

# MINISTRY OF EDUCATION GHANA ASSOCIATION OF BUSINESS EDUCATION TEACHERS



## **ACCOUNTING**

for Senior High Schools

Year 1



Josephine Kyei Baffour Alex Nsoh Emmanuel Asante-Koree

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Alex Nsoh
Emmanuel Asante-Koree















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ISBN:

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#### **FOREWORD**

Ghana's new Senior High School Curriculum aims to ensure that all learners achieve their potential by equipping them with 21<sup>st</sup> Century skills, knowledge, character qualities and shared Ghanaian values. This will prepare learners to live a responsible adult life, progress to further studies and enter the world of work. This is the first time that Ghana has developed a Senior High School Curriculum which focuses on national values, attempting to educate a generation of Ghanaian youth who are proud of our country and can contribute effectively to its development.

The Ministry of Education is proud to have overseen the production of these Learner Materials which can be used in class and for self-study and revision. These materials have been developed through a partnership between the Ghana Education Service, teacher unions (Ghana National Association of Teachers- GNAT, National Association of Graduate Teacher -NAGRAT and the Pre-Tertiary Teachers Association of Ghana-PRETAG) and National Subject Associations. These materials are informative and of high quality because they have been written by teachers for teachers with the expert backing of each subject association.

I believe that, if used appropriately, these materials will go a long way to transforming our Senior High Schools and developing Ghana so that we become a proud, prosperous and values-driven nation where our people are our greatest national asset.

#### Haruna Iddrisu MP

Minister for Education

**SECTION** 

1

# NATURE AND FUNCTIONS OF ACCOUNTING



#### FINANCIAL ACCOUNTING

#### **Conceptual Framework**

#### INTRODUCTION

This is the first section of the business accounting programme in which we will focus on the conceptual framework of accounting. We will delve into the fundamental aspects of accounting by showing its importance in both personal life and business contexts. The central objective is to equip you with the ability to use personal financial activities as a lens to understand the essence, purpose, and application of accounting. Consequently, by the end of this section, you will gain a holistic understanding of financial aspects in diverse fields and the capacity to articulate the conceptual framework of accounting so that you can apply it to personal financial scenarios and be able to discuss the various facets of accounting, including standards and financial statement components.

#### **KEY IDEAS**

- **Accounting** is the systematic process of recording, summarising, analysing, and reporting financial transactions of a business or organisation.
- **Accounting system** is a structured set of process and tools used to manage and record an organisation's financial transactions.
- **Accounting information** refers to the financial statements or records generated through the process of book-keeping and accounting.
- **Accounting Process** refers to the systematic series of steps followed to collect, process, and communicate financial information about an organisation.
- **Accounting standard**s are set of principles, rules, guidelines and procedures that define the basis of financial accounting policies and practices.
- **Users of accounting information** are those persons or businesses who use financial statements to make decisions.

#### **ACCOUNTING AS A SYSTEM**

Every day, we make choices between different things we want to do or buy. But as we all know, while our **wants are many**, the money or resources we have to meet them are **limited**. So, we must choose what is **most important or useful**.

Let us look at this simple example:

Your class plans to organise a **clean-up exercise** with a social activity afterwards. Everyone agrees to contribute **GH¢5.00**, and since there are 30 students, a total of **GH¢150.00** is collected. The class prefect is put in charge of collecting and keeping the money.

Now, the class comes up with **three possible ways to use the money**:

1. Buy **drinks and biscuits** and save the rest.

- 2. Buy **drinks**, **snacks**, **balloons**, and rent a speaker to play music.
- 3. Buy some **food** and save part of the money to **plant flowers** around the school.

Before choosing the best option, the class must ask:

- a. How much does each option cost?
- b. Have they collected enough money to cover the cost?
- c. Which option makes the class happy **and still leaves some money for future** use?

After the event the class prefect writes down:

- a. How much money was collected
- b. What the money was used for
- c. How much is left

Later, the prefect gives a report to the class. **This whole process is called** *accounting*.

So, what is accounting?

