial statements of sole traders, we transferred the profit for the year to the capital account. In the case of limited liability companies, the profit for the year is transferred to retained earnings in the statement of changes in equity.

The closing balance of the accounts in the statement of changes in equity is then transferred to the statement of financial position.

Gains on property revaluation

Gains on property revaluation arise when a property is revalued. The revaluation is recognized in the other comprehensive income part of the statement of profit or loss and other comprehensive income and shown in the statement of changes in equity as a movement in the revaluation surplus.

For example, an asset originally cost FRW 10 million and was revalued to FRW 15 million. The gain on the revaluation is recognized in the statement of profit or loss and other comprehensive income (in the other comprehensive income section) and then shown as a movement in the revaluation surplus

Illustration

IDC Ltd has share capital of 400,000 ordinary shares of FRW 10 each and 200,000 5 per cent preference shares of FRW 10 each.

The net profits for the first three years of business ended 31 December are: 2014, FRW 10,967,000; 2015 FRW 4,864,000; and 2016 FRW 15,822,000.

Transfers to reserves are made as follows: 2014 nil; 2015, general reserve, FRW 10,000; and 2016, fixed assets replacement reserve, FRW 22,500.

Dividends were proposed for each year on the preference shares at 5 per cent and on the ordinary shares at: 2014, 10 per cent; 2015, 12.5 per cent; 2016, 15 per cent.

Corporation tax, based on the net profits of each year, is 2014 FRW 410,000; 2015 FRW 525,000; 2016 FRW 630,000

Required: Prepare profit or loss account IDC Ltd

Solution

IDC Ltd Profit Accounts for the year ended 31 December FRW 2014

Profit for the year before taxation	10,967,000	
Less Corporation tax	(410,000)	
Profit for the year after taxation		10,557,000
Less Proposed dividends:		
Preference dividend of 5%	100,000	
Ordinary dividend of 10%	400,000	(500,000)
Retained profits carried forward to next year =		**10,057,000**

6.1.2 Presentation of statement of profit or loss and other comprehensive income

We have considered just the statement of profit or loss. However, IAS 1 requires entities to include a statement of profit or loss and other comprehensive income, either as a single statement or as two separate statements:

Statement of profit or loss and a statement of other comprehensive income

The statement of profit or loss and other comprehensive income takes the statement of profit or loss and adjusts it for certain gains and losses. At Financial Accounting level, this just means gains on revaluations of property, plant and equipment.

The idea is to present all gains and losses, both those recognized in profit or loss (in the statement of profit or loss) as well as those recognized directly in equity, such as the revaluation surplus (in other comprehensive income).

IAS 1 gives the following suggested format for a statement of profit or loss and other comprehensive income

ABC CO
Statement of profit or loss and other comprehensive income for the year ended 31 December 2012

Illustrating the classification of expenses by function

	2012 "000" FRW	2011 "000" FRW
Revenue	x	x
Cost of sales	(x)	(x)
Gross profit	x	x
Other income	x	x
Distribution cost	(x)	(x)
Administrative expenses	(x)	(x)
Other expenses	(x)	(x)
Financing cost	(x)	(x)
Profit before tax	x	x
Income tax expenses	(x)	(x)
Profit for the year	x	x
Other comprehensive income:		
Gain on property	x	x
Total comprehensive income	**x**	**x**

Or

Statement of profit or loss and other comprehensive income for the year ended 31 December 20x8 Extract

Gross profit	xxx
Less other expenses	(xxx)
Profit before tax	xxx
Less income tax	(xxx)
Profit/loss for the year	**xxx**

Other comprehensive income:

Gain on property on revaluation

Total comprehensive income = Profit for the year + other comprehensive income

Format of a trading account

Note:

- A reference to other comprehensive income means the last three lines in the statement above. However, a reference to statement of profit or loss and other comprehensive income means the whole statement shown above.
- At the Financial Accounting level, the only items of other comprehensive income are gains on revaluations of property, plant and equipment.
- **Income statement** is a financial statement that reports a company's financial performance over a specific accounting period. Financial performance is assessed by giving a summary of how the business incurs its revenues and expenses through both operating and non-operating activities.

Illustration

ABC ltd company trial balance on 31/12/2019

Particular	Debit FRW“000”	Credit FRW“000”
Share capital		24,000
Loans		20,000
Statutory reserve		1,000
Sales		35,000
Account payables		4,000
Bills payables		5,000
Purchase returns		2,000
Dividend received		3,000
Plant and machinery	13,000	
Buildings	17,000	
Receivables	9,650	
Land	15,000	
Purchases	18,000	
Discount allowed	1,200	
Warehouse Wages	7,000	
Salaries	3,000	
Traveling expenses	750	
Freight	200	
Insurance	300	
Commission paid	100	
Cash in hand	100	
Cash at bank	1,600	
Repairs	500	
Interest on loans	600	
Opening inventory	6,000	
Total	**94,000**	**94,000**

Notes:

a) Closing inventory FRW 8,000

b) Depreciation on plant and machinery at 15% buildings 10%

c) Provision for doubtful receivables FRW 500

d) Insurance prepaid FRW 50

e) Outstanding rent

f) An asset (land) originally cost FRW 15 million and was revalued to FRW 20 million.

Required:

i) To Prepare a statement of profit or loss and other comprehensive income for the year ended 31 December 2019

Answer:

Vertical format

ABC ltd Company trading account on 31/12/2019

Particular	FRW"000"	FRW"000"	FRW"000"
Sales			35,000
Less Sales return			(0)
Net sales			35,000
Less cost of sales:			
Opening stock		6,000	
Purchase	18,000		
Add: Warehouse wages	7,000		
Less return outwards	(2,000)		
Net purchase		23,000	
Total available for Sales		29,000	
Less: closing stock		(8,000)	
Cost of goods sold			(21,000)
Gross profit			**14,000**

Answer:

Vertical format

i) Statement of profit or loss and other comprehensive income for the year ended 31 December 2019

Particular	"000"FRW	"000"FRW
Gross profit		14,000
Add: other income		
Dividend received		3,000
Total income		17,000
Less other expenses:		
Discount lowed	1,200	
Salaries	3,000	
Traveling expenses	750	
Freight	200	
Insurance 300-50	250	
Commission paid	100	
Repairs	500	
Interest on loan	600	
Rent outstanding	100	
Provision for doubtful receivables	500	
Depreciation:		
Plant and machinery	1,950	
Buildings	1'700	(10,850)
Profit for the year		**6,150**
Other comprehensive income:		
Gain on property		5000
Total comprehensive income for the year		**11,150**

Application activity 6.1

ABC Ltd has share capital of 400,000 ordinary shares of FRW 10 each and 200,000 5 per cent preference shares of FRW 10 each.

The net profits for the first three years of business ended 31 December are: 2014, FRW 10,967,000

2015 FRW 14,864,000; and 2016 FRW 15,822,000.

Transfers to reserves are made as follows: 2014 nil; 2015, general reserve, FRW 100,000; and 2016, fixed assets replacement reserve, FRW 225,000.

Dividends were proposed for each year on the preference shares at 5 per cent and on the ordinary shares at: 2014, 10 per cent; 2015, 12.5 per cent; 2016, 15 per cent.

Corporation tax, based on the net profits of each year, is 2014 FRW 410,000; 2015 FRW 525,000; 2016 FRW 630,000

Required: Prepare profit or loss account ABC Ltd at ended 31 December are: 2015, 2016

6.2 Statements of Financial Position

Learning Activity 6.2

ABC Company is closing its Financial period and they need to know the company's Financial Position. As a hired accountant,

You are asked to:

1. Tell which statement that shows the Financial Statements of a business and its elements.

6.2.1 Presentation of statement of financial position

ABC Company

Statement of financial position as

	FRW "000"	FRW"000"
Assets		
Non-current asset/fixed/long term assets:		
Property, Plant and equipment	X	
Goodwill	x	
Other intangible assets	x	
		X
Current assets/short term assets		
Inventories	x	
Trade receivables	x	
Other current assets	x	
Cash and cash equivalents	x	
Total assets		X

Equity and liabilities	**"000"FRW**	**"000"FRW**
Equity:		
Share capital	X	
Retained earnings	x	
Other component of equity	x	
		X
Non-current liabilities/ long term liabilities:		
Long –term borrowing	x	
Long-term provision		
Deferred tax	x	
		X
Current liabilities/short term liabilities:		
Trade and other payables	x	
Short- term borrowing	x	
Current portion of long term borrowings	x	
Current tax payables	x	
Short term provisions	**x**	
Total equity and liabilities		X

6.2.2 Element of statement of Financial position

The statement of financial position makes use of accounting equation concepts:

Assets = Capital+ liabilities

The statement of financial position is also prepared according to the business entity convention/concept, that a business is separate from its owners.

Assets

The assets are exactly the same as those we would expect to find in the account of a sole trader.

The only difference is that the detail is given in notes. Only the totals are shown on the face of the statement of financial position.

Equity

Capital reserves usually have to be set up by law, whereas revenue reserves are appropriations of profit. With a sole trader, profit was added to capital. However, in a limited company, share capital and profit have to be disclosed separately share capital, reserve, retained earnings, dividends, because profit is distributable as a dividend but share capital cannot be distributed. Therefore, any retained profits are kept in the retained earnings reserve.

Liabilities

Liabilities are split between current and non-current

Users of financial statements need to be able to identify current assets and current liabilities in order to determine the company's financial position. Where current assets are greater than current liabilities, the net excess is often called 'working capital' or 'net current assets.

Each entity should decide whether it wishes to present current/non-current assets and current/ non-current liabilities as separate classifications in the statement of financial position. This decision should be based on the nature of the entity's operations. Where an entity does not choose to make this classification, it should present assets and liabilities broadly in order of their liquidity.

In either case, the entity should disclose any portion of an asset or liability which is expected to be recovered or settled after more than 12 months. For example, for an amount receivable which is due in installment over 18 months, the portion due after more than 12 months must be disclosed.

Current assets

An asset should be classified as a ***current asset*** when it is:

- Expected to be realized in, or is held for sale or consumption in, the entity's normal operating cycle
- Held primarily for the purpose of being traded
- Expected to be realized within 12 months after the reporting date
- Cash or a cash equivalent which is not restricted in its use all other assets should be classified as non-current assets.

All other assets should be classified as non-current assets

Non-current assets include tangible, intangibles operating and financial assets of a long –term nature. Other term with the same meaning can be used ("fixed" "long-term").

The term ***operating cycle*** of an entity is the time between the acquisition of asset for processing and their realization in cash or cash equivalent. Current assets therefore include assets (such as inventories and trade receivables) that are sold or realized as part of the normal operating cycle. This is the case even where they are not expected to be realized within 12 months.

Current liabilities

A liability should be classified as a current liability when it is:

- Expected to be settled in the entity's normal operating cycle
- Due to be settled within 12 months of the reporting date
- Held primarily for the purpose of being traded

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

The categorization of current liabilities is very similar to that of current assets. Thus, some current liabilities are part of the working capital used in the normal operating cycle of the business (i.e trade payables and accruals for employee and other operating costs). Such items will be classed as current liabilities even where they are due to be settled more than 12 months after the reporting date.

There are also current liabilities which are not settled as part of the normal operating cycle, but which are due to be settled within 12 months of the reporting date. These include bank overdrafts, income taxes, other non-trade payables and the current portion of interest-bearing liabilities. Any interest-bearing liabilities that are used to finance working capital on a long-term basis, and that are not due for settlement within 12 months, should be classed as non-current liabilities.

Example:

From the example **6.2.2**.1 Present statement of financial position of ABC limited Company for the ended 31 December 2019 in vertical format.

Statement of financial position of ABC Limited Company for the ended 31 Dec 2019

Assets	**COST FRW "000"**	**Accumulated depreciation FRW :000"**	**Net book value of asset FRW "000"**
Fixed Asset			
Plant and Machinery	13,000	1,950	11,050
Buildings	17,000	1,700	15,300
Land	20,000		20,000
Total fixed asset	45,000	3,650	**46,350**
Current assets			
Stock		8,000	
Account receivables		9,650-500	
Insurance prepaid		50	
Cash at bank		1,600	
Cash in hand		100	
Total current assets		**18,900**	**18,900**
Total assets			**65,250**
Financed by /owner's equity			
Share Capital			24,000
Retained earning			7,150
Revaluation Surplus on land			5,000
Current liabilities			
Account payables			4,000
Bills payables			5,000
Outstanding rent			100
Loan			20,000
Total equity and liabilities			65,250

Application activity 6.2

The following balances were extracted from the book of KASAYA limited as at 30 September

2010 in FRW"000"

Land and buildings (net book value)	25,000
Plant and machinery (net book value)	8,000
Motor vehicle (net book value)	2,000
Inventory	6,000
Ordinary share capital (FRW 50 par value)	10,000
5%preferenceshare capital (FRW 100 par value)	9,000
5%debentures	8,000
Corporation tax	500
Interim dividend paid	2,000
Other operating expenses	1,550
Distribution cost	6,000
Administrative expenses	13,000
Account payables	19,000
Other operating income	4,000
Gross profit	25,000
Debenture interest paid	400
Preference dividend paid	450
Account receivable	20,000
Cash at bank	4,100
Capital redemption reserve	6,000
Share premium	4,000
Revenue reserve (1 October 2009)	3,250

Additional information:

1. The balance on corporation tax account represents an over provision of tax for the previous year.

   tax expenses for the current year is estimated at FRW 3 million.

2. On the 15 September 2010 the directors of the company proposed to pay the dividend due to the ordinary preference shareholders and also to pay a final dividend of FRW 2 million to the ordinary shareholders.

3. A building whose net book value is 5million is to be revalued to FRW 9 million.

Required:

Prepare Statement of financial position for the year ended 30 September 2010

6.3. Statement of changes in equity

Learning Activity 6.3

There are two businesses A&B which are operating in Kamonyi District where A is a Sole trader and B is a company. There are showing you their Financial Statements.

Required: To Differentiate statement of sole trader from Statement of financial position of company based on element of owners' equity?

6.3.1 Presentation statement of changes in equity

IAS 1 requires an entity to provide a statement of changes in equity. The statement of changes in equity shows the movements in the entity's equity for the period.

The statement of profit or loss and other comprehensive income is a straight forward measure of the financial performance of the entity, in that it shows all items of income and expense recognized in a period. It is then necessary to link this result with the results of transactions with owners of the business, such as share issues and dividends. The statement making the link is the statement of changes in equity.

The statement of changes in equity simply takes the equity section of the statement of financial position and shows the movements during the year. The bottom line shows the amounts for the current statement of financial position.

As we saw above, the total comprehensive income for the year is split between the gains on revaluation of property, which is credited to the revaluation surplus, and the profit for the year, which is credited to retained earnings.

An example statement of changes in equity is shown below

6.3.2 Elements of statement of changes in equity

ABC co statement of changes in equity for the year ended 31 December 2012

	Share capital	Share Premium	Revaluation surplus	Retained earning	Total
Balance at 1.1.2012.	X	X	X	X	X
Change in accounting police	-	-	-	(x)	(x)
Changes in equity for 2012					
Dividends	-	-	-	(x)	(x)
Total comprehensive Income for the year	--	--	X	X	X
Issue of share capital	X	X	X	X	X
Balance at 31.12.2012	**X**	**X**	X	X	X

Dividends paid during the year are not shown on the statement of profit or loss account, they are shown in the statement of changes in equity.

Example 1:

Opening balances of all equity account

Share capital FRW 5000,000

Retained earnings FRW 2,350,000

Accumulated other comprehensive income FRW 650,000

Preliminary financial data:

Revenue was FRW 15,000,000 and expenses were FRW 8,500,000 for the year.

A cash dividend of FRW 500,000 was declared and paid in the current year.

The other comprehensive income for the year is FRW 900,000

Prepare and present statement changes in equity for the year.

Solution:

Items	Share capital	Retained earnings	Other comprehensive income	Total equity
Beginning balance	5,000,000	2,350,000	650,000	8,000,000
Net income		6,500,000		6,500,000
Dividends		(500,000)		(500,000)
Other comprehensive income			900,000	900,000
Balance at the end	5,000,000	8,350,000	1,550,000	14,900,000

Application activity 6.3

The published accounts of XYZ Co, the profit for the period is FRW 350,000. The balance of retained earnings at the beginning of the year is FRW 50,000. If dividends of FRW 250,000 were paid, what is the closing balance of retained earnings?

a) FRW 400,000

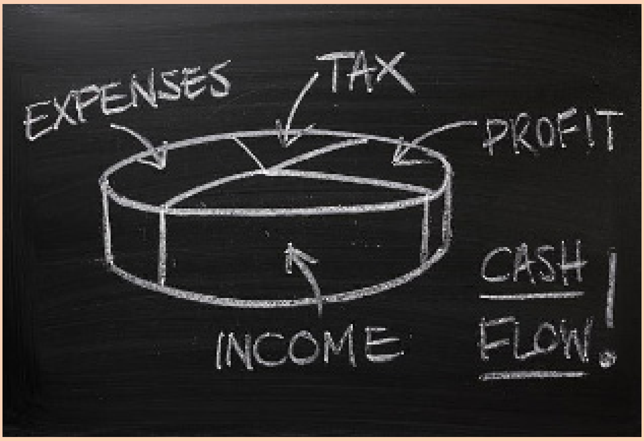
b) FRW 150,000

c) FRW 50,000

d) FRW 100,000

6.4 Statement of cash-flow

Learning Activity 6.4



Picture 6.4

Analyze the above picture and answer the question follow:

a) Is there the movement of money? Explain

b) List two examples of each movement of money

The standard gives the following definition, the most important of which are cash and cash equivalents.

- 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.

- Operating activities are the principal revenue-producing activities of the entity and other activities that are not investing or financing activities.
- Investing activities are the acquisition and disposal of long term assets and other investments not included in cash equivalents.
- Financing activities are activities that result in changes in the size and composition of the contributed equity capital and borrowings of the entity.

6.4.1 Presentation of a statement of cash flows

IAS 7 requires statements of cash flows to report cash flows during the period classified by operating, investing and financing activities.

The manner of presentation of cash flows from operating, investing and financing activities depends on the nature of the enterprise.

By classifying cash flows between different activities in this way, users can see the impact on cash and cash equivalents of each one, and their relationships with each other. We can look at each in more detail.

Component of cash flow:

1. **Operating activities:**

This is perhaps the key part of the statement of cash flows because it shows whether, and to what extent, companies can generate cash from their operations. It is these operating cash flows which must, in the end, pay for all cash outflows relating to other activities, ie paying loan interest, dividends and so on.

Most of the components of cash flows from operating activities will be those items which determine the net profit or loss of the enterprise, i.e they relate to the main revenue-producing activities of the enterprise.

The standard gives the following as examples of cash flows from **operating activities.**

a) Cash receipts from the sale of goods and the rendering of services

b) Cash receipts from royalties, fees, commissions and other revenue

c) Cash payments to suppliers for goods and services

d) Cash payments to and on behalf of employees

Certain items may be included in the net profit or loss for the period which do not relate to operational cash flows; for example, the profit or loss on the sale of a piece of plant will be included in net profit or loss, but the cash flows will be classed as investing.

2. Investing activities

The cash flows classified under this heading show the extent of new investment in assets which will generate future profit and cash flows.

The standard gives the following examples of cash flows arising from investing activities

a) Cash payments to acquire property, plant and equipment, intangibles and other non-current assets, including those relating to capitalized development costs and self-constructed property, plant and equipment

b) Cash receipts from sales of property, plant and equipment, intangibles and other non-current assets

c) Cash payments to acquire shares or loan notes of other entities

d) Cash receipts from sales of shares or loan notes of other entities

e) Cash advances and loans made to other parties

f) Cash receipts from the repayment of advances and loans made to other parties

3. Financing activities

This section, of the statement of cash flows shows the share of cash which the entity's capital providers have claimed during the period. This is an indicator of likely future interest and dividend payments. The standard gives the following examples of cash flows which might arise under these headings.

a) Cash proceeds from issuing shares

b) Cash payments to owners to acquire or redeem the entity's shares

c) Cash proceeds from issuing loans, bonds, mortgages and other short- or long-term borrowings

d) Cash repayments of amounts borrowed

e) Cash payments by a lessee for the reduction of the outstanding liability relating to a lease

Reporting cash flows from operating activities

a) **Direct method:** disclose major classes of gross cash receipts and gross cash payments

b) **Indirect method**: net profit or loss is adjusted for the effects of transactions of a non-cash nature, any deferrals or accruals of past or future operating cash receipts or payments, and items of income or expense associated with investing or financing cash flows

a. Using the direct method:

There are different ways in which the information about gross cash receipts and payments can be obtained. The most obvious way is simply to extract the information from the accounting records.

Direct method is given below.	FRW"000	FRW"000
Cash flows from operating activities:		
Cash receipts from customers	XX	
Cash paid to suppliers and employees	(XX)	
Cash generated from operations	XX	
Interest paid	(XX)	
Income taxes paid	(XX)	
Net cash from operating activities		+XX

Example

ABC Ltd had the following transactions during the year:

a) Purchases from suppliers were FRW 19,500,000 of which FRW 2,550,000 was unpaid at the year end. Brought forward payables were FRW 1,000,000.

b) Wages and salaries amounted to FRW 10,500,000 of which FRW 750,000 was unpaid at the year end. The accounts for the previous year showed an accrual for wages and salaries of FRW 1,500,000.

c) Interest of FRW 2,100,000 on a long-term loan was paid in the year.

d) Sales revenue was FRW 33,400,000, including FRW 900,000 receivables at the year end. Brought forward receivables were FRW 400,000.

Required:

To calculate the cash flow from operating activities using the direct method

ANSWER

	FRW' 000	FRW' 000
Cash flows from operating activities:		
Cash received from customers (400 + 33,400 – 900)		32,900
Cash paid to suppliers (1,000+ 19,500 – 2,550)		(17,950)
Cash paid to employees (1,500 + 10,500 – 750)		(11,250)
Interest paid		(2,100)
		1,600

B. Using the indirect method

This method is undoubtedly easier from the point of view of the preparer of the statement of cash flows. The net profit or loss for the period is adjusted for the following.

a) Changes during the period in inventories, operating receivables and payables

b) Non-cash items, eg depreciation, provisions, profits/losses on the sales of assets

c) Other items, the cash flows from which should be classified under investing or financing activities

Profit before tax (statement of profit or loss)	X
Add depreciation	X
Interest expense	X
Loss (profit) on sale of non-current assets	(X)/X
(Increase)/decrease in inventories	(X)/X
(Increase)/decrease in receivables	(X)/X
Increase /(decrease) in payables	X/(X)
Cash generated from operations	X
Interest paid	(X)
Income taxes paid	(X)
Net cash flows from operating activities	X

It is important to understand why certain items are added and others subtracted.

a) Depreciation is not a cash expense, but is deducted in arriving at the profit figure in the statement of profit or loss. It makes sense, therefore, to eliminate it by adding it back.

b) By the same logic, a loss on a disposal of a non-current asset (arising through under-provision of depreciation) needs to be added back and a profit deducted.

c) An increase in inventories means less cash – you have spent cash on buying inventory.

d) An increase in receivables means the company's receivables have not paid as much, and therefore there is less cash.

e) If we pay off payables, causing the figure to decrease, again we have less cash.

- **Interest and dividends**

Cash flows from interest and dividends received and paid should each be **disclosed separately**. Each should be classified in a consistent manner from period to period (IAS 7,

A financial institution shows interest paid and interest and dividends received as operating cash flows, because its business model is based around generating receipts of interest and dividends.

For entities that are not financial institutions:

a) Interest paid should be classified as an operating **cash flow** or a **financing cash flow**.

b) Interest received and dividends received should be classified as **investing cash flows**.

c) Dividends paid by the entity may be classified as a **financing cash flow**, showing the cost of obtaining financial resources or alternatively as an operating cash flow, so that users can assess the entity's ability to pay dividends out of operating cash flows. (IAS 7

- **Taxes on income**

Cash flows arising from taxes on income should be separately disclosed and should be classified as cash flows from operating activities unless they can be specifically identified with financing and investing activities

- **The advantages of cash flow accounting**

a) Survival in business depends on the ability to generate cash. Cash flow accounting directs attention towards this critical issue.

b) Cash flow is more comprehensive than 'profit' which is dependent on accounting conventions and concepts.

c) Creditors of the business (both long and short term) are more interested in an enterprise's ability to repay them than in its profitability. While 'profits' might indicate that cash is likely to be available, cash flow accounting gives clearer information.

d) Cash flow reporting provides a better means of comparing the results of different companies than traditional profit reporting.

e) Cash flow reporting satisfies the needs of all users better.

i) For management, it provides the sort of information on which decisions should be taken (in management accounting, 'relevant costs' to a decision are future cash flows). Traditional profit accounting does not help with decision making.

ii) For shareholders and auditors, cash flow accounting can provide a satisfactory basis for stewardship accounting.

iii) As described previously, the information needs of creditors and employees will be better served by cash flow accounting.

a) Cash flow forecasts are easier to prepare, as well as more useful, than profit forecasts.

b) They can in some respects be audited more easily than accounts based on the accruals concept.

c) The accruals concept is confusing, and cash flows are more easily understood.

ILLUSTRATION 1

The following are balance sheets of Neema private ltd for the years ended 31st Dec 2003 and 2004 respectively Neema private company.

Balance sheet/ statement of financial position as at 31st Dec 2003

	FRW '00'	FRW '00'	FRW '00'
	Cost	Accumulated dep.	N.B.V
NON CURRENT ASSETS			
Land	15,000		15,000
Furniture	3,800	(400)	3,400
Motor vehicles (NBV)			5,500
			23,900
Investment			2,000
			25,900
CURRENT ASSETS			
Stock		6,700	
Debtors		4,900	
Cash		300	
		11,900	
CURRENT LIABILITIES			
Creditors		4,100	
Bank overdraft		30,000	
NON CURRENT LIABILITIES			
Bank loan			5,000
Financed by Capital			25,000

NEEMA PRIVATE LTD

Balance sheet/ Statement of Financial Position as at 31st Dec 2004

	FRW '00'	FRW '00'	FRW'00'
	Cost	Accumulated dep.	Net book value
NON CURRENT ASSETS			
Land & premises	15,000	3000	12,000
Furniture	3,800	(1,000)	2,800
Motor vehicles (NBV)			8,800
			23,600
CURRENT ASSETS			
Stock		5,700	
Debtors		6,900	
Bank		150	
Cash		50	
		12,800	
CURRENT LIABILITIES			
Creditors	(7,800)		
Bills payable	(2,400)		2,600
		(10,200)	26,200
Financed by Capital			23,200
Net profit			2,000
Fresh capital			1,000
			26,200

Additional information:

i. A piece of land was sold in July 2004 for FRW 610,000 and investment in October 2004 for FRW 175,000

ii. Some motor vehicle was bought in 2004 for FRW 520,000. No furniture was bought or sold during the year.

Required: To prepare a statement of Cash Flow to explain the change in cash

Solution

Adjustments:

a) Gain on disposal (land) = 610,000-(1,500,000-1,200,000) = 610,000-300,000=310,000

b) Loss on disposal (investment)= 200,000-175,000= 25,000

c) Depreciation on furniture= 100,000-40,000=60,000

or NBV for 2nd year-NBV for 1st year= 3,400-2,800=600x100=60,000

a) Depreciation on Motor Vehicle= 520,000-(880,000-550,000) =190,000

NEEMA PRIVATE LTD

STATEMENT CASH FLOW (INDIRECT METHOD)

	FRW'000'	FRW'000'
Net cash flow from operating activities		200,000
Add: Depreciation on furniture		60,000
Depreciation of motor vehicles		190,000
Loss on disposal of investment		25,000
Increase in creditors		40,000
Decrease in stock		100,000
Increase in bills payable		140,000
		755,000

Less:		310,000
Profit on sale of investments		200,000
Increase in debtors		**245,000**
Net cash flow from operating activities		
Investing activities:	610,000	
Sale on land	175,000	
Sale of investments	(520,000)	265,W000
Less: Purchases of motor vehicles		**510,000**
Financing:	100,000	
Fresh capital	(400,000)	
Repayment bank loan	(180,000)	(480,000)
Drawings		**30,000**

ILLUSTRATION 2

The following information is extracted from the financial statement of AMANI ltd on 31/12/2016:

a) Profit and loss account for the year ended 31/12/2016

FRW FRW

Sales……………………………............................2 000

Operating expenses……….…….820

Depreciation …………………....200

Goodwill amortized …………..….100 ….………1 120

Operating profit…………………………………....880

Debenture interests…………………………………..40

Net profit before Tax ………………………………..840

Taxation ………………………………………………170

Net profit after tax……………………………………670

Dividends………………………………………….130

Retained profit…………………………………………540

b) Balance sheets for two years (2015 and 2016)

	31/12/2015		31/12/2016	
FIXED ASSETS:				
* Goodwill	……….	100	……….	0
* Plant and Machinery	2 000		2 900	
Less Depreciation	(400)	1 600	(600)	2 300
		1 700		2 300
CURRENT ASSETS:				
* Stocks	480		1 150	
* Debtors	400		980	
* Bank	100	980	120	2 250
CURRENT LIABILITIES				
* Taxation	150		180	
* Creditors	200		500	
* Dividends	130	480	130	810
L.T LIABILITIES				
Debentures		0		500
SHARE CAPITAL & RESERVES				
Ordinary share capital		2 000		2 400
Share premium account		-------		100
Profit and loss account		200		740

You are required to prepare a statement of Cash Flow

Answer:

	FRW	FRW
1) Cash flows from operating activities		
Operating profit before TAX	……..	880
Add Depreciation charge for the year (200 + 100)	……..	300
		1 180
Adjust for changes in working capital:		
Less Increase in inventory (1 150 – 480)	670	
Add Increase in debtors (980 – 480)	580	
Add Increase in creditors (500 – 200)	300	(950)
		230
Less Debentures interest paid	40	
Less Taxation	170	
Add Increase in liabilities (taxation currently payable) (180 - 150)	30	**(180)**
Net cash flow from operating activities (a)		***50***
2) Cash flows from investing activities		
Less Purchase of non-current assets: (2 900 – 2 000)…		**900**
Net cash flow from investing activities (b)	……	(900)
3) Cash flows from financing activities		
Add Increase in ordinary share (2,400 - 2 000)	400	
Add Increase in share premium acct (100 - 0)	100	
Less Increase in debentures (500 - 0)	500	**1 000**
Equity dividends paid: Balance at the end of 20x1 (130 - 130)	0	
During the year 2012	130	**(130)**

Net cash flow from financing activities	*(c)*		*870*
Net increase in cash (a) + (b) + (c)		....	**(20)**
Add Cash Balance b/d (opening balance)		....	***100***
Equal: Cash balance c/d (closing balance)		....	***120***

6.4.2 Notes to financial statement

Note to financial information are included in a set of financial statement to give users extra information.

Notes to financial statements provide more details for the users of the accounts about the information in the statement of profit or loss and other comprehensive income, the statement of financial position, the statement of cash flows and the statement of changes in equity.

For example, the statement of financial position shows just the total carrying amount of property,

Plant and equipment owned by an entity. The notes to the financial statements then break down this total into the different categories of assets, the cost, any revaluation, the accumulated depreciation and the depreciation charge for the year.

A reconciliation to the opening and closing amount at the beginning and end of the period, as

Shown below:

Cost or valuation	Total	Land and Building	plant and equipment
	FRW'000	FRW'000	FRW'000
At January 2014	50,000	40,000	10,000
Revaluation surplus	12,000	12,000	-
Additions in year	4,000	-	4000
Disposal in year	(1,000)	-	(1,000)
At 31 December 2014	65,000	52,000	13,000

Depreciation			
At 1 January 2014	16,000	10,000	6,000
Charge for the year	4,000	1,000	3,000
Eliminated disposal	(500)	-	(500)
At 31 December 2014	19,500	11,000	8,500
Carrying amount			
At 31/ December 2014	45,500	41,000	4,500
At 1 January 2014	34,000	30,000	4,000

As well as the reconciliation above, the financial statements should disclose the following.

i) An accounting policy note should disclose the measurement bases used for determining the amounts at which depreciable assets are stated, along with the other accounting policies.

ii) For each class of property, plant and equipment:

For each class of property, plant and equipment: IAS 16

- Depreciation methods used
- Useful lives or the depreciation rates used
- Total depreciation allocated for the period
- Gross amount of depreciable assets and the related accumulated depreciation at the beginning and end of the period

iii) For revalued assets:

For revalued assets:

a) Effective date of the revaluation

b) Whether an **independent valuer** was involved

c) Carrying amount of each class of property, plant and equipment that would have been included in the financial statements had the assets been carried at cost less depreciation

d) Revaluation surplus, indicating the movement for the period and any restrictions on the distribution of the balance to shareholders.

Intangible non-current assets

A reconciliation of the carrying amount of intangible assets at the beginning and end of the period, as shown below

Cost or valuation	Total	Land and Building	plant and equipment
	FRW'000	FRW'000	FRW'000
At January 2014	40,000	30,000	10,000
Additions in year	19,000	15,000	4000
Disposal in year	(1,000)	-	(1,000)
At 31 December 2014	58,000	45,000	13,000
Amortization			
At 1 January 2014	11,000	5,000	6,000
Charge for the year	4,000	1,000	3,000
Eliminated disposal	(500)	-	(500)
At 31December 2014	14,500	6,000	8,500
Carrying amount			
At 31/ December 2014	43,500	39,000	4,500
At 1 January 2014	29,000	25,000	4,000

As well as the reconciliation above, the financial statements should disclose the following

- The accounting policies for intangible assets that have been adopted.
- For each class of intangible assets (including development costs), disclosure is required of the following:

The method of amortization used: IAS 38

a) The useful life of the assets or the amortization rate used

b) The gross carrying amount, the accumulated amortization and the accumulated impairment losses as at the beginning and end of the period

c) The carrying amount of internally generated intangible assets

d) The line item(s) of the statement of profit or loss in which any amortization of intangible assets is included

Contingent liabilities

Disclose for each contingent liability:

i) A brief description of its nature; and where practicable

ii) An estimate of the financial effect

iii) An indication of the uncertainties relating to the amount or timing of any outflow

iv) The possibility of any reimbursement

Contingent assets

Where an inflow of economic benefits is probable, an entity should disclose:

i) A brief description of its nature; and where practicable

ii) An estimate of the financial effect.

Inventories

Inventories are valued at the lower of cost and NRV. Cost is determined using the first in, first out (FIFO) method. NRV is the estimated selling price in the ordinary course of business, less the costs estimated to make the sale.

	2011	2010
	FRW'000	FRW'000
Raw materials	31	28
Work in progress	23	25
Finished goods	25	15
	79	68

6.4.3 Company accounts for internal purposes

The large amount of information in this unit so far has really been geared towards the financial statements companies produce for external reporting purposes. In particular, the IFRS Standards discussed here are all concerned with external disclosure. However, companies to produce financial accounts for internal purposes.

It will often be the case that financial accounts used internally look very similar to those produced for external reporting for various reasons.

a) The information required by internal users is similar to that required by external users. Any additional information for managers is usually provided by management accounts.

b) Financial accounts produced for internal purposes can be used for external reporting with very little further adjustment.

It remains true, nevertheless, that financial accounts for internal use can follow whichever format manager wishes.

They may be more detailed in some areas than external financial accounts (perhaps giving breakdown of sales and profits by region or by product), but may also exclude some items.

For example, the taxation charge and dividend may be missed out of the statement of profit or loss.

EXAMPLE

The accountant of ABC Ltd has prepared the following trial balance as at 31 December 2017

FRW0.5 ordinary shares (fully paid)	350
7% FRW1 preference shares (fully paid)	100
10% loan stock (secured)	200
Retained earnings 1.1.2017	242
General reserve 1.1. 2017	171
Land and buildings 1.1. 2017 (cost)	430
Plant and machinery 1.1. 2017 (cost)	830

Accumulated depreciation:	
Buildings 1.1. 2017	20
Plant and machinery 1.1. 2017	222
Inventory 1.1. 2017	190
Sales	2,695
Purchases	2,152
Preference dividend	7
Ordinary dividend (interim)	8
Loan interest	10
Wages and salaries	254
Light and heat	31
Sundry expenses	113
Suspense account	135
Trade accounts receivable	179
Trade accounts payable	195
Cash	126

Notes

1. Sundry expenses include FRW 9,000 paid in respect of insurance for the year ending 1 September 2018. Light and heat does not include an invoice of FRW 3,000 for electricity for the three months ending 2 January 2018, which was paid in February 2018. Light and heat also includes FRW 20,000 relating to salespeople's commission.

2. The suspense account is in respect of the following items.

	FRW'000
Proceeds from the issue of 100,000 ordinary shares	120
Proceeds from the sale of plant	300
	420
Less consideration for the acquisition of ABC Ltd	(285)
	135

3. The net assets of ABC Ltd were purchased on 3 March 2017. Assets were valued as follows. FRW'000

Investments	231
Inventory	34
	265

All the inventory acquired was sold during 2017. The investments were still held by ABC at 31.12.2017.

4. The property was acquired some years ago. The buildings element of the cost was estimated at FRW 100,000 and the estimated useful life of the assets was 50 years at the time of purchase. As at 31 December 2017 the property is to be revalued at FRW 800,000.

5. The plant which was sold had cost FRW 350,000 and had a carrying amount of FRW 274,000 as at 1 January 2017. FRW 36,000 depreciations are to be charged on plant and machinery for 2017.

6. The loan stock has been in issue for some years. The FRW 0.5 ordinary shares all rank for dividends at the end of the year.

7. The management wish to provide for:

    1. Loan stock interest due
    2. A transfer to general reserve of FRW 16,000
    3. Audit fees of FRW4,000

8. Inventory as at 31 December 2017 was valued at FRW 220,000 (cost).

9. Taxation is to be ignored.

Required:

Prepare the financial statements of ABC Co as at 31 December 2017, including the statement of financial position, the statement of profit or loss and other comprehensive income, and the statement of changes in equity. No other notes are required.

SOLUTION:

1. Normal adjustments are needed for accruals and prepayments (insurance, light and heat, loan interest and audit fees). The loan interest accrued is calculated as follows.

a)

	FRW'000
Charge needed in statement of profit or loss (10% × FRW 200,000)	20
Amount paid so far, as shown in list of account balances	10
Accrual: presumably 6 months' interest now payable	10

The accrued expenses shown in the statement of financial position comprise:

Loan interest	10
Light and heat	3
Audit fee	4
	17

b) The mis-posting of FRW 20,000 to light and heat is also adjusted, by reducing the light and heat expense, but charging FRW 20,000 to salespeople's commission.

c) Depreciation on the building is calculated as $\frac{100,000}{50} = FRW\ 2,000$

$\frac{100,000}{50} = FRW\ 2,000$

The carrying amount of the property is then FRW 430,000 – FRW 20,000 – FRW 2,000 = FRW 408,000 at the end of the year. When the property is revalued a revaluation surplus of FRW 800,000 – FRW 408,000 = FRW 392,000 is then created.

d) The profit on disposal of plant is calculated as proceeds FRW 300,000 (per suspense account) less carrying amount FRW 274,000, ie FRW 26,000. The cost of the remaining plant is calculated at FRW 830,000 - FRW 350,000 = FRW 480,000.

The depreciation allowance at the yearend is:

Balance 1.1.2017	222
Charge for 2017	36
Less depreciation on disposals (350 - 274)	(76)
	182

e) Goodwill arising on the purchase of ABC Ltd is: FRW'000

Consideration (per suspense account)	285
Assets at valuation	(265)
Goodwill	20

f) The other item in the suspense account is dealt with as follows. FRW

Proceeds of issue of 100,000 ordinary shares	120
Less nominal value 100,000 x FRW 0.5	50
Excess of consideration over par value (= share premium)	70

The transfer to general reserve increases it to FRW 171,000 + FRW 16,000 = FRW 187,000.