Accounting is the art of recording, classifying, summarising, analysing and interpreting financial data to help users of this information to make decisions. It is a system that a business uses to collect, store, manage, process, retrieve and report its financial data.

#### **Terminology**

**Recording**: keeping a record of the money we collect and spend. In business, capturing or keeping track of all transactions (bookkeeping).

**Classifying**: organising transactions into categories (e.g., assets, liabilities etc).

**Summarising**: preparing financial statements like the income statement, balance sheet or personal budget.

**Analysing**: Examining financial information to understand a business' performance, financial health and prospects.

**Interpreting**: Analysing data to support decision-making.

What does this look like in practice?

Here is an example.

Opanyin Asante owns a small grocery shop where he keeps <u>a</u>record of all income, expenses and the profit made at the end of the month <u>to support</u> decision making <u>related to his business</u>.

**Recording:** Opanyin Asante keeps detailed records of all financial transactions, including income (sales revenue), expenses (cost of goods sold, utilities, wages, etc.), and other financial activities.

**Classification**: He categorises income and expenses, which helps him to understand his different sources of revenue and types of costs. Proper classification is essential for accurate financial reporting.

**Summarising**: At the end of each month, he calculates the profit by subtracting the total expenses from the total income. This process involves compiling the recorded data into meaningful financial statements, such as the income statement (profit and loss account).

**Analysing and interpreting**: The profit calculation and financial records enable him to make informed decisions about his shop, such as whether to increase stock, reduce expenses, or adjust prices.

Opanyin Asante's practice of keeping records of income, expenses, and profit is a practical example of an accounting system in action to track financial performance and guide business decisions.

#### **Purpose of Accounting**

The main purpose of accounting is to provide useful financial information to people who need it (stakeholders), such as business owners, managers, government agencies, and investors. This information helps stakeholders to

- 1. make informed decisions about money,
- 2. plan for the future,
- 3. check how well a/their business is doing
- 4. ensure that money is managed properly.

In simple terms, accounting helps keep track of how money is received and spent and shows whether an organisation is doing well or not.

#### **Importance of Accounting**

- 1. **Helps in Planning and Decision-Making:** Accounting gives managers the right information to plan how to use resources wisely and make good decisions for the future.
- 2. **Used for Tax Purposes**: Organisations use accounting records to calculate how much tax they need to pay to the government.
- 3. **Assesses Performance**: Accounting helps in checking how well managers or business owners are doing their jobs by looking at the financial results.
- 4. **Tracks Progress Over Time**: With accounting, a business can compare its performance from one year to another to see if it is growing or facing problems.
- 5. **Compares Organisations**: It allows people to compare the financial performance of different businesses to decide which one is doing better or where to invest.

#### **Branches of Accounting**

There are different branches of accounting which include: financial accounting, management accounting, cost accounting, auditing, forensic accounting, tax accounting.

Each branch is summarised in *Table 1.1*.

#### **Table 1.1: Branches of Accounting**

Financial accounting	A branch of accounting that focuses on recording, summarising, and reporting an organisation's financial transactions over a specific period.		
	Its primary goal is to provide accurate and timely financial information to stakeholders such as investors, creditors, regulators, and management.		

Management accounting	Management accounting supports the day to day running of a business. It focuses on providing financial and non-financial information to an organisation's internal users such as managers and employers.  Its primary goal is to support decision making, planning and controlling business operations.
Cost accounting	This is a subset of management accounting and focuses on identifying, measuring and controlling costs of producing goods and services.  Its primary goal is to support the management of an organisation understand and manage costs to improve efficiency and profitability.
Auditing	Auditing is the process of examining and organisation's financial records. This may be carried out internally (by employees of the organisation), or externally (by independent professionals).  Its primary goal is to provide assurance and credibility to the financial information published by an organisation.
Forensic accounting	This is a specialised area of accounting that investigates fraud or financial irregularities.  Its primary purpose is to investigate and analyse financial evidence and report on their findings.
Tax accounting	Tax accounting focuses on the preparation of tax returns and ensuring organisations understand their current and future tax obligations.  Its primary goal is to ensure organisations are compliant with tax legislation and minimise liabilities.