ABC CO

Statement of profit or loss and other comprehensive income for the year ended 31 December 2017

	FRW'000	**FRW'000**
Revenue		2,695
Cost of sales		
Opening inventory	190	
Purchases (2,152 + 34)	2,186	
	2,376	
Closing inventory	(220)	
		(2,156)
Gross Profit		539
Profit on disposal of plant		26
		565
Expenses:		
Wages, salaries and commission	274	
Light and heat (31 – 20 + 3)	**14**	
Depreciation:		
Buildings	**2**	
Plant	**36**	
Audit fees	**4**	
Loan interest	**20**	(457)
Profit for the year		**108**

Other comprehensive income	
Revaluation of non-current assets	392
Total comprehensive income for the year	**500**

STATEMENT OF CHANGES IN EQUITY FOR THE YEAR ENDED 31 DECEMBER 2017

	Ordinary Share Capital	preference share capital	share premium	revaluation surplus	general reserve	retained earning	Total
	FRW'000	FRW'000	FRW'000	FRW'000	FRW'000	FRW'000	FRW'000
Balance at 1.1.x7	350	100	-	-	171	242	863
Total comprehensive Income for the year	-	-	-	392	-	108	500
Issue of shares	50	-	70	-	-	-	120
Dividend paid	-	-	-	-	-	(15)	(15)
Transfer to general reserve	-	-	-	-	16	(16)	-
Balance at 31.12x7	**400**	**100**	**70**	**392**	**187**	**319**	**1,468**

SOLUTION

ABC Co

STATEMENT OF FINANCIAL POSITION AS AT 31 DECEMBER 2017

Assets	FRW '000	FRW'000
Non-current assets		
Property, plant land and equipment		800
Plant:		
Cost	480	
Depreciation	(182)	298
Goodwill		20
Investments		**231**
Current assets		
Inventory	220	
Trade accounts receivable	179	
Prepayments	6	
Cash	126	
		531

Total assets		**1,880**
Equity and liabilities		
FRW0.5 ordinary shares (350 + 50)	400	
7% FRW1 preference shares	100	
Share premium	70	
Revaluation surplus	392	
General reserve	187	
Retained earnings	319	
		1,468
Non-current liabilities		
10% loan stock (secured)		200
Current liabilities		
Trade accounts payable	195	
Accrued expenses	17	
		212
Total equity and liabilities		**1,880**

Illustration

1. Which of the following is not a component of financial statements?

   a) Statement of Financial Position

   b) Cashbook

   c) Statement of Profit or Loss D Statement of Changes in Equity

2. The following trial balance was extracted from the books of accounts of KWESA LTD for the year ended 20 June 2021:

KWESA LTD Trial Balance as at 30 June 2021

Particulars	Dr FRW "000"	Cr FRW "000"
Revenues		5,400,000
Purchases	2,704,228	
Returns	50,000	45,620
General services	115,000	
Transport expenses	57,150	
Cleaning services	22,860	
Carriage expenses	8,500	9,650
Staff meals	12,500	
Staff salaries and wages	385,000	
Decentralized taxes	85,000	
Vehicle maintenance costs	6,580	
Marketing expenses	100,000	
Fuel costs	8,652	

Communication Allowances	21,520	
Mission allowances	5,600	
Rent expenses	65,000	
Staff refreshments	8,680	
Vehicles	250,000	
Buildings	3,000,000	
Furniture and fittings	176,000	
Intangible Assets	880,000	
Accumulated Depreciation-Vehicles		25,000
Share capital		500,000
Share premium		125,000
Retained Earnings		168,000
Revaluation Reserve		87,000
Accumulated Depreciation-Buildings		90,000
Accumulated Depreciation-Furniture and fittings		22,000
Inventory as at 01/07/2020	85,000	
Inventory as at 30/06/2021	95,000	
Trade receivables	658,000	
Trade payables		85,000
Loan		2,500,000
Cash at the bank	385,000	128,000
Total	**9,185,270**	**9,185,270**

The following additional information is relevant for the preparation of financial statements

1. The loan was obtained from Cogenenk Plc. ON 1stseptemeber 2020 at an annual rate of 16.5% and the interest was not yet settled as at 30thJune 2021.

2. Depreciation, Staff meals and staff salaries and wages are to be allocated to both selling and Distribution and administrative expenses in the ration of 30% to 70% respectively.

3. The following rate will be applicable in the depreciation of the following assets:

   – Buildings 5% straight line

   – Furniture and fittings 25% reducing balance

   – Vehicles 20% reducing balance

4. The buildings were revalued at 30 June 2021 at FRW 3.2 billion
5. Income tax expense is to be charged at 30% of the profit
6. On 1st January 2021, the company acquired a new ERP software worth FRW 543.5 million with a definitive useful life of 10 years. This software has not been recorded in the financial statements.

Required: In accordance with IAS, Prepare:

a) Statement of profit or loss and comprehensive incomes of KWESA LTD for the year ended 30 June 2021

b) Statement of financial position of KWESA LTD as at 30 June 2021

Answer to illustration:

The correct answer **is B**

KWESA LTD STATEMENT OF PROFIT OR LOSS FOR THE YEAR ENDED 30 JUNE 2021

Particulars	Notes	FRW "000"	FRW "000"
Revenues	1		5,350,000
Cost of goods sold	**1**		(2,638,958)
Gross profit			**2,711,042**
Less operating expenses			
Administrative expenses	3	-849,685	
Selling and Distribution expenses	4	-304,532	(1,154,217)
Operating profit			**1,556,825**
Less Finance cost	5	-343,750	
Profit before tax			**1,213,075**
Less income tax			(363,923)
Profit for the year			**849,153**
Add other comprehensive incomes			
Revaluation surplus	6	440,000	
Total comprehensive incomes			**1,289,153**

KWESA LTD STATEMENT OF FINANCIAL POSITION AS AT 30 JUNE 2021

Assets	**Notes**	FRW "000"	FRW "000"
Non-current assets			
Vehicles	7c	180,000	
Buildings	7a	2,760,000	
Furniture and fittings	7b	115,500	
Intangible Assets		880,000	
ERP Software		516,325	
Total Non-current Assets			**4,451,825**
Current assets			
inventory as at 30/06/2021		95,000	
Trade receivables		658,000	
Cash at the bank		385,000	
Total current Assets			**1,138,000**
Total Assets			**5,589,825**
Equity and Liabilities			
Equity			
Share capital		500,000	
Share premium		125,000	
Retained Earnings		1,017,153	
Revaluation Reserve		527,000	
Total Equity			2,169,153
Liabilities			
Non-current Liabilities			
Loan			2,500,000
Current Liabilities			
Trade payable		85,000	
Bank overdraft		128,000	
Interest payables		343,750	
Tax payables		363,923	
Total Liabilities			**920,673**
Total Equity and Liabilities			**5,589,826**

Workings

1	Revenue	5,400,000
	Less Return inwards	(50,000)
	Net Revenues	**5,350,000**
2	Cost of goods sold	85,000
	Purchases	2,704,228
	Add: carriage inwards	8,500
	Less return outwards	(45,620)
	Goods available for sale	2,733,958
	Less closing inventory	(95,000)
	Cost of goods sold	**2,638,958**
3.	Administrative expenses	
	Rent	65,000
	Communication Allowances	21,520
	Staff refreshments	5,600
	General services	**115,000**
	Transport	57,150
	Cleaning services	22,860
	Decentralized taxes	85,000
	Amortization of ERF Software	27,175
	Depreciation expenses	163,450
	Staff meals	8,750
	Staff salaries and wages	269,500
	Total Administrative expense	**849,685**
4		
	Selling and Distribution expenses	
	Staff salaries and wages	115,500
	Staff meals	3,750
	Vehicle maintenance costs	6,580
	Fuel costs	8,652
	Marketing expenses	100,000
	Carriage out	9,650
	Depreciation expenses	70,050
	Total Selling and Distribution expenses	**304,532**

5	**Finance costs**		
	Interest expense		343,750
6	Revaluation surplus		
	Revaluation amount		3,200,000
	Cost	3,000,000	
	Accumulated depreciation	-90,000	
	Depreciation charge	-150,000	2,760,000
	Revaluation surplus		**440,000**
7a	Depreciation of Buildings		
	Cost		3,000,000
	Depreciation charge (5%)		(150,000)
	Accumulated Depreciation		-90,000
	Net Book Value		**2,760,000**
7b	Depreciation of Furniture and Fittings		
	Cost		176,000
	Accumulated Depreciation		(22,000)
	Carrying amount		154,000
	Depreciation charge (25%)		(38,500)
	Net Book Value		**115,500**
7c	Depreciation of Vehicle		
	Cost		250,000
	Accumulated Depreciation		(25,000)
	Carrying amount		225,000
	Depreciation charge (20%)		(45,000)
	Net Book Value		**180,000**
	Enterprise Resource Planning (ERP) Software		
8	Cost		543,500
	Amortization		(27,175)
	Net Book Value		**516,325**

Application activity 6.4

The following is a summarized balance sheet of MURENZI Ltd as at 31st March 2014, together with the comparative figures relating to the previous year.

Murenzi Ltd

	31/3/2014	31/3/2015
	FRW '000'	FRW '000'
Non-current assets:		
Land and buildings	2,640	2,724
Plant and machinery	5,910	7,674
	8,550	10,398
Investments quoted (cost)	2,496	2,160
Net current assets	7,496	8,835
Total assets less current liabilities	18,504	21,393
10%debentures (secured)	(1,860)	(2,160)
	16,644	**19,233**
Share capital:		
Ordinary shares of FRW 1 each fully paid	12,000	13,500
9% preference shares of FRW 1 each fully paid	1,500	1,500
Share premium	150	450
Profit and loss account	2,994	3,783
	16,644	**19,233**

Notes to the balance sheets

				"000'
i) Non-current assets:				
Land and buildings				
At 31 March 2014				2,640
Add: purchases and improvements				84
At 31st march 2015				2,724
Plant and machinery				
At 31 March 2014				5,910
Add: purchases				2,781
				8,691
Book value of sales				(192)
				8,499
Depreciation				(825)
				7,674
ii) Investments:				
at 31 March 2014				2,496
Disposal at cost				(336)
				2,160
iii) Current assets:		**31/3/14**		**31/3/15**
Stock		5,991		5,427
Debtors		2,082		2,964
Cash and bank		6,114		7,512
		14,187		15,903
Creditors	(3,903)		(3,990)	
Proposed dividend	(7500		(900)	
Taxation	(2,076)	(6,729)	(2,178)	7,068
		7,458		**8,835**

iv) Capital raising operations

a) During the year ended 31 March 2015 there was a right issue of FRW 1 ordinary shares for every 8 held, being issued at a price of FRW 1.20 per fully paid share.

b) There was an issue of FRW 300,000 10% debenture stock. Both of these issues were fully subscribed.

v) Profit and Loss Account

	FRW '000'	FRW "000"
At 31 March 2014		2,994
Add: Trading profit		4,368
Profit on sale of plant and machinery		30
Income from quoted investments		300
		7,692
The loss of investments	(36)	
Dividends in respect of the year:		
Paid dividends		
Preference shares	(120)	
Ordinary shares	(600)	
Taxation	(900)	
At 31 March 2015	(2,253)	(3,909)
		3,783

NOTE: the trading profit was arrived at after charging the FRW 201,000 debenture interest.

Required:

Prepare the statement OF Cash Flow for MURENZI Ltd for the year ended 31 March 2015

2. What must include in note to financial statement for property, plant and equipment: IAS 16

Skills Lab

Students in small groups prepare financial statements of a limited liability company from case studies.

Through a case study, students conduct a field visit to see how financial statements are prepared in a selected limited liability company and present what they have observed

End assessment

1. According to IAS 1, which of the following items must appear on the face of the statement of profit or loss and other comprehensive income?

   i) Tax expense

   ii) Revenue

   iii) Cost of sales

   iv) Profit or loss

   a) (iv) only
   b) (ii) and (iv)
   c) (i), (ii) and (iv)
   d) (ii) and (iii)

2. According to IAS 1, which of the following items make up a complete set of financial statements?

   i) Statement of changes in equity

   ii) Statement of cash flows

   iii) Notes to the accounts

   iv) Statement of financial position

   v) Statement of profit or loss and other comprehensive income

   vi) Chairman's report

   a) All of the items
   b) (i), (ii), (iv) and (v)
   c) (i), (ii), (iii), (iv) and (v)
   d) (iii), (iv) and (v)

3. Which of the following items are non-current assets?

   i) Land

   ii) Machinery

   iii) Bank loan

   iv) Inventory

      a) only

      b) (i)and (ii)

      c) (i), (ii) and (iii)

      d) (ii), (iii) and (iv)

4. How is a bank overdraft classified in the statement of financial position?

      a) Non-current asset

      b) Current asset

      c) Current liability

      d) Non-current liability

5. The following account balances were extracted from the books of XYZ LTD, a company owning a computer store in Nyarugenge, at the end of her financial year 30 June 2020:

Accounts payable		45,500
Accounts receivable	2,300	
Bank	12,200	
Carriage in	600	
Cash	1,900	
Commission income		60,000
Equipment	60,000	

Insurance	1,800	
Light and heat	5,200	
Loss from the previous period	70,000	
Opening Inventory	94,000	
Purchases	314,000	
Rent expense	85,000	
Returns in	8,000	
Returns out		3,500
Sales		608,000
Share Capital (1000 shares of FRW 290 each)		290,000
Shop fittings	260,000	
Shop wages	92,000	
Total	1,007,000	1,700,000

The inventory at the end of the year was valued at FRW 8,800

You are required to prepare (For Internal Purpose):

a) XYZ's Statement of Profit or Loss for the year ended 30 June 2020 (10 Marks)

b) XYZ's Statement of Financial Position as at 30 June 2020

UNIT 7 EVENTS AFTER THE REPORTING PERIOD

Key unit competence: To be able to assess the events that require the entity to adjust the amount shown in the financial statements.

Introductory activity

Imagine that the end of your reporting period is 31st December 2022, your accountants finish the closing works on 31st January 2023, the board of directors authorizes them for issue on 15th February 2023 and the shareholders approve them on 28th February 2023. By definition, you need to consider everything that happens between 31st December 2022 and 15th February 2023 as an event after the reporting period.

Ok, but what if the earthquake happens on 16th February 2023 and destroys your building? Well, that is the event after the reporting period for sure, but not under the definition of IAS 10, because it falls outside those two important dates.

1. Why do accountants adjust the accounts after the reporting period?
2. What is the impact of adjustments on the financial statements of a company?

7.1. Objective and scope of the International Accounting Standard 10 (IAS 10)

Learning Activity 7.1

One of the accounting purposes is to report the accounting information to various users, including internal and external. After reporting, some events may occur and adjustments may be done.

1. In which range these adjustments must be done?

Events after the reporting period are the events which could be favorable or unfavorable, that occur between the reporting period and the date that the financial statements are authorized for issue.

7.1.1 Objective of the International Accounting Standard 10 (IAS 10)

The financial statements are significant indicators of a company's success or failure. It is important therefore, that they include all the information necessary for an understanding of the company's position.

7.1.2 Scope of the International Accounting Standard 10 (IAS 10)

The International Accounting Standard 10 (IAS 10) deals with the events after the reporting period, which may affect the performance and financial position of a company at the reporting date. It addresses the criteria that must be met in order to adjust the financial statements and all disclosures that must be made regarding events after the reporting period date.

Application activity 7.1

a) Why do businesses consider adjustments after reporting period?

b) Is it necessary to adjust all events that occur between the reporting period and that of authorization for issue? Why?

7.2. Events that require adjustments and events that do not require adjustments.

Learning Activity 7.2

After the reporting period, a given number of events may occur and, some of them affect the accounts included in the financial statements while others are not, reason why accountants must consider all of these events.

a) Why do accountants adjust accounts?

7.2.1 Events that require adjustments

Events that require adjustments are the events that provide further evidence of conditions that existed at the reporting date should be adjusted for in the financial statements.

The standard requires adjustment of assets and liabilities in certain circumstances; an entity shall adjust the amounts recognized in its financial statements to reflect adjusting events after the reporting period.

Examples include additional evidence which becomes available after the reporting date is where a customer goes bankrupt, thus confirming that the trade account receivable balance at the year-end is irrecoverable.

Other examples include:

- Evidence of a permanent diminution in property value prior to the year end,
- Sale of inventory after the end of the reporting period for less than its carrying at the year-end;
- Insolvency of a customer with a balance owing at the year-end;
- Amounts received or paid in respect or insurance claims which were in negotiation at the year end
- Determination after the year end of the sale or purchase price of assets sold or purchased before the year end;
- Evidence of a permanent diminution in the value of a long-term investment prior to the year end
- Discovery of fraud or errors that show that the financial statements are incorrect.

The standard states that, where operating results and the financial position have deteriorated after the reporting date, it may be necessary to reconsider whether the going concern assumption is appropriate in the preparation of the financial statements.

7.2.2 Events that do not require adjustments

Events which do not affect the situation at the reporting date should not be adjusted, but should be disclosed in the financial statements. The entity shall not adjust the amounts recognized in its financial statements to reflect non-adjusting events after the reporting period.

Example given by the standard of such an event is where the value of an investment falls between the reporting date and the date the financial statements are authorized for issue. The fall in value represents circumstances during the current period, not condition existing at the previous reporting date, so it is not appropriate to adjust the value of the investment in the financial statements. Disclosure is an aid to users, however, indicating unusual changes in the state of assets and liabilities after the reporting date.

Other examples include the following:

- Acquisition or disposal of subsidiary after the year end;
- Announcement of a plan to discontinue an operation;
- Major purchases and disposals of assets;
- Destruction of a production plant by fire after the end of the reporting period
- Announcement of commencing implementation of a major restructuring;
- Share transactions after the end of the reporting period;
- Litigation commenced after the end of the reporting period.

Illustration

KANYANA Company Ltd faces the court case for selling contaminated foods to KABANYANA its customers. KANYANA Company Ltd denied all claims and no provision was made in its financial statements at 31st December 2021.

On 2nd February 2022, the court awards KABANYANA FRW 1,000,000 damages against KANYANA Company Ltd. The financial statements have not yet authorized for issue at that date.

Therefore, this adjusting event must be reflected in the financial statement at 31st December 2021.

KANYANA Company Ltd needs to create a provision for the damages because the present obligation existed at 31st December 2021 (they sold contaminated food prior that date)

The adjusting entries are as under:

Dr: Legal costs in profit or loss	1,000,000
Cr: provision against legal cost	1,000,000

Application activity 7.2

a) Distinguish the events that require the adjustments from the events that do not require adjustments after the reporting period

b) Give three examples of events that require adjustments and three ones that do not require adjustments after the reporting period

c) State whether the following events occurring after the reporting period require an adjustment to the assets and liabilities of the financial statements:

- Purchase of an investment
- A change in the rate of tax, applicable to the previous year
- An increase in pension benefits
- Losses due to fire
- An irrecoverable debt suddenly being paid
- The receipt of proceeds of sales or other evidence concerning the net realizable value of inventory
- A sudden decline in the value of property held as a long-term asset

d) A debtor who owed FRW 500,000 to the business by the end of the financial year is declared bankrupt by the court before the statements are authorized for issue.

Required:

- State if this event requires adjustment or not. Explain your position
- Make journal entries for this bankruptcy

7.3. Information to be disclosed in the notes

Learning Activity 7.3

Accounting information users always need to be informed about the performance and the financial position of their business. Sometimes, there are events that occur after reporting period and do not require adjustments.

1. In which way are the shareholders informed how their business is especially about the events which are not included in the financial statements?

Notes to the financial statements disclose the detailed assumption made by accountants when preparing a company's income statement, balance sheet, statement of change of financial position or statement of retained earnings. The notes are essential to fully understanding these documents.

These notes include important factors that were used in preparing the statement, information such as cash or accrual accounting procedures, valuation methods for inventory, reporting of events, intangible assets and contingent liabilities. These notes are used to disclose important information that explains how accountants applied Generally Accepted Accounting Principles (GAAP) in their reporting of the company.

Importance of disclosed information

Full disclosure of relevant information by businesses **helps investors make informed decisions**. It decreases the sentiment of mistrust and speculation and increases investor confidence as they feel fully prepared to make investment decisions with transparency in information at hand.

7.3.1 Dividends

A dividend is the distribution of a company's earnings to its shareholders and is determined by the company's board of directors

Proposed dividend (which must be distributed among shareholders of the company during a financial year which will be paid in the next financial year), or declared dividend (dividend that has been authorized by the board of directors, but not yet paid to investors), are not recognized as a liability in the accounts at the reporting date, but are disclosed in the notes to the accounts.

7.3.2 Disclosures

Accounting disclosure notes are included in the footnotes to an entity's financial statements. These notes reveal certain important facts about an entity's finances that are not shown elsewhere in the financial statements. These disclosure notes disclose facts and situations that are considered "material" and are done either as a requirement or in good faith.

If there is a known merger or acquisition occurring in the near future, it would be in the best interest of the shareholders to reveal this fact in a disclosure note. Essentially, any time there is a major event or important fact related to a company's financial health that is not included anywhere else in the financial statements, this item should be reported via an accounting disclosure note.

The following requirements are given for material events after the reporting period which do not require adjustment. If disclosure of events occurring after the reporting period is required by this standard, the following information should be provided:

- The nature of the events
- An estimate of the financial effect, or a statement that such an estimate cannot be made.

Application activity 7.3

1. What is the importance to the shareholders to disclose information?
2. Which organ is in charge of determining the dividend to be distributed to the shareholders within the business?

Skills Lab

Students in small groups analyze events after reporting period from case studies. Through a case study, students conduct a field visit to school bursar office, check how the events after reporting period are treated and their effects on the financial statements prepared just at the end of the reporting period.

End unit assessment

1. The controller of UBWIZA Ltd Company is preparing the financial statement for the year ended 30th June 2018 and has identified the following transactions/events which happened after the end of the reporting period but before the date when the financial statements are authorized for issue:

   a) The production of a factory has been suspended since 15th July 2018 due to a succession of power cuts. Sales orders of FRW 60,000,000 received in May 2018 with a planned production and delivery in August 2018 could not be fulfilled. According to the terms of the sale contracts, UBWIZA Ltd Company agreed to compensate the counterparty by 25% of the contract price for breach of contract;

   b) A customer informed UBWIZA Ltd Company on 3rd July 2018 that all the goods delivered to the customer's warehouse on 25th June 2018 were not produced in accordance with the agreed specification. UBWIZA Ltd Company reproduced the order and shipped the replacement goods to the customer on 10th July 2018. The invoice of FRW 32,000,000 issued on 25th June 2018 has not been cancelled and the customer paid it when they confirmed the acceptance of the replacement goods.

Required:

Explain how the above transactions/events should be dealt in the financial statements of UBWIZA Ltd Company for the year ended 30 June 2018

2. The following material events take place after reporting date of 31st December 2021 and before the financial statements for KIRABO Ltd are approved:

   i) KARABO Company, a major customer of KIRABO Ltd, went into liquidation. KIRABO Ltd was advised that it is highly unlikely to receive any of the outstanding debt of FRW 150,000,000 owed by KARABO Company at the year end

ii) A fire occurred in the warehouse of KIRABO Ltd and stock costing FRW 75,000,000 was destroyed.

Adjustments are made in the financial statements as required by IAS

Required

What is the effect on profit for the year in the financial statement at 31st December 2021 of making the required adjustments?

a) Reduction of FRW 150,000,000

b) Reduction of FRW 75,000,000

c) Reduction of FRW 225,000,000

d) No effect on profit

UNIT 8 CONSOLIDATED FINANCIAL STATEMENTS

Key unit competence: To be able to consolidate financial statements

Introductory activity

Companies frequently refer to the use of aggregate reporting of the entire firm when using the term "consolidation" in the company's financial reporting.

1. What are the financial statements that are important for the financial reporting of group companies?

8.1. Introduction to consolidated financial statements

Learning Activity 8.1

There are few fundamental strategies to expand business operations, like purchasing a foreign company or its shares, launching altogether a new company, forming a joint venture with someone else

1. Define the following terms;

   i) A parent Company

   ii) A subsidiary Company

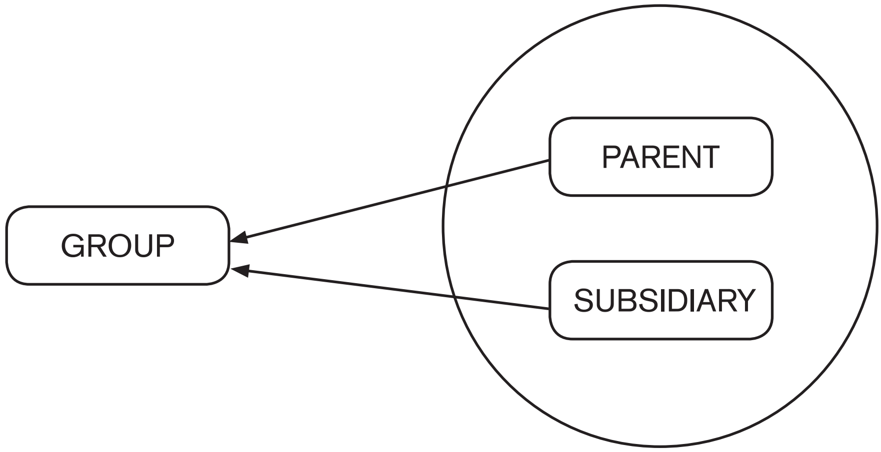
   iii) A group

8.1.1 An overview on Groups and consolidation

This topic discusses issues in relation to group accounting and the provisions of the IFRSs that give guidance on how to disclose items in the financial statements. It gives important definitions and explains the need for consolidation and how relevant consolidated financial statements are for the users. One of the IFRSs that guide consolidation process is IFRS 10, the objective of IFRS 10

'Consolidated Financial Statements' is to establish principles for preparation and presentations of consolidated financial statements when an entity controls one or more other entities.

The need to develop an IFRS to deal specifically with issues of consolidated accounts arose due to inherent weaknesses in IAS 27. While recognizing that the basic model for consolidated accounts was fine in IAS 27, inconsistency in applying the provisions of IAS 27 necessitated the need for a single combined model that meets the needs of both those preparing financial statements and the end users of financial information in a consistent manner.



Non-controlling interest: Equity in a **subsidiary** not attributable, directly or indirectly.

IFRS 10 establishes principles for presenting and preparing consolidated financial statements when an entity controls one or more other entities. IFRS 10:

- Requires an entity (the parent) that controls one or more other entities (subsidiaries) to present consolidated financial statements;
- Defines the principle of control, and establishes control as the basis for consolidation;
- Sets out how to apply the principle of control to identify whether an investor controls an investee and therefore must consolidate the investee;
- Sets out the accounting requirements for the preparation of consolidated financial statements; and
- Defines an investment entity and sets out an exception to consolidating particular subsidiaries of an investment entity.

Consolidated financial statements are financial statements that present the assets, liabilities, equity, income, expenses and cash flows of a parent and its subsidiaries as those of a single economic entity.

Consolidation means presenting the results, assets and liabilities of a group of companies as if they were one company.

Example

There are two companies, Mukungu and Shaiga. Mukungu owns 70% of the shares in Shaiga. Mukungu has a land worth 120 FRW million. Shaiga has buildings worth RWF100 million. Keep in mind that consolidation refers to the presentation of the results of two or more businesses as if they were one.

Answer

You add together all the values of the land and buildings to get the values of the assets. In group accounts take the share for Mukungu plus the share for Shaiga and this is how is done;

FRW120 Million + FRW 100 million=FRW 220 Million. So, this what is **consolidation?**

Intra-group debts

a) Suppose Mukungu has receivables of FRW 60 Million and FRW40 million for shaiga. Shaiga owes Mukungu 4Million (included in his receivables).

Consolidation = FRW 60Million + FRW40 Million-FRW 4Million= FRW96Million. This implies that, figures as treated as for one company. What Shaiga owes Mukungu is there internal matters.

b) Suppose Mukungu has FRW50Million payables and Shaiga has FRW30Million payables still Shaiga owes Mukungu FRW 5Million payables.

Consolidation payables =50Million+30Million-5Million= 75Million

The total receivables and payables show that correct figure in the books of Mukungu company.

From the above we conclude that Mukungu controls Shaiga and mukungu's directors have the right to control shaiga as a subsidiary company. In this case, the total assets for the company is equal to FRW 220Million.

From the above activity FRW 142,000 Million is the total non-current assets of Mukiza ltd.

8.1.2 Subsidiary

A subsidiary is an entity controlled by another entity.

There are relevant IFRS standards for consolidation;

ISA 27 Separate Financial statements

ISA 28 Investments Associates and joint ventures

IFRS 3 Business Combination

IFRS 10 Consolidated Financial Statements

ISA 27 consolidated and separate financial statement is set out to enhance the relevance, reliability and comparability of information provided by the parent company in its separate financial statements and in its consolidated financial statements where it has entities under control.

It outlines the conditions under which consolidated financial statements are necessary, how to account for the changes in the ownership and how to account for the loss of control. Additionally, it specifies disclosure rules pertaining to the connection between the parent company and its subsidiaries.

The standard applies to a group of entities under control of a parent and to associate and joint ventures where they elect, or are required to present separate financial statements.

ISA 28 Investment in associates

ISA 28 outlines the accounting treatment of investment in associates which also provides specifics on how to apply the equity method to account for investments in associates and joint ventures.

IFRS 3 Business combinations

When a parent company acquires control of a business, the accounting rules for goodwill on acquisition and non-controlling interests are outlined in IFRS 3 Business combinations. It also establishes what information must be made available to financial statement users.

IFRS 10 Consolidated financial statements

When an entity controls one or more other entities, IFRS 10 consolidated financial statements specifies the guidelines for production and presentation of consolidated financial statements. It provides controls as the foundation for consolidation, mandates that the parent entity presents consolidated financial statements and defines the principle of control.

Definitions

Although some of the concepts will be covered in greater depth later, they are helpful now because they offer you a general idea about consolidation.

Control: when an investor is exposed to, has a claim to, variable returns as a result of its participation with an investee and has power to influence those returns due to that power over investee, the investor is said to have control over the investee.

Power: Existing rights that allow the present to control the essential activities.

Subsidiary: is an entity that is controlled by another entity known as the parent

Parent: is an entity that control one or more entities

Group: is a parent and all of its entities (subsidiaries)

Consolidated Financial Statements: The financial statements of a group in which the assets, liabilities, equity, income, expenses and cash flows of the parent company and the subsidiaries are presented as of those of a single economic entity.

Non-Controlling interest: The equity in subsidiary that is not directly or indirectly related to the parent company. **Please refer to IFRS 10**

A trade or investment: is a stake kept foe wealth accumulation in the stock of another company is not an affiliate or subsidiary.

Investments in subsidiaries

You should be able to tell from the definitions above the concept of control.

The parent or the holding company will often control the majority of ordinary shares in the subsidiary company (to which normal voting rights are attached). There are circumstances, however, when the parent company owns merely minority of the voting rights in the subsidiary, yet the parent still have control over the subsidiary. For example, when the parent company own more than a half of the company's voting rights i.e more than 50%, control is typically considered to exist until it can be demonstrated that such ownership does not constitute control but these situations will be rare.

What about the circumstances in which this ownership criterion is absent? Below examples illustrate instances in which control even exists when a parent owns just 50% or less of the voting entity.

- By agreement with other investors, the parent has control over more than 50% of the voting rights.

- By statute or agreement, the parent has the authority to control the entity's financial and operational policies.
- The parent has the authority to control or dismiss the majority of the board of directors
- At the board of directors meeting, the parent has the power to vote for the majority of votes.

For example:

kawu co has invested its share in the following companies;

Name of the company	Equity shares	Non-equity shares held
Koco co	70%	Nil
Koba co	35%	90%
Kabu co	48%	25%

Kawu co has appointed five out of seven directors of Kabu co

Which of the above investments is considered as subsidiary in the consolidated accounts of Kawu co group?

Answer

Let's examine each invest in turn to see if the control exists and if so, whether they should be treated as a subsidiary in accounting terms.

Koco co –By looking at the equity shares, Kawu has more than 50% (i.e. 70%) so, it is a subsidiary

Koba co- has less than 50 % of equity shares, despite having majority of non-equity shares (these do not give voting power) Kawu co does not have control, so it is not a subsidiary

Kabu co- has less than 50% of equity shares you may incorrectly conclude that it doesn't have control over Kabu co but because it appointed five directors out of seven, it has the voting right, thus its decision will impact on the returns of the company. In conclusion therefore, Kabu co is a subsidiary.

8.1.3 Associates and trade investments

Associate is a business that is partially owned by the parent company. A parent company will hold minority or non-controlling interests. A corporation in which another has sizeable portion of voting shares, typically, 20-50% in accounting and business valuation. Associates are accounted in the consolidated statements of a group using equity method.

Investment in Associates

Investment in associates is less than investment is subsidiary but more than a simple trade investment. Here the key criterion is the significant influence.

Significant influence means the ability to influence the investee's financial and operational policy decisions without having sole or shared control over those decisions. Similar to control, considerable influence can be assessed based on who holds voting rights (which are typically linked common shares) in the entity. According to IAS 28, unless it can be demonstrated clearly that this is not the case it can be assumed that an investor has significant control over the entity if they hold 20% or more of the voting power of the entity. If the investor owns less than 20% of the entity's voting power, significant influence can generally be assumed to not exist unless proven differently.

The existence of significant influence by an entity is usually evidenced in one or more of the following ways:

a) Representation on the board of directors or equivalent governing body of the investee;

b) Participation in policy-making processes, including participation in decisions about dividends or other distributions;

c) Material transactions between the entity and its investee;

d) Interchange of managerial personnel; or

e) Provision of essential technical information.

Equity method

For investments in associates, IAS 28 mandates the use of the equity method of accounting (often known as "equity accounting") (with certain exceptions, but these are beyond the scope of this syllabus).

Trade investments

A trade investment is a simple investment in the shares of another entity that is not an associate or a subsidiary.

Trade investments are simply shown as investments under non-current assets in the consolidated statement of financial position of the group

8.1.4 Content of consolidated financial statements

Consolidated financial statements present the results of the group; they do not replace the separate financial statements of the individual group companies.

Consolidated financial statements do not replace parent or subsidiary individual statements. Consolidated financial statements are issued to the shareholders of the parent company and provide information for those shareholders on all the companies controlled by the parent company.

Most of the parent companies present their own individual accounts and their group accounts in a single package. The package typically comprises the following.

Parent Company financial statements, which will include investments in subsidiary undertaking' as an asset in the statement of financial position, and income from subsidiaries (dividends) in the statement of profit and loss and other comprehensive income

Consolidated statement of financial position

Consolidated statement of profit and loss and other comprehensive income

Note: The other comprehensive income elements of the consolidated financial statements will not be covered in this unit.

Application activity 8.1

Mukiza ltd own 60 %of Ruzinda ltd. Mukiza has non-current assets of FRW 100 Million and Ruzinda has non-current assets of FRW70Million.

Required: Calculate the consolidated non-current assets

8.2 Consolidated Financial statements

Learning Activity 8.2

During the consolidation process, a

parent company has to compile financial reports from the subsidiaries.

Required: What are the procedures of consolidated statement of financial position?

8.2.1 Consolidated Statement of Profit or Loss

The main principle of equity accounting states that whether or not as associate, GARU ltd, pays its gains as dividends, the investing business MURT ltd, should account for its portion of those gains. MURT ltd accomplishes this by including the group's portion of GARU Ltd's post tax profit in the consolidated earnings. Take note of the distinction between this method and consolidating the financial performance of a subsidiary firm. If MURT ltd owned 100% of GARU ltd, it would be entitled to all of GARU Ltd's sales revenues, cost of sales, etc.

Using the equity accounting, sales revenues, cost of sales and other financial measures for associate are not combined with those of the group instead the profit after tax of associate is merely added to the group profit in the form of the group share.

8.2.2 Consolidated statement of financial position (Balance sheet)

In this lesson we are going to learn about the statements of financial position also known as the Balance sheet.

Consolidated financial statements are financial statements of a group presented as those of a single economic entity (IFRS 10). When a parent company issues consolidated financial statements, it should consolidate all subsidiaries, both domestic and foreign. The first step in any consolidation is to identify the subsidiaries using the definitions as set out in IFRS 10.

Consolidated financial position includes investments in associate's amount that must be declared at the cost at the moment the associate was acquired.

This amount will arise or fall annually in proportion to the group's portion of the connected company's post-acquisition retained reserve growth or decline.

Basic steps

The following are the procedures for consolidated statements of financial position;

- In the individual statements of the parent company and each subsidiary, items that appear as an asset in one company and a liability in another should be cancelled out.
- After cancellation, add together the remaining assets and liabilities through the group.

Items to be cancelled may include;

- The assets, investment or shares in subsidiary in the parent company's statement of financial position will be matched with the share capital in the subsidiaries' accounts.
- Any intra-group trading needs to be cancelled accordingly. E.g the parent company records a receivable for selling goods to its subsidiary and the subsidiary likewise recording a payable relating to the parent company. This means that there is a trading between a parent and subsidiary company (trading group).

Example

Statement of financial position as at 31 December 2021

	KAKA ltd	GAGA ltd
Assets		
Non-current assets		
Property, plant and machinery	35,000	60,000
Investment of FRW 55,000 of shares in GAGA ltd at cost	55,000	-
Total non-current assets	90,000	60,000
Current assets		
Inventory	16,000	27,000
Trade receivables:		
GAGA ltd	2,000	24,000
Others	21,000	-
Bank	16,000	-
Total current assets	55,000	51,000
Total assets	145,00	111,000
Equity and liabilities		
55,000 ordinary Shares	-	55,000
85,000 ordinary shares	85,000	-
Retained earnings	3,000	14,000
Member's interest and reserves	116,000	69,000
Non-current liabilities	-	-
Current liabilities		
Bank overdraft	-	8,000
Trade payables: KAKA ltd	-	2,000
Others	29,000	-
	145,000	145,000

Consolidated statement of financial position as at 31 December 2021

Particulars	KAKA ltd
Assets	
Non-current assets	
Property, plant and machinery	95,000
	95,000
Current assets	
Inventory	43,000
Trade receivables	45,000
Bank	16,000
Total current assets	104,000
	199,000
Equity and liabilities	
FRW85,000 Ordinary shares	85,000
Retained earnings	45,000
Non-current liabilities	
Bank overdraft	8,000
Trade payables	61,000
Totan non-current assets	69,000
	199,000

Intra-group trading

We are going to look the consolidated financial statements specifically on intra-group trading explain what it is and have examples.

If intra-group trading transactions are undertaken at cost, there would be no issue in dealing with profits due to intra-group trading. However, with each company in a group being a separate trading entity, other group companies are treated in the same way as any other outside customer. In this case, if a company is selling say a parent company to a subsidiary company or a subsidiary company to another, their selling prices should be the same as they say to outsiders.

In the consolidated statement of financial position, the only profits recognized should be those earned by the group in providing goods or services to outsiders. Inventory should also be valued at cost to the group.

Scenario

GAGA ltd (subsidiary) buys goods at one price and sells them at a higher price to kaka ltd (a parent company). The accounts of GAGA ltd will properly include the profit earned on sales to KAKA ltd. KAKA Ltd's statement of financial position will also include inventories at their cost of purchase from GARU ltd.

The problem arising from the above transaction

1. Although GAGA ltd makes a profit as soon as it sells goods to KAKA ltd, the group does not make a sale or achieve a profit until an outside customer buys the goods from KAKA ltd. This is because the inventories are still in the group until they get an outsider to come and buy goods.
2. Any purchases from GAGA ltd which remain unsold by KAKA ltd at the end of the year will be included in KAKA Ltd's inventory. Their value in the statement of financial positions will be at their cost to KAKA ltd, which is not the same as their cost to the group.

EXAMPLE

GAGA ltd buys goods for FRW 5,000 and sells to its parent company KAKA ltd for FRW 7,000. The goods are in KAKA Ltd's store at the end of the year and appear in KAKA Ltd's statement of financial position at FRW 7,000.

In this case GAGA ltd made a profit of FRW 2,000 as it bought goods on FRW 5,000 and sold them to KAKA ltd a parent company at FRW 7,000. This will be recorded in GAGA Ltd's individual account. Let's see how to record in an intra- group

Consolidated financial statement for intra-group company

Cost of the group	FRW 5,000
External sales	-
Closing stock at the cost to the group	FRW 5,000
Profit or loss to the group	-

Because the group account is overstated by FRW 2,000 from KAKA ltd individual statement of financial position, it must be cancelled.

Consolidation adjustment

	Dr	Cr
Group retained earnings	2,000	
Group inventory		2,000

Steps to follow when you have non-controlling interest

1. Intra-group sales and purchases should be eliminated
2. Any unrealized profit is eliminated by trading to the cost of sales
3. I f the subsidiary made the sale; the figure for the subsidiary's net profit used to non-controlling interest must be adjusted for the unrealized profit.
4. If the parent made a sale, there will be no effect on the non-controlling interest.

Example

KAKA ltd acquires 75% of the ordinary shares of the GAGA ltd, which it has owned since GAGA Ltd's incorporation. The summarized statements of profit or loss of the two companies for the year ending 31 December 2021 are given below. GAGA ltd sold goods to KAKA ltd for FRW8, 000. It has bought these goods for FRW 6,000. 40% of these goods remained in KAKA Ltd's inventory at 31 December 2021.

Statement of profit or loss for the year ended 31 December 2021

	KAKA Ltd	**GAGA ltd**
Sales	87,000	45,000
Cost of sales	(54,000)	(19,000)
Gross Profit	33,000	26,000
Less expenses	13,500	9,800
Profit before tax	19,500	16,000
Income tax expense	5,460	4,536
Profit after tax	14,040	11,664

Let's first determine profit made by the subsidiary when selling to the parent company

Sales	8,000
Less cost of sales	(6,000)
Gross profit	2,000

Unrealized profit $=2,000\times40/100=800$

KAKA ltd consolidated statement of profit and loss for the year ended 31 December 2021

Sales	124,000
Cost of sales	65,800
Gross profit	58,200
Less operating expenses	(23,300)
Profit before tax	34,900
Less income tax expense (5460+4536)	(9,996)
Profit after tax	24,904
Profit attributed to:	
Owners of the parent company	22,188
Non-controlling interest	2,716

NOTE: After getting the value for profit, we have to determine what non-controlling interest is and what belongs to the parent company.