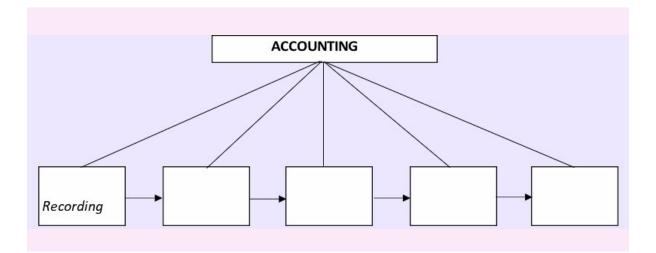
#### **Careers in Accounting**

Studying accounting offers varied career opportunities. These include:

- 1. Teaching/Lecturing
- 2. Auditors in public and private practice
- 3. Tax consultants/ Advisors
- 4. Financial Analyst/ Consultants
- 5. Accountants in both public and private organisations
- 6. Insurance brokers

#### **Activity 1.1 Key Terms in the Meaning of Accounting**

- 1. Copy the diagram below into your book.
  - a. Fill in the empty boxes with the sequence of activities that define accounting. The first step has been completed for you.
  - b. Share and discuss your answer with a colleague for feedback.



#### **Activity 1.2 The Concepts of Accounting**

1. Study the scenario below and perform the activities that follows

Auntie Ama runs a small provision shop near your school. She needs help to organise her stock better. She gives you a list of some items she has in her shop, and your class will help her make sense of it. The items are:

- a. 12 sachets of Milo
- b. 20 rolls of toilet paper
- c. 15 packets of biscuits
- d. 8 bottles of cooking oil
- e. 10 bars of Key Soap
- f. 6 tins of milk
- g. 9 packets of sugar
- h. 5 packets of salt.
- 2. In groups,
  - a. writes down all the items and quantities.
  - b. put the items into categories (such as beverage items, toiletries and cooking ingredients).
  - c. total the items in each category in a tabular form.
- 3. In your discussion, relate what you have helped Auntie Ama to do to the concepts of recording, classifying and summarising in accounting.
- 4. Answer the question: why is accounting important in daily life?

#### Activity 1.3

- 1. Your teacher will lead a class discussion on accounting as a system and its purpose using the example of Opanyin Asante's case described in the section above.
- 2. Go back and read the example and consider the following questions:

- a. Why do you think Opanyin Asante records all of his income and expenditure?
- b. How does classifying his expenses help him in decision making?
- c. What would happen if he didn't summarise his monthly records?
- 3. Turn to your partner and share your responses to these questions. Discuss your different responses then agree a shared answer to feedback to the wider class.

#### **Extension Activity**

- 1. Your teacher will arrange you in small groups of no more than five to study the different branches of accounting and potential career opportunities for you as students of accounting.
- 2. Create a poster or short presentation that you could share with the class. Be creative and make it engaging with the aim of generating interest in accounting as a future career.

#### **ACCOUNTING PROCESS**

#### **The Accounting Process**

The accounting process is the step-by-step way a business records and organises its financial activities. It helps a business know how much money it receives, spends, owes, or owns.

The steps outlined below help businesses to prepare useful financial reports:

#### **Major Steps in Processing Accounting Information**

#### **Identify and Analyse Transactions**

The first step is to find and understand all money-related activities (called transactions) that happened during a given period. These can include money spent, loans paid, cash earned from sales etc. Each transaction is looked at to see how it affects the business.

#### **Record Transactions in a Journal**

Next, the details of each transaction are written down in a journal. This is like a daily diary of financial activities. The entries are recorded in the order they happened (chronological order), either in a book or using a computer programme.

#### **Post Transactions to the Ledgers**

After recording in the journal, the transactions are grouped into specific accounts in the ledger. For example, all cash transactions go into the cash account, and all sales go into the sales account. This makes it easy to track activity in different parts of the business.

#### **Determine the Trial Balance**

At the end of the accounting period, the balances from all the ledger accounts are collected to prepare a trial balance. The trial balance checks if the total amount of money recorded as debits equals the total recorded as credits. If they don't match, it means there's an error that must be corrected.