Workings

Sales=87,000+45,000-8000=124,000

Cost of sales=54,000+19,000+800=65,800

Gross profit=124,000-65,800=58,200

Operating expenses =13,500-9,800=23,300

Non-controlling interest (NCI) = NCI%×(subsidiary's profit after tax-unrealized profit)

NCI=25%×(11,664-800)=2,716

Owner's =14,040 = [75%×(11,664-8,000)]=22,188

Owner's

1. You can get the balancing figure of profit before tax and non-controlling interest
2. Use the formula;

Total parent's profit=parent's profit + [parent%× (subsidiary's profit after tax-unrealized profit]

Goodwill arising on consolidation

Goodwill is simply reputation of the business. Goodwill is recognized only when it has been acquired for the value consideration and represents advance payment made by the acquirer for the future economic benefit.

On consolidation, goodwill is reported as an intangible asset in consolidated group balance sheet. One of the simplest methods of calculating goodwill is by subtracting the fair market value of a company's net identifiable assets from the price paid for ....

Example

Muko ltd buys all the shares of 50,000 FRW 1,000 of Musi ltd at 80 million in by using cheque. The following is the statement of financial position before the acquisition of Musi ltd.

Statement of financial position as at 31 December 2021

	MUKO ltd	MUSI ltd
Assets	FRW M	FRW M
Property, plant and machinery	120	50
Bank	80	
Total assets	**200**	**50**
Equity and liability		
Share capital	200	50
Total Equity and liabilities	**200**	**50**

Consolidated statement financial position after acquisition (MUKO Group) as at 31 December 2021

Assets	**FRW M**	**FRWMP**
Property, plant and machinery	120+50	180
Goodwill arising on consolidation	20	20
Total assets		**200**
Equity and liabilities		
Share capital		200
Total Equity and liabilities		**200**

NOTE: Since MUKO Ltd bought 50,000 shares at FRW 1,000 and paid 80 Million which is above the value of the shares, the difference (the premium amount) is the goodwill. In this case, 30 Million is goodwill

Application activity 8.2

1) Why do parent companies need to prepare consolidated financial statements?
2) Outline their limitations of financial statement
3) Mucyo Co ltd acquired 100% of Mukama Co ltd at a cost of FRW 100M. On the date of acquisition, the fair value of the identifiable assets of Mukama Co ltd was FRW 75M.

Required: Calculate the goodwill arising on acquisition.

End unit assessment

1. The following statements of financial position were extracted from the books of two companies-GIKI LTD and KAWU LTD at 31 December 2020

	GIKI LTD	KAWU LTD
	FRW"000"	FRW"000"
Non-current assets		
Property, plant and Equipment	75,000	11,000
Investment shares in KAWU LTD	27,000	
Total Non-current Assets	**102,000**	**11,000**
Current Assets	214,000	33,000
Total Assets	316,000	44,000
Equity		
Share capital	80,000	4,000
Share premium	20,000	6,000
Retained Earnings	40,000	9,000
Total share capital	**140,000**	**19,000**
Current Liabilities	176,000	25,000
Total capital and liabilities	**316,000**	**44,000**

GIKI LTD acquired all of the share capital of KAWU LTD one year ago. The retained earnings of KAWU LTD stood at FRW 2,000,000 on the day of acquisition. Goodwill is calculated using the fair value method and there has been no impairment of goodwill since acquisition.

Required: Prepare the consolidated statement of financial position of GIKI LTD as at 31 December 2020.

UNIT 9 | FINANCIAL STATEMENTS ANALYSIS

Key unit competence: To be able to analyze financial statements for an entity

Introductory activity

JWZ is a partnership business of lawyers operating its activities in Bugesera District. The business accountant prepared all needed financial statements for the year ended 31 December 2022 horizontally. Some users of financial statements information are trying to convince him not to use the horizontal format and the accountant is trying to explain to them that there are different forms of financial statement analysis.

You are asked:

1. What is financial Statement analysis?
2. What are the formats of Financial Statements?

9.1. Introduction to financial statement analysis

Learning Activity 9.1

An Audit conducted in Rwanda, in 2022 revealed that some businesses are not preparing financial statements. Asking them why, some answered that they do have enough knowledge on financial statements and thus they do not know about the financial statements analysis. As an accountant student, your asked to help them about:

a) Explain the term financial Statements analysis?

b) What is involved in Financial statements analysis?

c) What are the advantages of financial statements analysis?

Financial Statement consists of Statement of Financial Position, Financial reports and other financial reports which are to be framed according to applicable financial reporting framework and auditor and various other analysts analyze the financial statements and give their report on the same but this analysis has certain limitations because of volatile industry, business conditions, and other factors.

9.1.1 Introduction

Financial statements are prepared and presented, in accordance with generally accepted accounting principles, to give readers an overview of the financial results and condition of a business. However, it is the analysis of financial statements that gives true representation of what is going on inside the company.

It is necessary to analyses the numbers in the statements to get a true and clear picture of the company. The financial statements are analyzed with the help of different tools such as comparative statements, common size statements, ratio analysis, trend analysis and funds flow analysis.

Financial statement analysis (or financial analysis) is the process of reviewing and analyzing a company's financial statements to make better economic decisions.

These statements include the income statement, balance sheet, statement of cash flows, a statement of retained earnings.

9.1.2 Meaning of financial statements analysis

Financial statement analysis is a method or process involving specific techniques for evaluating risks, performance, financial health, and future prospects of an organization.

Financial statement analysis (or financial analysis) is the process of reviewing and analyzing a company's financial statements to make better economic decisions.

These statements include the income statement, balance sheet, statement of cash flows, a statement of retained earnings.

Financial statement analysis is one of the most fundamental practices in financial research and analysis. In layman's terms, it is the process of analyzing financial statements so that decision-makers have access to the right data.

Financial statement analysis is also used to take the pulse of a business. Since statements center on a company's key financial details, they are useful for evaluating activities. This is essential to understanding the firm's overall performance.

Financial statement analysis involves:

- Assessment of the firm's past, present and future financial condition
- Finding out a firm's financial strengths and weaknesses
- Comparison through time (Trend)
- Comparison among companies (industrial analysis)

Advantages of a financial statement Analysis

- To meet their financial reporting obligations and to assist in strategic decision-making, firms prepare financial statements. However, "the information provided in the financial statements is not an end in itself as no meaningful conclusions can be drawn from these statements alone." Firms employ financial analysts to read, compare and interpret the data as necessary for quantitative analysis and decision- making.
- Financial analysis determines a company's health and stability.
- The data gives you an intuitive understanding of how the company conducts business
- Stockholders can find out how management employs resources and whether they use them properly.
- Governments and regulatory authorities use financial statements to determine the legality of a company's fiscal decisions and whether the firm is following correct accounting procedures
- Government agencies, such as the Internal Revenue Service, use financial statement analysis to decide the correct taxation for the company.

Financial statements

Measures of financial performance and position are developed from a firm's financial information organized into 3 main statements:

- Statement of Profit or Loss
- Statement of Financial Position
- Statement of Cash Flow

According to IFRS, a complete set of financial statements comprises the following:

- Statement of financial Position
- Statement of Profit or Loss
- Statement of changes in equity
- Statement of cash flow
- Accounting policies and notes

Entities are encouraged to furnish other related financial and non-financial information in addition to the financial statements. The statement of changes in equity reflects information about the increase or decrease in net assets or wealth.

Importance of Statement of Financial Position

The statement of Financial Position helps to know the three origins of economic resources used by a firm:

- Contribution of shareholders or owners
- Long, medium and short term liabilities
- Internal financing (retained earnings and reserves)

Succinctly, sources of capital used by a business are:

- Personal resources
- Borrowings from friends or banks
- Trade credits
- Bank overdraft

The Statement of Financial Position helps to know the use of economic resources which are:

- Fixed assets (Fixed capital)
- Current assets (Stocks, receivables, cash)

Structural equilibrium of the enterprise

The structural equilibrium is based on the following general principles:

1. Owner's equity should be greater than liabilities.
2. Capital employed (owner's equity plus long term liabilities) should cover the fixed assets and part of current liabilities.
3. Current liabilities should be invested only into current assets and basically in cash and receivables so to be easily reimbursed.

Application activity 9.1

As an accountant student:

a) What do you understand by financial statements analysis?

b) Is it necessary to have financial statement Analysis? Justify your answer

9.2 Uses of financial statement analysis

Learning Activity 9.2

Your classmates of senior six Accounting are discussing about preparation of financial statements. They are not aware and asked you to:

Explain the key measures in determining the financial strength of the business?

Final accounts or financial Statements are outputs of an accounting system, they are prepared at the end of the financial year, hence the name final accounts.

However, interim financial statements can be prepared before the end of financial year.

External users of accounting information (Banks, shareholders or investors, creditors, donors, funding agencies, government, competitors and general public) are more interested in final accounts or financial statements than books of accounts.

Final accounts are prepared from trial balance after end year adjustments are incorporated. The types of financial statements prepared vary from one organization to another depending upon its nature and size among other factors. However, the major financial statements prepared by profit making organizations for disclosure purpose are:

- Statement of profit or Loss
- Statement of Financial Position

The income statement should be prepared before the balance Sheet/Statement of Financial Position because the ending figure after subtracting expenses from incomes (net profit or net Loss) connects the income statement/Statement of Profit or Loss and statement of financial Position, thus, there are two accounts that are in both final accounts:

- Closing stock
- Net profit/Loss

9.2.1 Statement analysis for different users

The users of information can be divided into two:

- Internal users: who are parties within the organization e.g. the management or the employees.
- External users: who on the other hand, are parties outside the organization e.g. the shareholder, creditors, government, customers, etc.

Stakeholders including current and potential investors, creditors, customers, employees, government, bankers and stock exchanges all have an interest in the financial performance (and other aspects) of a company. Financiers and credit providers are concerned about the financial performance and creditworthiness of a company, especially before providing any loans or securities. Stakeholders will have enhanced confidence in a company if it has strong ratios compared

The need for financial analysis

Financial statements are prepared for decision-making purposes. Good decision making is driven by effective analysis and interpretation of financial statements (also referred to as financial analysis). Analysis provides a meaningful conclusion by drawing a meaningful relationship between the various items of the two financial statements:

- the profit and loss account or income statement
- the balance sheet or statement of financial position.

These are the indicators of profitability and financial soundness of a business entity for a given period.

Interested parties and managers

Different parties are interested in financial statements and their analysis for various reasons. As discussed above, they provide useful financial information to external and internal users in making financial decisions. For example, investors want to know the earning capacity of the business, the wellbeing of the business and its future prospects. Understanding the company's financial position and recent performance helps management direct the business.

Shareholders entrust the board of directors with the responsibility for managing the resources entrusted to them by giving it direction and providing both control and strategy. The board employs managers to implement their strategic vision and to help ensure the investments of owners are maximized.

Owners put mechanisms in place to monitor managerial behavior. For example, the UK Corporate Governance Code provides guidelines that require directors to conduct business with integrity, responsibility and accountability. An obligation of stewards or the directors is to provide relevant and reliable financial information, including analysis of financial statements using various techniques.

Key financial indicators

The purpose of financial analysis is to assess the financial strength and weakness of the business by assessing the efficiency and performance of an entity. The key measures in determining the financial strength of the business are as listed below.

- **Profitability**: the main objective of a business and its management (the agent) is to earn a satisfactory return on the funds invested by the investors or shareholders. Financial analysis ascertains whether adequate profits are being earned on the capital invested. It is also useful to understand the earning capacity of a business, its wellbeing and its prospects, including the capacity to pay the interest and dividends.
- **Trend of achievements:** analysis can be done through the comparison of financial statements with previous years, especially trends regarding various expenses, purchases, sales, gross profits and net profit. Users can compare the value of assets and liabilities, and forecast the future prospects of the business.
- **Growth potential of the business:** financial analysis indicates the growth potential of the business.
- **Comparative position in relation to similar businesses**: financial analysis helps the management to study the competitive position of their firm in respect of sales, expenses, profitability and capital utilization.
- **Overall financial strength and solvency of the entity:** analysis helps users make decisions by determining whether funds required for the purchase of new machines and equipment are provided from internal sources or received from external sources, and whether it has sufficient funds to meet its short-term and long-term liabilities.

9.2.2 Analysis of income statement and balance sheet

Tools of financial statements analysis

- Comparative financial statement
- Common size financial statements
- Trend percentages analysis
- Ratio analysis, cash flow statement analysis etc.

What Is Horizontal Analysis?

Horizontal analysis is used in financial statement analysis to compare historical data, such as ratios, or line items, over a number of accounting periods.

Horizontal analysis can either use absolute comparisons or percentage comparisons, where the numbers in each succeeding period are expressed as a percentage of the amount in the baseline year, with the baseline amount being listed as 100%. This is also known as base-year analysis.

Horizontal analysis shows the changes between years in the financial data in both FRW and percentage form

Illustration1

Norique Ltd had the following sales and operating income in FY 2016 and FY 2017 (amounts are in FRW millions).

	FY 2016	FY 2017	Change
Sales	90,322	100,232	100,232 – 90,322 = 9,910
Operating income	5,792	6,782	6,782 – 5,792 = 990

The change calculated shows that the sales have increased by FRW 9,910 million in FY 2017, with the corresponding increase in the operating income by FRW 990 million.

A better trend analysis is provided by the change in percentage, calculated as:

Percent change = (Current period amount – Base period amount) ÷ Base period amount

Percentage change for Norique Ltd is as follows.

	FY2016	FY2017	Change	Percentage Change
Sales	90,322	100,232	9,910	9,910 ÷ 90,322 = 11%
Operating income	5,792	6,782	990	990 ÷ 6782 = 14.6%

The above calculations show sales have increased by 11% from FY2016 to FY2017, whereas operating income has increased by 14.6%. This requires further investigation.

Illustration2.

Clover Corporation's balance sheets for the year ended December 31

	This year	Last year	amount	%
Assets				
Current assets:	12,000	23,500	(11,500)	(48.9)
Account receivable, net	60,000	40,000	20,000	60
Inventory	80,000	100,000	(20,000)	(20)
Prepared expenses	3,000	1,200	1,800	160
Total current assets	155,000	164,700	(9,700)	(5.8)
Property and equipment:				
Land	40,000	40,000	0	0
Buildings and equipment, net	120,000	85,000	35,000	42.2
Total property and equipment	160,000	125,000	35,000	28
Total assets	315,000	289,700	25,300	8.7

FRW change=Current year figure - Base year figure

The FRW amounts for last year become the 'base year figure'

Percentage change = $\frac{\textbf{\textit{FRW change}}}{\textbf{\textit{base year figure}}} \times 100$

FRW 12,000-FRW 23,500=FRW (11,500)

FRW (11,500/23,500) *100= (48.9%)

We could also this for the liabilities and stockholders 'equity, but now let's look at the income statement accounts.

CROVER CORPORATION

Income statements for the year ended December 31

Particulars	This year	Last year	Amount	%
Sales	520,000	480,000	40,000	8.3
Cost of goods sold	380,000	315,000	45,000	14.3
Gross margin	160,000	165,000	(5,000)	(3)
Operating expenses	128,600	126,000	2,600	2.1
Net operating income	31,400	39,000	(7,600)	(19.5)
Interest expenses	6,400	7,000	(600)	(8.6)
Net income before taxes	25,000	32,000	(7,000)	(21.9)
Less income taxes (30%)	7,500	9,600	(2,100)	(21.9)
Net income	17,500	22,400	(4,900)	(21.9)

Sales increased by 8.3%, yet net income decreased by 21.9%

There were increases in both cost of goods sold 14.3% and operating expenses 2.2%. These increased costs more than offset the increase in sales, yielding an overall decrease in net income.

Vertical analysis or Common size statements

Trend Analysis

Trend percentages state several years' financial data in terms of a base year, which equals 100 percent

$$\text{Trend percentage} = \frac{\textbf{\textit{Current year amount}}}{\textbf{\textit{base year amaunt}}} \times 100$$

Illustration

Berry product

Income information for the years ended December 31

Items	Year				
	2011	2010	2009	2008	2007
Sales	400,000	355,000	320,000	290,000	275,000
Cost of goods sold	285,000	250,000	225,000	198,000	190,000
Gross margin	115,000	105,000	95,000	92,000	85,000

Working:

The base year is 2007, and its amounts will equal 100%.

2008 amount/2007 amount*100%

(290,000/275,000) *100%=105%

(198,000/190,000) *100%=104%

(92,000/85,000) *100%=108%

Items	Year				
	2011	2010	2009	2008	2007
Sales	145%	129%	116%	105%	100%
Cost of goods sold	150%	132%	118%	104%	100%
Gross margin	135%	124%	112%	108%	100%

By analyzing the trends for Berry Products, we can see that cost of goods sold is increasing faster than sales, which is slowing the increase in gross margin.

Vertical analysis is a proportional analysis where each item of financial statement is shown as a percentage of base items. Usually, line items in the income statement are shown as a percentage of sales, while line items in the balance sheet are shown as a percentage of the total assets. It helps to provide a greater understanding of how sales revenue is being consumed within the business, thus requiring further investigation if the level of activity is not as expected

Vertical analysis: focuses on the relationships among financial statement items at a given point in time.

In Income statements, all items usually are expressed as a percentage of sales.

In Balance sheets, all items usually are expressed as a percentage of total assets.

Common-size financial statements are particularly useful when comparing data from different companies.

Interpreting Horizontal and Vertical Analyses

There are several interpretations that can come out of Horizontal analysis, the following are examples:

Under horizontal analysis,

- Increase in total asset may mean company growth
- Increase in company's inventory and fixed asset may be due to expending business by opening new stores, branches, etc. However, increase in inventory may also mean weakness because as a general rule, retail companies are in business to sell, not hold, inventory. When we see a build-up in inventory we know that the company is facing a soft business environment. We cannot generate cash unless we sell inventory.
- Significant Decrease in cash position from one period to another may be a warning sign since the cash weakening hurt the liquidity of the company.
- A comparative analysis on income statement reveals an increase/ decrease in income/expense from one year to another and this would explain a decrease or increase in the resulting net income.

Under vertical analysis:

- Under balance sheet any other item is expressed as a percentage of asset, so important figure is gauged depending on how much they are compared to total asset for example: A higher % of debt may mean a highly leveraged company and Vice versa.
- Under income statement important figures are determined depending on how much they are compared to sales; for e.g. if COGS and operating expenses are important compared to sale, one can evaluate the effectiveness of management looking at how well the management controls operating expenses and COGS. The increase in % of COGS or Operating expense as compared to sales may mean an adverse situation given that it would worsen the net income.

9.2.3 Limitations of financial analysis

- The cost principle is used to prepare financial statements. Financial data is not adjusted for price changes or inflation/deflation.
- Companies may have different fiscal year ends making comparison difficult if the industry is cyclical.
- Diversified companies are difficult to classify for comparison purposes
- Financial statement analysis does not provide answers to all the users' questions. In fact, it usually generates more questions!

Other limitations

The analysis is based on past and present data and conditions: The analysis of the auditor and various analysts are based on past data and present conditions and results. They compare the past data with the present position and if there is the improvement they will issue the positive reports and otherwise the qualified report, but they do not consider the future plans of the enterprise and future economic and market conditions as these conditions can change at any point of time due to unpredictable nature. The report which shows the favorable points is based on conditions which can be changed hence it is not necessary that report will always show the points in the future also.

Reliability of the data presented: Auditor and various analyst make reliability on the reports and financial statements presented by the management of the enterprise and they only verify the figures on test check bases but in the world of competition everyone wants to attract the investors and hence one can do the same by window dressing of accounts and showing the better position of the company. Hence the reports issued by independent third parties are subject to the limitation of reliability and transparency by management.

Valuation by different methods of accounting policies and estimates: The valuations made by management like valuation of inventory, valuation of Fixed assets, valuation of investments, etc. are based on different methods and accounting policies and estimates by the management. And the auditor or financial analyst cannot question on the method or policy adopted unless being not acceptable by law. The different methods and estimates show different results and accordingly different financial positions.

Change in accounting methods enforced by law: There are situations when an enterprise is following one accounting method for years and suddenly the law changes and enterprise have to change the accounting policies or methods as required by law. Hence because of different accounting policies from past periods it is not justifiable to compare the statement with the past data. Analysts and auditor while analyzing should keep this limitation in mind.

Inflationary effects are being ignored: As inflation is increasing day by day and it affects every business organization which results into rise in expenses and probably a decrease in profits. With this, too every investor, analyst or auditor make the comparison of the current position with the past data but they should also keep that limitation in mind that the time value of money changes.

Limitations of methods application for analysis: Every analyst whether the auditor or the market analyst analyzes and make reports based on the experience and skills of the analyst and we must take this fact in mind that the experience and skill of analysts is not the same in any manner. Hence the reports issued by them are subject to limitation as it is based on personal judgments of the analyst.

The Reports of the Analysis should not create the assessment of managerial Ability: On the basis of the reports issued by an analyst, the people or some stock analyst question the management about their inability to bring the company at the industry standards and forget the truth that it is based on market conditions, situations, the response from buyers, the attitude of employees, credit worthiness etc. hence one should keep the fact in mind that unfavorable result doesn't mean the poor managerial or performance ability.

Change of business conditions: The market is highly unpredictable, the market situations and conditions can change at any point of time, sometimes results into recession sometimes favorable conditions. Hence being an analyst, one should make clear that the reports are subject to the current conditions and which may or may not be the same all the time and can change in the future, the unfavorable conditions can turn into favorable and vice versa.

Application activity 9.2

a) Disco LLP has finalized its quarterly results for Q1 FY 2018. The team has also included the previous years' financials. Can you determine the horizontal trends?

In FRW'000'	Q1 2017	Q1 2018
Sales	500	731
Cost of goods sold	354	532
Gross profit	146	199
Sales and administration expenses	23	50
Marketing expenses	21	32
Operating expenses	12	32
Operating income	90	85
Non-operating expenses	30	56
Profit before tax	60	29
Tax	12	6
Net income	48	23

End unit assessment

1. What do you understand about horizontal analysis?
2. Which of the following statement describes horizontal analysis?

   a) A statement that shows items appearing on it in percentage and dollar form.

   b) A side-by-side comparison of two or more years' financial statements.

   c) A comparison of the account balances on the current year's financial statements.

   d) None of the above.

Let's take the above information from the comparative income statements of Clover Corporation for this year and last year.

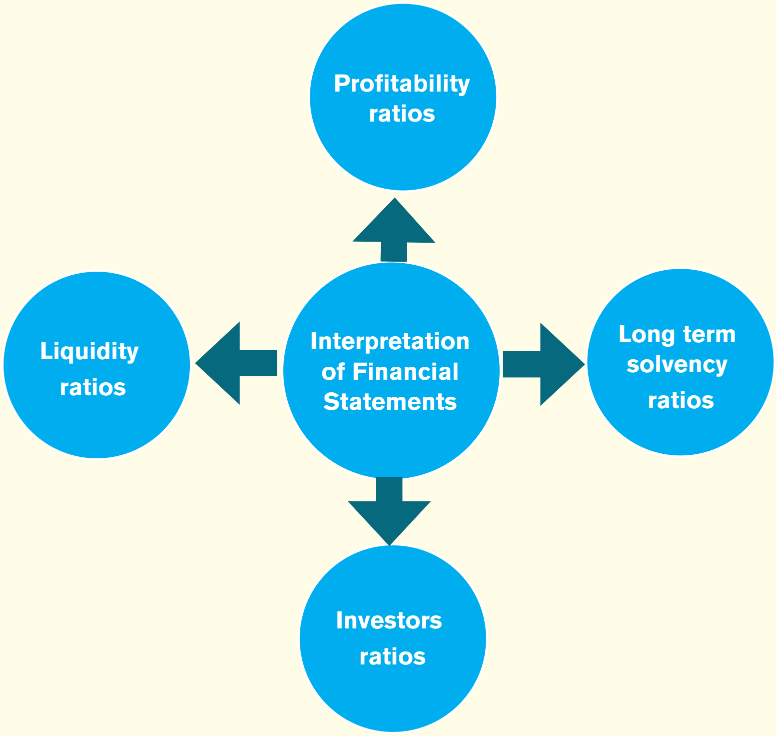
Determine the vertical trend.

	This year	Last year
Sales	520,000	480,000
Cost of goods sold	360,000	315,000
Gross margin	160,000	165,000
Operating expenses	128,600	126,000
Net operating income	31,400	39,000
Interest expenses	6,400	7,000
Net income before taxes	25,000	32,000
Less income taxes (30%)	7,500	9,600
Net income	17,500	22,400

UNIT 10 INTERPRETATION OF FINANCIAL STATEMENTS

Key unit competence: To be able to interpret financial statements using ratios for an entity

Introductory activity



Observe the above picture and answer to the following questions:

1. What do you think is the interpretation of financial statements?
2. What is a financial ratio?
3. What is the purpose of financial ratios?
4. What are the broad categories of accounting ratios?

10.1. Introduction to financial statements interpretations

Learning Activity 10.1

Lois ltd company is a Company operating its business in Kigali city from 2019. At the end of the financial period ended 31st December 2021, the owners hired the new accountant to present the business's financial statements. After preparing the financial statements, the owners asked the accountant to explain the meaning of his results and he was not able to give the real answer. The owners of Lois ltd company want you to help them to understand well the meaning of their financial statements results.

a) Which tool are you going to use to understand the Financial Statements results?

b) What is the purpose of financial statement interpretation?

c) What is the Importance of ratio method?

10.1.1 Meaning of interpretation of financial statements

Financial statements should be clear and understandable to enable users make sound decision and judgments. They should also show corresponding figures for the preceding period to afford comparison and analysis.

Depending on the need and the accounting knowledge of the users, the financial statements may not fully serve the required needs, however simple they may appear to the accountant. It is therefore the duty of the accountant to analyze and interpret the special language to non-accounting users so that they may make the best use of financial statements to suit their special needs. The accountant translates the information contained in the financial statements into a form which is more helpful and can easily be understood by users.

In order to translate financial statements to users, some yardsticks or bases or identifiable economic relationships are used. The commonly used yardsticks in analyzing and interpreting financial statements are as follows:

- **Annual or inter-period**

The analysis of financial statements is based on the results achieved by the business enterprise during a previous accounting period. This is only possible if financial statements show corresponding figures for the preceding period.

- **Inter-firm comparison**

The results of the firm and results of other closely related firms operating within the same industry for the current period, also help in analyzing the firm's performance.

- **Standards and budgets**

The management establishes standards and budgets upon which the performance of the business is measured. The financial statements are therefore analyzed based on these standards.

Tools of financial analysis

There are several tools used in analyzing financial statements. These include:

i. Ratio analysis: Liquidity, profitability, Solvency, operating or activity

ii. Comparative financial statements (variations in %)

iii. Common size statement

iv. Trend ratios or trend analysis (changes in % from base year)

v. Statement of changes in working capital

vi. Funds flow and cash flow analysis

vii. Graphics

viii. Charts

10.1.2 Meaning and purpose of accounting ratios

Definition of ratio

Ratio can be defined as a proportional relationship between two significant values (or significant magnitudes). It is an arithmetical relationship between given items normally expressed as a fraction or a percentage or the numerical or arithmetical relationship between two figures. It is expressed where one figure is divided by another.

Ratio analysis

Ratio analysis is one of the powerful tools of financial analysis which deals with calculation and interpretation of ratios. It can be defined as the process of ascertaining the financial ratios that are used for indicating the ongoing financial performance of a company using a few types of ratios.

Ratio analysis helps the analysts to make quantitative judgment with regard to concern's financial position and performance.

Ratio can be expressed:

- As a pure ratio e.g 1:2
- As a decimal value, such as 0.10
- As an equivalent percent, such as 10%
- As a decimal number, especially when they are more than 1.

Objectives/purpose of financial ratios/ financial statements interpretation

Use of ratios enable items appearing in financial statements to be translated and interpreted using any suitable basis such as the past record of the business. Comparison of the firm with other competitive business of the same nature, is also possible by use of ratio analysis.

In analyzing the financial statements of a business, ratio analysis has the following objectives:

- Measure the profitability and adequacy of the profits of the business enterprise. In this regard, users of financial statements would be able to determine:

  a) Whether the profits earned by the business are rising or declining over time and whether such profits are adequate to cover the cost of sales and operating expenses, yet still leave a balance for the proprietors.

  b) Whether the firm's profits are stable over time

  c) The position of the firm's profits as compared to the average annual profits earned by competitors and similar firms operating in the same industry.
- Measure the worth of a business to its owners or equity holders. In this regard, users would be able to determine:

  a) The return on equity or shareholders' funds tied up in the business

  b) If the satisfaction that the current earnings are per share is realistic

  c) How realistic the current market price is for the firm's shares.
- Measure the liquidity, financial strength and the survival ability of the business. In this regard, the users of financial statements would be able to determine:

  a) The ability of the business to pay its short term debts as they fall due, without having to sell the whole undertaking

  b) The financial stability of the business

c) The ability of the enterprise to withstand a fall in the value of its assets before the creditors' position is prejudiced

d) The ability of the business to generate enough revenue to cover financial charges and leave a sufficient balance over for dividends, expansion and provision to finance a loan capital repayment.

- Measure the productivity of the assets and how efficient management utilizes the economic resources placed at its disposal. In this regard, the users would like to know:

  a) The extent of asset utilization and extent to which management uses all available resources to generate sales.

  b) The collection period of accounts from credit customers

  c) How fast the business turns over its stock and the ability of management to control the investment in stock.

  d) The average period of time taken to pay debts of the business especially to settle accounts of creditors.

- Measure the solvency, defensive and survival position of the business. Users would be able to determine:

  a) The extended to which the firm's assets are financed through borrowing and its extent of trading on equity, i.e. using shareholders' funds.

  b) The level of the cushion of security of creditors

  c) The gearing or leverage into the capital structure of the business, in other words, the relationship between capital and capital invested by the ordinary shareholders.

Importance of ratio method

Ratio method permits:

- To follow the evolution and progress of the financial situation of an enterprise
- To set or to establish regularly the relationship between two values or two subjects
- To analyze and interpret the information extracted from the financial statements
- To compare an enterprise (financial position) with another (or industry) in the same sector.
- To know the actual financial situation of an enterprise.

- It provides a basis for making future business policies.
- It is used in evaluating the business and shares by investing on stock exchange.

The users of financial ratios

Users of financial statements include owners -who are managers, owners –who are shareholders, managers, government, creditors, potential buyers, suppliers, customers, employees and general public.

Each of these users has their own requirement of information. Financial statements may meet some. Financial statements provide information that is historical, summarized and highly selective.

- **Internal Managers**: To evaluate the performance of the business as compared to the previous years or other firms in the same trade.
- **Existing and prospective shareholders**: to make the investments decisions on the basis of return on their investments.
- **Bank Managers and creditors**: To make the decisions for providing loans and credit facilities.
- **Security analysts**: use financial ratios to compare the strengths and weaknesses in various companies. If shares in a company are traded in a financial market, the market price of the shares is used in certain financial ratios. Etc

Source of data for financial ratios

Values used in calculating financial ratios are taken from the balance sheet, income statement, statement of cash flows or (sometimes) the statement of retained earnings. These comprise the firm's accounting statements or financial statements.

Notes:_ The comparison of a firm's ratios with other similar firms' ratios, or with industry figures, is known as **A cross sectional analysis.**

Whereas the comparison of the firm's own results in time is called **Time series analysis.**

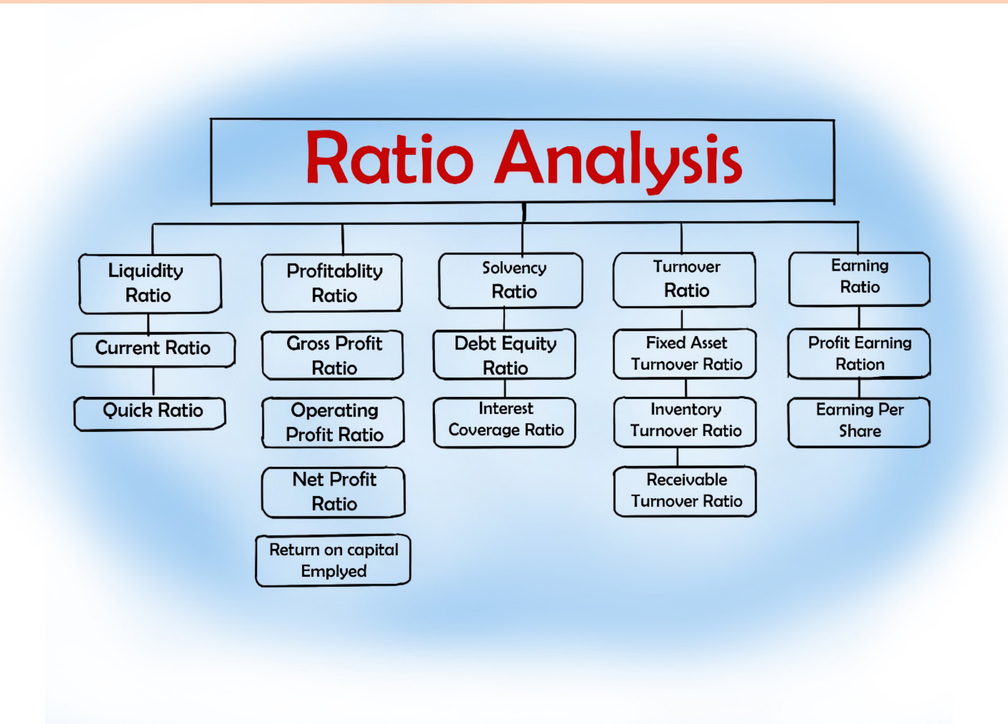
Application activity 10.1

1. You are hired as an accountant of any local company, appreciate the need of financial ratios method in your work.

2. An accountant of your local company is not understanding why different users' need its financial ratios and he/she is persisting offering them. You are asked to help him/her knowing some users of accounting information and why each of them needs that information.

10.2 Broad categories of ratios, their calculation and their interpretation.

Learning Activity 10.2



From the above figure,

a) What are the broad categories of ratio analysis?

b) Give examples to each category of ratio analysis.

Financial ratios are categorized according to the financial aspect of the business which the ratio measure. There are broadly classified into five categories:

- **Liquidity/working capital ratios** measure the availability of cash to pay debt
- **Activity ratios** measure how quickly a firm converts non-cash assets to cash assets.
- **Debt ratios** measure the firm's ability to repay long-term debt.
- **Profitability ratios** measure the firm's use of its assets and control of its expenses to generate an acceptable rate of return.
- **Market ratios** measure investor response to owning a company's stock and also the cost of issuing stock.

10.2.1 Liquidity ratios

Liquidity: It is the ability of a business to pay its debts as they fall due and to meet unexpected expenses within a reasonable settlement period. It is also an indicator of a firm's ability to generate enough cash to remain in existence.

Liquidity Ratios, also called working capital ratios. Those are the ratios that attempt to indicate the ability of a business to meet its debts as they become due.

A business that has satisfactory liquidity will have sufficient funds, normally referred to as working capital to pay creditors at the required time. This is vital to ensure that good business relationships are maintained

The liquidity ratios include:

c) **Current ratio (or working capital ratio)**: It measures current assets against current liabilities.

$$\textbf{Current ratio} = \frac{Current\ \ Assets}{Current\ \ Liabilities}$$

This ratio shows whether the business is able to pay back its current liabilities using only its current assets. The analysis of this ratio can be completed by the analysis of facility of current assets to be turned into cash.

Interpretation: It is best for this ratio to be about 2 (or 2:1) i.e the current asset must at least be twice as high as current liabilities. The rule says that the current ratio should meet current liabilities at least twice. If the actual current ratio is less than the standard ratio (current) of two to one (2:1), the conclusion is that the concern does not enjoy sufficient liquidity and will not be able to meet its short-term obligations and vice-versa.

d) Quick ratio (or Acid test ratio): The Acid test or quick ratio takes into account only those current assets that are cash or can be changed very quickly into cash.

$$\textbf{Quick ratio} = \frac{Current\ \ Assets - Stocks}{Current\ \ Liabilities}$$

This ratio shows whether there are enough liquid assets to be able to pay current liabilities quickly. It is dangerous if this ratio is allowed to fall to a very low figure. The analysis of this ratio should be completed by the comparison analysis between collection period and payment period. Collection period should precede repayment period. It is an acid test of solvency and measures on how quickly current assets can be converted into cash.

Is a more refined current ratio which exclude amount of stock of the firm. Stocks are excluded for two basic reasons:

i) They are valued on historical cost basis

ii) They may not be converted into cash very quickly

Interpretation: On average, a liquidity ratio 1:1 is considered adequate. However, the most appropriate acid test ratio will definitely depend on the nature of the business.

c) Cash ratio/absolute ratio/ super quick ratio: Indicates the cash available to pay the liabilities. This is a refinement of acid test ratio indicating the ability of the firm to meet its current liabilities from its most liquid resources. It is more refined since it assumes that debtors may not pay their accounts on time and stock will take time to convert into cash.

$$\textbf{Cash ratio} = \frac{\text{Cash} + \text{Cash equivalents/absolute assets}}{\text{Current liabilities}}$$

Absolute assets mean cash in hand, cash at bank and readily marketable securities.

Interpretation: Actual absolute liquid ratio is compared to the standard of 1:2, (the standard absolute liquid ratio is fixed at 1:2, because for the payments of quick liabilities, besides 100% cash available from the absolute liquid assets, a good amount of cash may also come from other current assets like bills receivable

d) Inventory to working capital ratio

Inventory/ stock: Refers to the closing stock of raw materials, work in progress (semi-finished goods) and finished goods.

Working capital: The difference between current assets and current liabilities or excess of current assets and current liabilities.

$$\textbf{Inventory Working Capital} = \frac{inventory}{\text{working capital}} * 100$$

The use of this ratio is to indicate that there is overstocking or understocking.

Interpretation: As per the standard, inventory to working capital ratio, the inventories should not absorb more than 75% of working capital. As such, a low inventory to working capital ratio (a ratio of less than 75%) indicates understocking and so, a high liquid position. While a high inventory indicates overstocking, and so a low liquid position.

Illustration 1.

Let's assume that the balance sheet of Diane on 31/12/2011 shows the following:

Fixed assets	150,000	Loan from bank	80,000
Stock	90,000	Account payable	60,000
Account receivables	50,000	Bank overdraft	10,000
Cash at bank	20,000		
Cash in hand	40,000		
Sales	120,000		

Current Assets: 90 000 + 50 000 + 20 000 + 40 000 = FRW 200 000

Current Liabilities: 60 000 + 10 000 = FRW70 000

1) **Current ratio** $= \dfrac{Current\ \ Assets}{Current\ \ Liabilities} = \dfrac{200\ 000}{70\ 000} = \mathbf{2.857}$

As this ratio is greater than 1, it means that the working capital is positive, the long financing covers all fixed assets and one part of current liabilities. It is good situation.

2) **Quick ratio =** $\frac{Current\ \ Assets - Stock}{Current\ \ Liabilities}$ **=** $\frac{200\ 000 - 90\ 000}{70\ 000}$ **= 1. 571**

This value of ratio shows that; the business can pay back its current debts (short debt) using only liquid assets.

3) Cash ratio = $\frac{\text{Cash} + \text{Cash equivalents}}{\text{Current liabilities}}$ **=** $\frac{20\ 000 + 40\ 000}{70\ 000}$ **= 0.857**

The amount of money in cash (at bank and in hand) covers more than 80% of current debt.

1) inventory to Working Capital ratio = $\frac{\textbf{\textit{inventory}}}{\textbf{\textit{working capital}}}$ *100

$$= \frac{90,000}{200,000\text{-}70,000} * 100 = 69\%$$

Illustration 2

The following was balance sheet of KSK on December 31st 2004:

FIXED ASSETS			**Net worth**		
Fixture & Fittings	11800		Capital	20 550	
Less Provision	1 180	10 620	Add Net profit	12 720	
				33 270	
CURRENT ASSETS			Less Drawings	10 000	23 270
Stocks	9 600		**CURRENT LIABILITIES**		
Debtors	3 000				
Cash at bank	4 200		Creditors.	5 150	
Cash in hand	1 300	18 100	Light accrued	300	5 450
		28 720			28 720

Determine the liquidity ratios studied knowing the sales values for period was FRW 20,000

Answer:

1) **Current ratio** $= \dfrac{Current\ \ Assets}{Current\ \ Liabilities} = \dfrac{18\ 100}{5\ 450}$ **= 3. 321**

As this ratio is greater than 1, it means that the working capital is positive, the long financing covers all fixed assets and one part of current liabilities. It is good situation.

2) **Quick ratio =** $\dfrac{Current\ \ Assets - Stock}{Current\ \ Liabilities} = \dfrac{18\ 100 - 9\ 600}{5\ 450}$ **= 1. 5596**

This value of ratio shows that; the business can pay back its current debts (short debt) using only liquid assets.

3) **Cash ratio =** $\dfrac{\text{Cash} + \text{Cash equivalents}}{\text{Current liabilities}} = \dfrac{4\ 200 - 1\ 300}{5\ 450}$ **= 0.532**

The amount of money in cash (at bank and in hand) covers more than 80% of current debt.

4) **Inventory to Working Capital =** $\dfrac{inventory}{\text{working capital}}$

$$= \frac{9{,}600}{18{,}100 - 5{,}450} = 75\%$$

10.2.2 Activity / efficiency ratios/performance ratios/turn-over ratios

Activity or efficiency ratios measure the effectiveness of the firms use of resources (assets) to generate sales/turnover and so profit.