#### **Analyse the Workbooks**

This step involves reviewing the records to find and fix any mistakes. If there are errors or transactions that were not recorded (like depreciation or unpaid bills), they are added using adjusting journal entries. This ensures everything is accurate and balanced.

#### **Prepare Financial Statements**

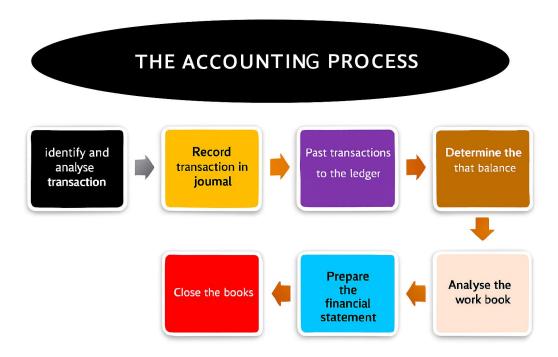
Once the books are correct, the business can prepare its financial statements. These reports show how the business performed over a certain time (monthly, quarterly, or yearly).

The **three** main financial statements are:

- 1. Income Statement shows profit or loss
- 2. Balance Sheet shows what the business owns and owes
- 3. Cash Flow Statement shows how cash moved in and out of the business.

#### **Close the Books**

The last step is to close the books at the end of the accounting period. This means finalising all records so the business can start fresh in the next period. Closing reports helps a business to check how well the it performed and plan for the future.



#### **Activity 1.4 Accounting Process**

- 1. Copy the diagram below into your book and draw lines to match each description of accounting process to the correct step or sequence on the right.
- 2. Share your answer with a colleague for discussion

Post transactions to the ledger  Analyse the workbook  Close the books  Determine the trial balance  Identify and analyse transaction  Record transaction in journal  Frepare the financial statement  T		
Analyse the workbook  Close the books  Determine the trial balance  Identify and analyse transaction  Record transaction in journal  6	DESCRIPTION	9372
Close the books  Determine the trial balance  Identify and analyse transaction  Record transaction in journal  6	Post transactions to the ledger	1
Close the books  Determine the trial balance  Identify and analyse transaction  Record transaction in journal  6		
Determine the trial balance  Identify and analyse transaction  Record transaction in journal  6	Analyse the workbook	2
Determine the trial balance  Identify and analyse transaction  Record transaction in journal  6		
Determine the trial balance  Identify and analyse transaction  Record transaction in journal  6	Close the books	3
Determine the trial balance  Identify and analyse transaction  Record transaction in journal  6		
Identify and analyse transaction  5  Record transaction in journal  6	Determine the trial belongs	4
Record transaction in journal	betermine the that balance	
Record transaction in journal	Identify and analyse transaction	5
	Table of the state	
	Record transaction in journal	6
Prepare the financial statement		
Prepare the financial statement		7
	Prepare the financial statement	

#### **Characteristics of Accounting Information**

For accounting information to be useful, it must have certain qualities that make it easy to understand, accurate, and helpful for decision-making.

The main characteristics of accounting information are summarised below:

- 1. Understandability: Accounting information should be easy to read and understand. It should be clearly written so that the intended audience can follow and make sense of it.
- 2. Relevance: The information should be useful and connected to what the user needs. It should help people make decisions about the past, present, or future of the business for example, whether to invest, lend, or manage better.
- 3. Consistency: The same methods and rules should be used every year when recording transactions. This helps make sure the results are fair and not changed to confuse people. It also makes it easier to compare financial results over time.
- 4. Comparability: Accounting information should allow users to compare how a business is performing over different time periods or with other businesses. This is possible when the same accounting methods and rules are used consistently.
- 5. Reliability (Faithful Representation): The information must be correct and trustworthy. It should show the true situation of the business, without major mistakes or dishonesty, so that users can rely on it when making decisions.
- 6. Objectivity: Accounting information should be fair and not take sides. It should be based on facts and evidence, not opinions or pressure from inside or outside the business.
- 7. Timeliness: Information should be given at the right time not too late. If it comes too late, it may not be useful anymore. For example, if a school's financial report is released after a new term starts, it may not help with planning.