These ratios compare revenue figures with capital figures and may be used in addition to the return on capital percentage to measure the management's efficiency in using available assets.

a) **Stock turnover ratio/Inventory turnover ratio**

$$\text{Stock turnover ratio} = \frac{Cost\ of\ goods\ sold}{Average\ stock}$$

Every business should operate both to keep its stock to as low a figure as possible without losing profitability, and to sell its goods as quickly as possible.

The stock turnover ratio measures how well the firm is managing to do these things and indicates the velocity with which goods move out of the business. In other words, it indicates the number of time the average stock of finished goods is turned over or sold during a year.

Interpretation: a stock turnover of 8 times a year is considered ideal. As such, a stock turnover of 8 times or more than 8 times indicates that more sales are affected. i.e. the business is expanding, thus there is effective management of inventory. On the other hand, a stock turnover of less than 8 times means that the concern has accumulated useable goods. i.e. the business is not prosperous.

Illustration1

Gross profit for product A: FRW 5 with Stock Turnover of 8

The total gross profit: 5 x 8 = FRW 40

If the stock turnover ratio goes up to 10. The gross profit will be 5 x 10 = FRW 50

Note: Average of stock is found by adding opening stock and closing stock and dividing the sum by two.

Average of Stock = $\frac{Opening\ stock + Clo\sin g\ stock}{2}$

b) **Inventory conversion period:** This ratio shows how long it takes a firm to convert or to renew its stock

Inventory conversion period= $\frac{Average\ stock}{Cost\ of\ goods\ sold}$ x 365 days

or

$$\frac{365\ days}{Stock\ turnover\ ratio}$$

Illustration 2

Given that: Opening stock: 300 units at FRW 200 per unit

Purchase account: 2 000 units for FRW 450 000

Closing stock: 100 units for FRW 24 000

Determine the:

i. Stock turnover ratio
ii. Inventory conversion period

Value of opening stock: 200 x 300 = FRW60 000

Average of Stock = $\frac{Opening\ \ stock + Clo\sin g\ \ stock}{2}$ $\frac{60\ 000 +\ \ 24\ 000}{2}$ **= FRW 42 000**

Cost of goods sold = Opening stock + Purchase – Closing stock

= 60 000 + 450 000 – 24 000 = FRW 486 000

Stock turnover ratio = $\frac{Cost\ \ of\ \ goods\ \ sold}{Average\ \ stock}$ **=** $\frac{486\ 000}{42\ 000}$ = **11. 57**

Inventory conversion period = $\frac{Average\ \ stock}{Cost\ \ of\ \ goods\ \ sold}$ **x 365 days**

= $\frac{42\ 000}{386\ 000}$ x 365 = 31.54 days _ 32 days or

Inventory conversion period = $\frac{365\ \ days}{Stock\ \ turnover\ \ ratio}$

= $\frac{365\ \ days}{11.57}$ = 31.54 days _ 32 days

The stock is renewed more of 11 times during the year, after 32 days.

c) Debtors to sales ratio or Debtors' collection period or Debtors ratio:

Also called **Average collection period (Number of days receivable)**, this ratio assesses how long it takes for debtors (On average) to pay what they owe.

Debtors to sales ratio = $\frac{averageDebtors}{creditSales\ \ for\ \ the\ \ year}$ **x 365 days**

Or

Debtors to sales ratio = $\frac{number of days a year, i.e. 365 or 366}{debtors turnover ratio}$ **x 365 days**

This ratio is better to judge the quality of the debtors. In short, it indicates the average period of credit allowed to debtors. It gives the number of days that debtors (on average) take to pay up; it is debt period.

Interpretation: if the actual period of credit is more than normal period of credit or ideal period of credit is 30 days, the indication is that credit is not efficient. On the other hand, if the actual period of credit allowed is less than the normal period of credit or ideal period of credit, the indication is that the credit collection is efficient.

Note: Here, the closing balance of debtor's figure is always used because the operating balance figure relates to the previous year's sales. By multiplying by 12 or 52 we may arrive at the credit period in months or weeks.

Two main reasons for the firm to make certain that the debtors pay their accounts on time:

- The longer a debt is owed, the more likely it will become a bad debt.
- Any payment can be used in the firm as soon as it is received, and so this increases profitability; it can help reduce expenses. E.g. it would reduce a bank overdraft.

d) Creditors to purchases ratio or Creditors' payment period or Creditor ratio:

This ratio shows how long it takes a firm (on average) to pay its suppliers

Creditors to purchase ratio = $\frac{average creditors}{credit Purchases\ for\ the\ year}$ **x 365 days**

Or

Credit payment period = $\frac{365 days or 12 months}{creditors turnover ratio}$ x 365 days

Taking longer to pay suppliers could be a good thing or bad thing, depending upon circumstances.

e) Cash turnover ratio

Cash, for this purpose, means cash in hand, cash at bank and readily realizable investment. **Turnover** refers to total annual sales (i.e., cash sales plus credit sales.

$$\textbf{Cash turnover ratio} = \frac{netSales}{cash}$$

Use: this ratio indicates the extent to which cash resources are efficiently utilized by the firm. It is also helpful in determining the liquidity of the concern.

Interpretation: the standard or ideal cash turnover ratio of 10:1. As such, a cash turnover ratio of 10:1 or more indicates the effective utilization of the cash resources of the enterprise. On the other hand, a cash turnover ratio of less than 10:1 suggests that cash resources of the enterprise are not effectively utilized.

f) Assets turnover ratio: (This ratio is also called **Asset efficiency ratios)** and indicates the efficiency or inefficiency in the use of total resources or assets of the concern. In other words, it is a measure of the overall performance of the business.

$$\textbf{Assets turnover ratio} = \frac{netSales}{Total\ \ Assets}$$

Interpretation: A total assets turnover ratio of 2 times or more indicates that the assets of the concern have been utilized effectively. On the other hand, a total assets turnover ratio of less than 2 times indicates that the assets of the concern have been under-utilized.

g) Working capital turnover ratio or sales to working capital ratio

Working capital is the excess of current assets over current liabilities. **Turnover** means net sales. i.e. total sales less sales returns.

$$\textbf{Working capital turnover ratio} = \frac{netSales}{workingcapital}$$

Use: this ratio indicates the efficient or inefficient utilization of the working capital of an enterprise.

Interpretation: there is no standard or ideal working capital turnover ratio. Though there is no standard working capital ratio, one can say that a high working capital turnover ratio indicates the efficiency and a lower working capital turnover ratio indicates the inefficiency of the management in the utilization of working capital.

h) Sales to net worth ratio or owned Turnover ratio

$$\text{Sales to net worth ratio} = \frac{Sales}{Fixed\ \ Assets}$$

Use: This ratio is a good index of the utilization of the owner's funds. It also indicates over trading (i.e. too much of sales in relation to owners' capital) or under- trading (i.e. low sales in relation to owners' capital). In short, it is a guide in the proper administration of capital.

Interpretation: if the volume of sales in relation to net worth is reasonable, the indication is that the owners 'funds have been effectively utilized.

i) Noncurrent assets turnover ratio (Sales/Fixed Assets ratio): This ratio indicates as to what extent the fixed assets of a concern have contributed to sales. In other words, it indicates as to what extent the fixed assets have been utilized.

$$\text{Noncurrent Assets turnover ratio} = \frac{Sales}{Fixed\ \ Assets}$$

Interpretation: The standard or ideal fixed assets turnover ratio is 5 times. So, a fixed assets ratio of 5 times or more indicates better utilization of fixed assets turnover ratio of less than 5 times is an indicator of underutilization of fixed assets.

j) Current assets turnover ratio

$$\text{Current Assets turnover ratio} = \frac{Sales}{current\ \ Assets}$$

Use: This ratio indicates the contribution of current assets to sales.

Interpretation: There is no standard or ideal current assets turnover ratio. Yet the inference is that high current assets turnover ratio is an indication of the better utilization of current assets. On the other hand, the low current assets turnover ratio suggests that the current assets have not been utilized effectively.

k) Account Receivables/debtors turnover ratio/ debtors velocity

Debtor turnover ratio is the ratio which indicates the relationship between debtors and sales. It is also the ratio which indicates the number of times the debts are collected in a year.

$$\textbf{Account Receivable turnover ratio} = \frac{netcreditSales\ \ for\ the\ year}{Average\ of\ \ accounts\ receivables}$$

Debtors or accounts receivables, for this purpose, is sundry debtors plus bills receivable. Further, debtors, here mean gross debtors (i.e. debtors before deducting bad debts and reserve for doubtful debts). **Sales** here, mean net credit sales (credit sales-sales returns)

Use: this ratio indicates the extent to which debts have been collected in time. It also indicates the liquidity of the concern

l) Account payable/creditors turnover ratio

This ratio indicates the rate at which the debt is paid to creditors.

$$\textbf{AccountPayableturnover} = \frac{creditPurchases\ \ for\ the\ year}{Average\ of\ \ accounts\ Payables}$$

$$\textbf{Average of account} = \frac{Opening\ \ Balance + Clo\sin g\ \ Balance}{2}$$

Illustration 3

The following information was extracted from IDI's books for the year ended X:

Sales accounts: FRW 700 000	Purchases account: FRW 550 000
Opening stock: FRW 100 000	Closing stock: FRW 80 000
Debtors account: FRW300 000	Creditors account: FRW 250 000
Total Assets: FRW 900 000	Total of noncurrent assets: 60% of Assets

Calculate the activity ratios

Average of Stock = $\frac{Opening\ stock + Closing\ stock}{2}$ $\frac{100\ 000 + \ 80\ 000}{2}$ **= FRW 90 000**

Cost of goods sold = Opening stock + Purchase – Closing stock

= 100 000 + 550 000 – 80 000 = FRW 570 000

Stock turnover ratio = $\frac{Cost\ of\ goods\ sold}{Average\ stock}$ = $\frac{570\ 000}{90\ 000}$ = 6. 33

Inventory conversion period = $\frac{Average\ stock}{Cost\ of\ goods\ sold}$ **x 365 days**

= $\frac{90\ 000}{570\ 000}$ x 365 = 57.63 days 58 days or

Inventory conversion period = $\frac{365\ days}{Stock\ turnover\ ratio}$ **=** $\frac{365\ days}{6.33}$ **= 57. 66**

= 58 days

Debtors to sales ratio = $\frac{Debtors}{Sales\ for\ the\ year}$ **x 365 days**

= $\frac{300\ 000}{700\ 000}$ **x 365 days = 156 days**

It means that it takes on average 156 days to collect from our customers the amount due from them, this situation is not efficiency because, and the credit period is long

Creditors to sales ratio = $\frac{Creditors}{Purchases\ for\ the\ year}$ **x 365**

= $\frac{250\ 000}{550\ 000}$ **x 365 = 166 days**

Cash conversion period: Inventory Conversion Period 58 days

+ Receivables Conversion Period 156 days

- Payables Conversion Period: <u>(166) days</u>

48 days

Assets turnover ratio $= \dfrac{Sales}{Total\ \ Assets} \dfrac{700\ 000}{900\ 000}$ **= 0. 778**

Fixed assets = 900,000 x 60% = 540,000

Fixed Assets turnover ratio $= \dfrac{Sales}{Fixed\ \ Assets} = \dfrac{700\ 000}{540\ 000}$ **= 1. 296**

Account Receivable turnover = $\dfrac{Sales\ \ for\ the\ year}{Average\ of\ \ accounts\ receivables}$

$= \dfrac{700000}{300000}$ **= 2. 33 times**

Note: As the opening balance of account receivable is not given, we use the closing balance instead of average.

Account Payable turnover $= \dfrac{Purchases\ \ for\ the\ \ year}{Average\ \ of\ \ accounts\ \ Payables}$

$= \dfrac{550000}{250000} = 2.2 \text{ times}$

10.2.3 Gearing / leverage/ capital structure ratios / long-term solvency ratios

These ratios measure the extent to which the firm is financed by liabilities. They are used to measure long term structure of the company position and its financial risk. Financial risk is the probability that the firm may not be able to pay its debts as and when they fall due.

Solvency ratio measure the ability of a company to pay its long term debt and the interest on that debt.

Solvency versus Liquidity

Liquidity is a measure of the firm's ability to pay short-term debt whereas **Solvency** measure of the firm's ability to pay all debt, particularly long-term debt and is a measure of the firm's long-term survival.

a) Gearing

$$\text{Gearing}= \frac{\text{Non - current liabilities}}{\text{Total Capital}} \times 100$$

It expresses the relationship between the proportions of fixed interest capital to share capital. A high proportion means a highly geared business (company).

This will mean that shareholders can get more income if the additional loan capital brings more profit than the interest. This on the other hand means that the dividends of ordinary shareholders will be fluctuating a lot. It also means that the company highly depends on non-owners to supply capital.

b) Debt ratio (or Debt to Assets ratio)

$$\textbf{Debt ratio} = \frac{\text{Total liabilities}}{\text{Total assets}} \times 100$$

Measures the proportion of the total assets financed by liabilities. In other words, this ratio indicates to what extent the liabilities of a firm can be covered by its economic resources. The higher the ratio, the higher the financial risk

c) Solvency ratio

Solvency ratio is a ratio between total assets and total liabilities of a concern.

$$\textbf{Solvency ratio} = \frac{\text{Total assets}}{\text{Total liabilities}}$$

Uses: The solvency ratio is a measure of the solvency of a concern means the ability of a concern to meet its total liabilities out of its total assets.

Interpretation: Though no standard ratio, solvency ratio has been established, one can say that the higher the ratio, the stronger the financial position of the concern and the lower the ratio the weaker is its financial position.

d) Debt to equity ratio or Leverage ratio

$$\textbf{Debt to equity ratio} = \frac{\text{Debt}}{\text{equity}}$$

Debt generally refers to long term liabilities. It may be noted that, according to some writers, debt covers all long term liabilities as well as short term liabilities.

Equity for this case includes: owner's funds (i.e. accumulated reserves and profits). If there are losses and fictions assets, they should be adjusted in (i.e. deducted from the owner's funds)

Use: The debt-equity ratio is the measure of the contribution of the owners to the long term finances of the concern as compared to the contribution of the long term creditors.

Interpretation: the standard ratio: 2:1. If the debt is less than two times the equity, the logical conclusion is that the financial structure of the concern is sound and so the risk of the long term is relatively less and vice-versa.

e) Capital structure ratio

$$\textbf{Capital structure ratio} = \frac{\text{Long term debt}}{\text{Net worth} + \text{Long term debt}} \times 100$$

This ratio shows the proportion of Long term debt in the long term financing.

f) Capital to non-current assets ratio (CNCAR)

$$\textbf{CNCAR} = \frac{\text{Owners equity}}{\text{Non current Assets}} \times 100$$

A higher CNCAR indicates that it is easier to meet the business debt and credit commitment

g) Proprietary/equity/Net worth ratio

Net worth means the excess of total assets over total liabilities. It means owners' funds. **Total assets** include all realizable assets that are all tangible assets and intangible assets if they can be realized. But goodwill cannot be included since it cannot be realized before the liquidation of the concern. It is calculated as follows:

$$\textbf{Net Worth ratio} = \frac{\text{net worth}}{\text{Total assets}}$$

Uses of Net Worth ratio: it indicates the proportion between owned capital and loaned capital. It is also an index of the amount proprietor invested on total assets.

Interpretation: The higher the proprietary ratio, the stronger is the financial position of the concern and vice versa. Generally, a ratio of 5:1 is considered ideal.

h) Fixed assets to Net Worth ratio

Fixed assets refer to assets which are used in the enterprise permanently. However, they do not include investments on security. Again, fixed assets mean Net fixed assets i.e. fixed assets at cost less depreciation.

Net worth means owner's fund

$$\textbf{Fixed assets to net worth ratio} = \frac{\text{net fixed assets}}{\text{Net worth}}$$

Use: It indicates to what extent the owners have invested funds in the fixed assets, which constitute the main structure of the business.

Interpretation: the ideal fixed assets to Net Worth ratio for an industrial undertaking is 67%. That is to mean the fixed assets should not constitute more than 67% or 2/3 of the owner's funds. If the fixed assets are more that, the owner's funds are mostly sunk in the fixed assets and current assets are financed out of loaned funds.

i) Current assets to Net worth ratio

$$\textbf{Current assets to Net Worth ratio} = \frac{\text{Current Assets}}{\text{Net worth}}$$

This ratio indicates the proportion of current assets financed by the owners.

Interpretation: The higher ratio indicates the proportion of current assets financed by the owners.

j) Fixed assets Ratio

It is the ratio between fixed assets and capital employed. Capital employed means owner's funds plus long term loans plus deposits and debentures.

$$\textbf{Fixed assets ratio} = \frac{\text{Fixed assets}}{\text{Capital employed}}$$

Use: this ratio indicates how the fixed assets of concern have been financed.

Interpretation: the fixed assets ratio should not be more than 1. The standard ratio is 0.67.

k) Fixed charges cover ratio

It is the ratio between net profit and fixed charges and income tax. Fixed profit for this purpose means net profit before deducting fixed charges and income tax. Fixed charges mean interests on long term loans and deposits and debentures.

$$\textbf{Fixed charges cover ratio} = \frac{\text{Net profit before fixed charges and incomes}}{\text{Fixed charges}}$$

This ratio indicates as to how many times the net profit of the concern covers its fixed charges. It indicates whether the business would earn sufficient profits to pay the interest charges periodically.

l) Dividend coverage ratio

This is the ratio between disposable profit and dividend. Disposable profit means net profit after deducting interest on long-term borrowings and income tax. In short, it means final net profit available for dividend.

$$\textbf{Dividend cover} = \frac{\text{Profit after tax - Preference dividend}}{\text{Ordinary dividend}}$$

Or

$$= \frac{\text{Profit after tax}}{\text{Dividend}}$$

Use: this ratio indicates the ability of the concern to maintain the dividend on shares in the future.

Interpretation: if the dividend declared is adequately covered by the disposable profit, the indication is that there is sufficient amount of retained profit and so, slight variations in profits in the future will not disturb the amount of dividend in the future and vice –versa. i.e. The higher the number of times the better for the enterprise.

Illustration 1

The list of accounts balance of MMM is given in the following table

	Debit FRW	Credit FRW
Cash in hand	300 000	
Bank overdraft		120 000
Bill Prepaid	220 000	
Office building	1 950 000	
Furniture and fitting	500 000	
Motor vehicle	4 800 000	
Depreciation:		
- Office building		250 000
- Fixture and fitting		25 000
- Motor vehicle		200 000
Capital		5 000 000
Drawings	500 000	
Bank Loan payable after 3 years		2 000 000
Opening stock	450 000	
Prepaid wages	50 000	
Accrued insurance		100 000
Debtors	400 000	
Provision for doubtful debt		150 000
Creditors		250 000
Accrued income	180 000	
Income received in advance		220 000
Net profit		1 035 000
	9 350 000	9 350 000

1. Calculate the Gearing/ leverage / capital structure ratios (Sales 5,000,000 FRW; Purchases: 1,000,000 FRW, Closing stock 600,000 FRW)

ANSWER:

	Formulas	BUSINESS
i) Gearing ratio	$\frac{\text{Non - current liabilities}}{\text{Total Capital}} \times 100$	$\frac{2\ 000\ 000}{5\ 535\ 000}$ = 36.1%
ii) Debt ratio	$\frac{\textit{Total Liabilities}}{\textit{Total Assets}}$	$\frac{2\ 690\ 000}{8\ 225\ 000}$ = 32.7%
iii) Debt to equity ratio	$\frac{\text{Total liabilities}}{\text{Net worth}} \times 100$	$\frac{2\ 690\ 000}{5\ 535\ 000}$ = 48.60%
iv) Capital structure ratio	$\frac{\text{Long term debt}}{\text{Net worth + Long term debt}}$	$\frac{2\ 000\ 000}{7\ 5350\ 000}$ = 26.54%
v) CNCAR	$\frac{\text{Owners equity}}{\text{Non current Assets}} \times 100$	$\frac{5\ 535\ 000}{6\ 775\ 000}$ = 81.70%

Illustration 2

The following is the Balance sheets (In FRW) of Maria

	Business A		Business B	
1. Fixed/ capital assets				
Equipment at cost	33 000		40 000	
Depreciation to date	(8 000)	25 000	(12 000)	28 000
2. Current assets				
- Stock (closing)	20 000		35 000	
- Debtors	15 000		40 000	
- Cash (at bank and in hand)	10 000		5 000	
	45 000		80 000	
3. Current liabilities				
- Creditors	(15 000)		(20 000)	
NET CURRENT ASSETS		30 000		60 000
Noncurrent liabilities		(25 000)		(0)
NET ASSETS / NET WORTH		30 000		88 000
FINANCED BY				
Capital balance (b/d)		50 000		72 000
Add. Net profit		16 000		30 000
		56 000		102 000
Drawings		(26 000)		(14 000)
Capital balance c/d		30 000		88 000

Required: Calculate the Gearing/ leverage / capital structure ratio

Answer:

	Formulas	BUSINESS A	BUSINESS B
i) Gearing ratio	$\frac{\text{Non - current liabilities}}{\text{Total Capital}}$	$\frac{25000}{30000}$ = 83.83%	$\frac{0}{88000}$ = 0%
ii) Debt ratio	$\frac{Total\ Liabilities}{Total\ Assets}$	$\frac{40000}{70000}$ = 57.14%	$\frac{20000}{108000}$ = 18.52%
iii) Debt to equity ratio	$\frac{\text{Total liabilities}}{\text{Net worth}}$	$\frac{40000}{30000}$ = 133.3%	$\frac{20000}{88000}$ = 22.72%
iv) Capital structure ratio	$\frac{\text{Long term debt}}{\text{Net worth + Long term debt}}$	$\frac{25000}{55000}$ =45.45%	$\frac{0}{88000}$ 0%
v) CNCAR	$\frac{\text{Owners equity}}{\text{Non current Assets}} \times 100 \times 365$	$\frac{30000}{25000}$ = 1.50	$\frac{88000}{28000}$ = 3.14

10.2.4 Profitability ratios

These are ratios which measure the profitability of a concern. In other words, there are ratios which reveal the effect of the business transactions on the profit position of an enterprise and indicate how far the enterprise has been successful in its aim.

i) Gross profit margin

This is the ratio of profits to sales. It assesses the business level and adequate of profits earned and their stability. The gross profit margin is expressed as:

Margin

$$\text{Gross profit ratio} = \frac{\text{Gross profit}}{netsales} \times 100$$

Mark-up

$$\text{Gross profit ratio} = \frac{\text{Gross profit}}{\cos tofgoodssold} \times 100$$

Gross profit is the profit that a concern earns on its trading. In other words, it is the excess of the net sales over the cost of goods sold.