The diagram below depicts the characteristics of accounting information

#### **Activity 1. 4 Characteristics of Accounting Information**

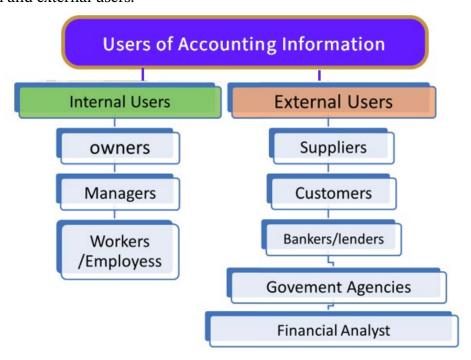
- 1. Copy and complete the table below. State the accounting characteristic that applies to each description.
- 2. Share your answer with a colleague for discussion.

S/N	Description	Characteristic
a	Application of accounting policies as well as the treatment of similar items should be the same	Consistency
b	Accounting information should be free from material misstatement and bias so that users can depend on it	
С	It should be possible for users of accounting information to compare the performance of similar companies in the same industry over time	
d	There should be clarity in the expression of accounting information such that it will be understandable to users	
e	Accounting information should be unbiased and free from any kind of internal and external influence	
f	Accounting information should be useful and assist a user to make informed decision	
g	Accounting information must be presented at the appropriate time when it is needed	

#### **ACCOUNTING INFORMATION**

#### **Users of Accounting Information**

Users of accounting information are those persons or businesses who use financial statements to make decisions. There are two types of users of accounting information – internal and external users.



#### **Internal Users of Accounting Information**

Internal users are people who work in or own the business and use its accounting information to make decisions.

#### 1. Shareholders / Owners

Shareholders are the people who put money (capital) into a business and are its owners. They need accounting information to:

- a. Know how the business is doing financially if it is making profit or loss.
- b. Check how stable the business is over time and how changes in the economy are affecting it.
- c. Decide whether to put in more money or take their money out of the business.

#### 2. Employees

Employees are the people who work in a business. They want to:

- a. Know if their jobs are safe and if the business can continue paying their salaries and benefits.
- b. Check if the business is paying their SSNIT contributions and taxes (like PAYE) to the government.
- c. Understand if the company is strong enough financially before they decide to work there in the future (for job seekers).

#### 3. Managers

Managers are the people who run a business and make daily decisions. They need accounting information to:

- a. Track how well the business is doing by comparing this year's results to past years or targets (budgets).
- b. Make good plans and control spending by using accounting data to monitor different departments or products.
- c. Compare how their business is doing against others in the same industry.

#### **External Users of Accounting Information**

External users are people or organisations outside a business who also need accounting information to make decisions.

#### 1. Suppliers

Suppliers provide goods or services to a business. They want to:

- a. be sure the business can pay for goods or services supplied on credit.
- b. know that the business will continue buying from them in the future.

#### 2. Customers

Customers are the people who buy goods or services from a business. They want to:

- a. know whether the business will continue to produce goods or services for them to buy.
- b. be sure that the products they get are of good quality and meet the right standards.

#### 3. Lenders / Banks

These are people, banks or other financial institutions who give loans to a business. They need the accounting information to:

- a. check the business's financial strength to know if it can pay back loans with interest.
- b. be sure the business can manage its debts well.

#### 4. Government / Regulatory Agencies

These are government bodies that oversee the activities of businesses. They need financial statements for several reasons:

- a. Registrar of Companies wants to confirm that the business is active.
- b. Ghana Revenue Authority (GRA) uses the information to calculate how much tax the business must pay.
- c. SSNIT checks if the business is paying workers' social security contributions.

#### 5. Financial Analysts and Advisors

These are people who study financial reports of businesses. They use this information to:

a. Check if a business is financially strong and likely to continue operating.

b. Compare different companies and set standards for measuring performance across the same industry.

#### **Activity 1.6 Users of Accounting Information**

- 1. Your teacher will arrange you in small groups of no more than five.
- 2. In your groups, identify and describe seven users of accounting information.
- 3. Categorise each user as either an internal or external user of accounting information.
- 4. Identify the reason why they need accounting information.
- 5. Join with another group to share your answers for discussion and feedback.

  You may use the table below to support your work. An example has been completed for you.

S/N	User	Description	Category	Reason for information
	Financial Analysts or Advisors	They are persons who study the financial statements of various businesses	External User	To measure the financial stability of a business to determine its continuous existence.  To establish industrial indicators which help to measure performances of businesses in the same industry.
a				
b				

#### **Activity 1.7 Importance of Accounting Information**

- 1. Working in pairs, discuss the following:
  - a. Why accounting information is important
  - b. What the impact may be of presenting accounting information that does not meet the characteristics of accounting principles to the users of this information.
- 2. Use charts or mind maps to summarise your points and present your answers to another pair
- 3. Discuss your presentation within your group and consider any feedback from your peers. Are there points you had not considered? If so, how would you address these?

#### **ACCOUNTING STANDARDS**

#### **Accounting Standards**

Accounting standards are rules and guidelines that explain how businesses should record, report, and share their financial information.

They help make sure that companies prepare their financial statements in the same way so that stakeholders and other interested parties can understand and trust the information.

#### **Types of Accounting Standards**

- 1. Generally Accepted Accounting Principles (GAAP): GAAP is a set of accounting rules mainly used in the United States. These rules help companies prepare clear financial statements so others can understand their performance. Public companies in the U.S. must follow GAAP.
- 2. International Financial Reporting Standards (IFRS): IFRS are used in many countries around the world. It helps international companies use one common method when preparing their financial reports. This makes it easier to compare financial information from businesses to business in different countries.

#### **Importance of Accounting Standards**

The benefits of accounting standards include.

- 1. Clarity: Accounting standards remove confusion by guiding businesses on how to record financial transactions. When all businesses follow the same method, their reports become easier to understand for investors, banks, the public, the government and other stakeholders.
- 2. Comparability: With accounting standards, the financial statements of one company can be compared to those of another. This helps people like investors or banks see which company is performing better or is more stable.
- 3. Guidance: Accountants need help to do their work properly every day. Accounting standards give them step-by-step instructions so they can record transactions correctly and produce useful financial reports.
- 4. Uniformity: These standards help all businesses use the same method to keep financial records. This uniform way of reporting makes it easier for companies to do business with each other and for stakeholders to understand their financial position.
- 5. Reliability: People like investors, workers, and business partners depend on financial reports to make decisions. When accounting standards are followed, it makes the reports more accurate and dependable.
- 6. Reducing Fraud: When all businesses follow the same rules, it becomes harder to cheat or hide important financial information. This helps reduce the chances of fraud or financial dishonesty.
- 7. Assist Auditors: Auditors check a company's financial reports to make sure they are correct. Accounting standards give auditors clear rules to follow, making it easier for them to check if a company has followed the right steps.

#### **Activity 1.8 Importance of Accounting Standards**

- 1. Arrange yourself in small groups of no more than five.
- 2. In your groups discuss at least three reasons why rules and regulation are important in your school.
- 3. Considering these examples, extend your discussion to think about the meaning of accounting standards and why they are important.
- 4. Summarise your points on manila cards for a presentation to the larger class for discussion and feedback

#### **Activity 1.9 Types of Accounting Standards**

- 1. Working in pairs, discuss accounting standards:
  - a. Identify the two main accounting standards that are used by businesses
  - b. Summarise how and where each standard is used
  - c. Why are these standards important to the accounting profession?
- 2. Write down your thoughts on flash cards and share with another pair for feedback.