Sales refer to total sales, i.e. cash sales plus credit sales, but they represent net sales, i.e. total sales minus sales returns.

Use: this ratio discloses the gross result of trading or the overall margin within which a business undertaking must limit its operating expenses to earn sufficient profit.

Interpretation: the actual gross profit ratio is compared with gross profit ratio of the previous years and those of other concerns carrying on similar business, when it is high, it is indication of good results and vice-versa.

ii) Net profit ratio

$$\text{Net profit ratio} = \frac{\text{Net profit}}{netsales} \times 100$$

Net profit means final balance of operating and non-operating incomes after meeting all expenses**. Sales** means total sales, but net sales i.e. total sales minus sales returns

Use: this ratio indicates the quantum of profit earned by a concern.

Interpretation: A high net profit ratio indicates that the profitability of the concern is good. On the other hand, a low net ratio indicates that profitability is poor.

iii) Operating ratio or operating cost ratio

$$\text{Operating cost ratio} = \frac{\text{operating cost}}{\text{net sales}} * 100$$

Operating cost refers to all expenses incurred for operating or running a business. It comprises cost of goods sold plus operating expenses and selling and distribution expenses. **Sales** refer to net sales. i.e. total sales minus sales returns.

Use: the operating ratio indicates the efficiency of the management in the conduct of the business.

Interpretation: a low operating ratio is an indication of an operating efficiency of the business.

iv)Expenses ratio

Expenses ratios are ratios which supplement the information given by the operating cost ratio. They are the ratios between expenses and sales. Some of the important expenses ratios are:

$$\text{Factory expenses ratio} = \frac{\text{Factory cost}}{\text{net sales}} * 100$$

$$\text{Administrative expenses ratio} = \frac{\text{administrative expenses}}{\text{net sales}} * 100$$

$$\text{Selling and distribution expenses ratio} = \frac{\text{selling and distribution expenses}}{\text{net sales}} * 100$$

Interpretation:

a) A low factory ratio is an indication of the economy and the efficiency in the manufacturing operations of the firm. On the other hand, a high factory expenses ratio is an indication of the inefficiency in the manufacturing process of the enterprise.

b) A low administrative expense ratio is an indication of the economy and the efficiency in the general administration of the concern and vice-versa.

c) A low selling and distribution expenses and vice versa.

v) Operating profit ratio

Operating profit ratio is the excess of net sales over the operating cost. Alternatively, it is the net profit plus non-operating expenses minus operating incomes.

$$\text{Operating profit ratio} = \frac{\text{operating profit}}{\text{Net sales}} * 100$$

Interpretation: The standard o ideal operating profit ratio of 10% or more is an indication of the operating efficiency of the business, and vice-versa.

vi)Return on total Resources ratio

Return, here, means net profit after taxes, i.e. final profit.

Total resources or total assets mean all realizable assets, including intangible, if they are realizable.

$$\text{Return on total resources ratio} = \frac{\text{net profit}}{\text{Total assets}} * 100$$

Use: This ratio measures the productivity of the total resources or assets of a concern. In other words, it indicates the profitability of the business.

Interpretation: a return of 10% is normally considered as an ideal ratio. As such, if the actual ratio is 10% or more, it is an indication of the higher productivity of the resources on the other hand, a return of less than 10% is an indication of lower productivity of the resources.

vii) Returns on capital employed (ROCE) or Return on Investment Ratio (ROI)

ROCE or ROI is the ratio between return on capital employed and capital employed

$$\text{ROCE ratio} = \frac{\text{Return on Capital Employed}}{\text{Capital Employed}} * 100$$

Return on capital employed means operating profit or net profit before deducting interests and taxes

Capital employed refers to total long-term funds employed in the business. This ratio indicates the overall profitability of the business. Since it reveals the productivity of the capital employed in the business. Capital employed here means investments made outside the business-fictious assets.

Interpretation: the standard or ideal return on capital employed ratio is about 16%. So if the actual ratio is equal to or more than 16% it is an indication of higher productivity of the capital employed.

Use: this ratio is the measure of the productivity.

viii) Return On Equity Ratio (ROE)

$$ROE = \frac{\text{Net profit after taxes}}{\text{Net worth}} * 100$$

Net worth here means all types of share capital + accumulated resources and profits-all losses and fictious assets**.**

Use: This ratio is a measure of the productivity of shareholders' funds. It also gives the shareholders an idea of the return on their funds. It is also useful for inter-firm and inter-industry comparisons.

Interpretation: the standard or ideal net profit to net worth ratio is about 13%or more. It is an indication of good return on shareholders' funds it influences the market price of the equity shares.

ix) Return on Equity Capital ratio or Net profit to Equity Capital

$$ROEC\ ratio = \frac{\text{Net profit available for equity shareholder}}{\text{equity shareholders funds}} * 100$$

Or

$$ROEC ratio = \frac{\text{Net profit available for equity shareholder}}{\text{Only equity Capital}} * 100$$

Net profit: Net profit after deducting taxes and preference dividends or net profit available for equity shareholders.

Equity capital is interpreted in two ways. Some authors take equity capital to mean only equity share capital. Other take equity shareholders' funds (i.e. equity share capital plus all accumulated reserves and profits minus all losses and fictious assets.

Use: this ratio is a measure of the productivity of equity capital. It is a satisfactory measure of the profitability of the eEnterprise from the point of view of equity shareholders.

Interpretation: there is no standard or ideal net profit to equity capital ratio. So, the actual net profit to equity capital ratio is compared with those other similar concern and the productivity of equity capital is determined.

x) Debt-service coverage ratio (DSCR)

1. In corporate finance, it is the amount of cash flow available to meet annual interest and principal payments on debt, including sinking fund payments.
2. In government finance, it is the amount of export earnings needed to meet annual interest and principal payments on a country's external debts.
3. In personal finance, it is a ratio used by bank loan officers in determining income property loans.

This ratio should ideally be over 1. That would mean the property is generating enough income to pay its debt obligations. In general, it is calculated by:

$$DSCR = \frac{\text{Net Operating Income}}{\text{Debt - service}}$$

A DSCR of less than 1 would mean a negative cash flow. A DSCR of less than 1, say .95, would mean that there is only enough net operating income to cover 95% of annual debt payments.

For example, in the context of personal finance, this would mean that the borrower would have to delve into his or her personal funds every month to keep the project afloat. Generally, lenders frown on a negative cash flow, but some allow it if the borrower has strong outside income.

Debt-service refers to the cash that is required for a particular time period to cover the repayment of interest and principal on a debt.

Sinking funds: a means of repaying funds that were borrowed through a bond issue.

Illustration

The following are the Final accounts for two similar types of business:

	Business A		Business B	
Sales		80,000		120,000
Opening stocks	25,000		22,500	
Purchases	50,000		91,000	
Goods available for sales	75,000		113,500	
Closing stocks	(115,000)		17,500	
Cost of goods sold		60,000		96,000
Gross profit		20,000		24,000

Expenses:				
Carriage outwards	1,000		1,500	
Salaries	2,500		4,000	
Insurances	3,000		2,500	
Electricity	3,500		1,000	
		(10,000)		(9,000)
Net profit		10,000		15,000

Balance Sheets (in FRW)

	BUSINESS A		BUSINESS B	
Fixed assets:				
Equipment at cost	20,000		35,000	
Depreciation	(8,000)	12,000	(6,000)	29,000
Current assets:				
Stock	15,000		17,500	
Debtors	25,000		20,000	
Cash (at bank and in hand)	5,000		2,500	
	45,000		40,000	
Current liabilities:				
Creditors	(5,000)	40,000	(10,000)	30,000
Net current assets		(10,000)		(15,000)
Net assets/net worth		42,000		44,000
Financed by:				
Capital balance b/d		38,000		36,000
Net profit		10,000		15,000
		48,000		51,000
Drawings		(6,000)		(7,000)
Capital balance c/d		42,000		44,000

You are required to calculate:

a) Gross margin rate
b) Gross mark-up ratio
c) Salaries expenses to sale ratio
d) Net margin ratio
e) Net mark-up ratio
f) Electricity expense to sales ratio
g) Return on Equity ratio
h) Return on Assets
i) Return on Fixed assets
j) Return on Capital Employed ratio (ROCE)

Solution

	Formulas	Business A	Business B
Gross margin rate	$\frac{\text{Gross profit}}{netsales}\times 100$	$\frac{20,000}{80,000}\times 100 = 25\%$	$\frac{24,000}{120,000}\times 100 = 20\%$
Gross mark-up rate	$\frac{\text{Gross profit}}{CGS}\times 100$	$\frac{20,000}{60,000}\times 100 = 33.3\%$	$\frac{24,000}{96,000}\times 100 = 25\%$
Salary expenses to sales ratio	$\frac{salaries}{sales}\times 100$	$\frac{20,000}{80,000}\times 100 = 3,125\%$	$\frac{4,000}{120,000}\times 100 = 3,33\%$
Net margin rate	$\frac{\text{net profit}}{netsales}\times 100$	$\frac{10,000}{80,000}\times 100 = 12.5\%$	$\frac{15,000}{120,000}\times 10012.5\%$
Net mark-up rate	$\frac{\text{Net profit}}{CGS}\times 100$	$\frac{10,000}{60,000}\times 100 = 16.67\%$	$\frac{15,000}{96,000}\times 100 = 15.625\%$
Electricity expenses to sales ratio	$\frac{electricity}{netsales}\times 100$	$\frac{3,500}{80,000}\times 100 = 4,375\%$	$\frac{1,000}{120,000}\times 100 = 0.83\%$
ROE	$\frac{\text{net profit}}{Capital}\times 100$	$\frac{10,000}{42,000}\times 100 = 23.81\%$	$\frac{15,000}{44,000}\times 100 = 34.09\%$
Return On Assets	$\frac{\text{net profit}}{Assets}\times 100$	$\frac{10,000}{57,000}\times 100 = 17.544\%$	$\frac{15,000}{69,000}\times 100 = 21.739\%$
Return on Fixed assets ratio	$\frac{\text{Net profit}}{FixedAssets}\times 100$	$\frac{10,000}{12,000}\times 100 = 83.33\%$	$\frac{15,000}{290,000}\times 100 = 51.724\%$

ROE ratio	$\frac{\text{Net profit}}{\textit{CapitalEmployed}} \times 100$	$\frac{10,000}{52,000} \times 100 = 19.230\%$	$\frac{15,000}{59,000} \times 100 = 25.424\%$

10.2.5 Shareholders ratios/growth and valuation ratios/ defensive and survival ratios

i) Earnings per share (EPS)

$$\text{EPS} = \frac{\text{Profit after tax, interest on loan andPreference dividend}}{\text{Number of ordinary shares}}$$

Use: the EPS ratio assesses the relationship of operating profit after tax, interest on loan capital and preference dividend, to the number of shares issued as fully paid up. It shows the amount of earnings applicable to a share of ordinary equity.

Interpretation: the more the earning per share, the better is the performance and the future prospects of the company. Higher earnings per share suggest the possibility of more cash dividend or bonus shares and a rise in the market price of share.

ii) Dividend per share (DPS)

$$\text{DPS} = \frac{\text{Ordinary Dividend}}{\text{No. of ordinary shares}}$$

The higher the ratio, the more profitable the enterprise.

iii) Dividend yield

$$\text{Dividend yield} = \frac{\text{DPS}}{\text{Market price per share}}$$

Use: this is the ratio of dividend paid by the business enterprise per share to the market price per each share of the business.

Interpretation: the actual dividend yield ratio of the company in question should be compared with the dividend yield ratios of other similar companies. If the dividend yield ratio of the company in question is more than that of other similar companies, it is an indication to the investor that it is worth investing on the shares of the company in the question.

iv)Price earnings ratio (P/E ratio)

$$\text{P E ratio} = \frac{\text{Market price per share}}{\text{EPS}}$$

This ratio assesses the ongoing financial performance of company from year to year. It shows the profit earning capacity of a business. It indicates the number of times the earning per share is covered by its market price. It is very useful to an investor for predicting the market price of shares at some future date.

Interpretation: the higher the price earnings ratio, the better are the chances of appreciation in the market price of share.

v) Dividend payout ratio/ payout ratio

$$\text{Payout ratio} = \frac{\text{Dividend}}{\text{Earnings}}$$

Use: it throws light on the chance of appreciation, in the price of the shares.

Interpretation: a low payout ratio indicates that only a small portion of the earning of the company has been used for dividend and the major portion of the earnings is retained for ploughing back and vice versa. A low payment ratio suggests that there are good chances of appreciation in the prices of shares.

vi)Preference Dividend cover

$$\text{Preference Dividend cover ratio} = \frac{\text{net profit after tax}}{\text{annual preference dividend}}$$

Use: the EDC indicates the number of times the equity dividend paid is covered by the profits available for equity shareholders. It indicates the degree of certainty of declaration of equity dividend in future years also.

Interpretation: the standard equity dividend cover is two times. As such, if the equity dividend cover is more, the indication is that there is a greater degree of certainty that equity dividend will be declared in the future years also; and vice versa.

Illustration1

You are provided the following information about XYZ Ltd.

Number of ordinary shares	100,000
Nominal value per ordinary share	FRW 1
Market price per ordinary share	FRW 2
Net profit before corporation tax	FRW50,000
Rate of corporation tax	50%
Dividend rate	10%

Required: to calculate: i) Dividend Yield ii) Earnings per share
iii) Dividend Cover iv) P/E Ratio

ANSWER:

Dividend Yield = 00 = $\dfrac{\textit{divident per share}}{\textit{marktet price per share}}$ **x100=** $\dfrac{\textit{FRW 0.1}}{\textit{FRW 0.1}}$ **x100 =5%**

Note: 10% of FRW is FRW 0.1

Dividend Cover = $\dfrac{\textit{net profit after tax}}{\textit{ordinary divident}} = \dfrac{\textit{FRW 25,000}}{\textit{FRW 10,000}}$ = 2.5

Note: Net profit= FRW 50000

Corporation tax =FRW 25,000 (50% of FRW 50,000)

Dividend= 10% of FRW 100,000= FRW 10,000

Earnings per share = $\dfrac{\textit{net profit after tax}}{\textit{Number of ordinary shares}} = \dfrac{\textit{FRW 25,000}}{\textit{100,000}}$ = FRW 0.25

P/E ratio = $\dfrac{\textit{Marketpricepershare}}{\textit{Earningpershare}} = \dfrac{\textit{FRW 2}}{\textit{FRW 0.25}}$ = 8

Limitations of ratio analysis

Ratio analysis is not foolproof. There are many problems in trying to identify trends and make comparisons. Below are just a few.

- **Information problems**
  - The base information is often out of date, so timeliness of information leads to problems of interpretation.
  - Historical cost information cost information may not be the most appropriate information for the decision for which the analysis is being undertaken.
  - Information in published accounts is generally summarized information and detailed information may be needed.
  - Analysis of accounting information only identifies symptoms, not causes, and is therefore of limited use.
- **Comparison problems: trend analysis**
  - Effects of price changes make comparisons difficult unless adjustments are made.
  - Impacts of changes in technology on the price of assets, the likely return and the future markets.
  - Impacts of a changing environment on the results reflected in the accounting information.
  - Potential effects of changes in accounting policies on the reported results

– Problems associated with establishing a normal base year with which to compare other years.

- **Comparison problems: across companies**
  - Selection of industry norms and the usefulness of norms based on averages
  - Different firms having different financial and business risk profiles and the impact on analysis.
  - Different firms using different accounting policies
  - Impacts of the size of the business and its comparators on risk, structure and returns.
  - Impacts of different environments on results, eg different countries or home-based versus multinational firms.

Application activity 10.2

1) The ratio has increased in 2018 compared to 2017 because we have increased the length of time allowed for customers to pay their invoices. The statement above could explain a decrease in which of the following ratios?

   i. The receivables collection period

   ii. The gearing ratio

   iii. Interest cover

   iv. The payables payment period

2) The following information for Christian Ltd is available

	FRW 'M'
PBIT	370
Interest	6
Tax	80
Profit after tax	284
Share capital	2,000
Reserves	314
	2,314
Loan liability	100
	2,414
Industry average return on capital employed	10%

Christian Ltd purchased new non-current assets during the year

Required: calculate and comment on ROCE for Christian Ltd

Skills Lab

Carry out a visit in any company, ask for their financial statements and interpret them based on different categories of financial ratios.

End unit assessment

Given below is a range of financial ratios for two companies that both operates nearby your school:

	KAZUNGU	TWIZEYIMANA
Gross Profit percentage	60%	32%
Operating profit percentage	28%	10%
Asset turnover	0.80 times	2.2times
ROCE	22%	22%
Current ratio	2.0	1.8
quick ratio	1.2	0.4
Inventory turnover	4.8	10.3 times
Trade receivables collection period	41 days	3 days
Trade payables payment period	62 days	70 days
Gearing	33%	50%
Interest cover	16%	5 times

Required: Comment upon what the ratios indicate about each business

One of the businesses is a supermarket and the other is jeweler who supplies some goods on credit to long standing customers. Identify which business.

2. The following are summarized financial statements of DAMIAN Limited:

DAMIAN Limited

Statement of Profit or Loss for the year ended 31 October

	2021 FRW '000'	2022 FRW '000'
Sales	93,500	111,350
Cost of sales	(55,120)	(72,970)
Gross profit	38,380	38,380
Expenses	(26,230)	23,960
Net profit before interest and tax	12,150	14,420
Loan interest	(450)	(375)
Net profit before tax	11,700	14,045
Taxation	(3,510)	(5,413.5)
Net profit after tax	8,190	8,631.5
Dividend	(6.00)	(6,000)
Retained profit	2,190	2,631.5

Balance sheet as at 31 October

	2021		2022	
	FRW'000'	FRW '000'	FRW '000'	FRW'000'
Fixed assets:				
Freehold premises	10,500		10,500	
Plant and equipment	7,200		9,500	
Motor vehicles	5,350	23,050	7,300	27,300
Current assets:				
Stock	12,500		11,800	
Debtors	9,850		8,900	
Bank balance and cash in hand	5,950	28,300	5,864.5	26,564.5
Current liabilities:				
Creditors	8,350		7,830	
Taxation	3,510		5,413.5	
Dividend	3,000	(14,860)	3,000	(16,243.5)
		36,490		37,621
Ordinary share capital		30,000		30,000
Reserves		3,490		5,121
		33,490		35,121
15% loan		3,000		2,500
		36,490		37,621

Note:

1. 80% of the sales are no credit
2. The stock as at 31 October 2001 was valued at FRW 13,000,000

REQUIRED:

Calculate two ratios for each classification identified below for the financial years ended 31 October 2021 and 2022:

i) Profitability
ii) Liquidity ratios
iii) Gearing ratios
iv) Activity ratios

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