#### **EXTENDED READING**

- Adomako, R. K. (2019). Contemporary Financial Accounting. Tamale: Zeal Publishing. pp. 62-68, pp. 200-215
- Andoh, C. A. (2020). Principles of Financial Accounting. Accra: Best Books Ltd. pp 25-30, 45-53
- Boateng, A. A. (2018). Essentials of Financial Accounting. Tamale: Northern Publications. Pp 42-50, 65-70
- Owusu, P. Y. (2021). Financial Accounting Made Simple. Cape Coast: Coastal Press pp 10-15, 55-60
- Tetteh, M. A. (2020). Financial Reporting and Analysis. Accra: Bloom Publications. pp. 40-47, pp. 110-125
- Any Financial Accounting book approved by NaCCA

#### **REVIEW QUESTIONS 1**

- 1. Explain the concept of accounting as a system.
- **2.** As the accountant for a company, explain the processes you would follow to prepare financial statements for decision makers.
- **3.** Evaluate the implications of poor financial accounting information on business activities.
- **4.** Assess the need for accounting standards in a business.

**SECTION** 

2

## APPLICATION OF THE ACCOUNTING EQUATION AND DOUBLE ENTRY PRINCIPLES IN RECORDING FINANCIAL TRANSACTIONS



#### FINANCIAL ACCOUNTING

#### **Financial Data Analysis**

#### INTRODUCTION

In this section, we will look at financial data analysis and the fundamental principles that underpin it. You will be introduced to the important rules of double entry and how to accurately analyse and record financial transactions in the books of accounts. This will help you to understand how business transactions affect the accounting equation by demonstrating changes in the values of assets, capital and liabilities; as well as how to record business transactions into the various day books and ledgers, balance off accounts and prepare a trial balance. This knowledge is crucial for further financial reporting and connects with various aspects of business management and decision-making.

#### **KEY IDEAS**

- **Accounting equation** is a formula that shows that the sum of a company's liabilities and owner's equity should be equal to its total assets thus Assets = Liabilities + Owner's equity (capital).
- **Assets** are things owned by a business that hold value.
- **Liabilities** are what a business owes, so may be a debt or obligation to another person or organisation
- **Owners' equity** or capital are the resources that belong to the owner and are supplied to the business.
- **Resources** are materials, or capabilities (e.g. human, financial etc.) that are available to be utilised by a business to achieve a set target or carry out operations.
- **Transaction** is an event or activity that involves the exchange of goods, services, or funds between two or more parties.

#### **COMPONENTS OF ACCOUNTING EQUATION**

Before we look at the accounting equation, it is important to understand some key terminology.

#### **Assets**

Assets are resources owned by an individual or a business that have economic value and can provide future benefits. Assets include cash, property, equipment, investments, and intellectual property. They are valuable because they can be used to generate income, provide benefits, or be converted into cash. They are essential for generating revenue and can be classified as:

#### **Current Assets**

A current asset is a type of asset that a company expects to change into cash, sell, or consume within one year or within its normal operating cycle. Current assets are important for maintaining daily operations and liquidity. Examples: Cash, accounts receivable, inventory, short-term investments, prepaid expenses.

#### **Non-Current Assets (Fixed Asset)**

Non-current assets, also known as long-term assets, are assets that a company intends to hold for a long period, typically more than one year. These assets are long-term and not expected to be converted into cash within a year. Non-current assets are important for the company's operations and are usually used to generate revenue over a period of time. Examples: buildings, machinery, land, patents, trademarks, long-term investments.

#### **Tangible Assets**

Tangible assets are physical, measurable assets that a business owns and uses in its operations to generate income. They have a physical form and can be touched, seen, and felt. Examples: buildings, land, machinery and equipment, vehicles, furniture and fixtures, inventory, etc.

#### **Intangible Assets**

Intangible assets are non-physical assets that provide long-term value to a business. Unlike tangible assets such as machinery or buildings, intangible assets do not have a physical form but are valuable because of the rights, privileges, or competitive advantages they confer. Examples: Goodwill, trademarks, brand, patents, copyrights, etc.

It is important for businesses to be able to calculate the total value of all of their assets. This can be done using the following formula.

#### Total Assets = current assets + non-current assets

#### **Example**

A company has the following assets:

Cash GH¢50,000

Account receivables GH¢20,000

Inventory GH¢35,000

Prepaid expenses GH¢6,000

Value of building GH¢230,000

Long term investments GH¢35,000

Intangible assets GH¢93,000.

It is useful to first categorise each asset as "current" or "non-current".

Calculate the sum of each type of asset, then add the two figures together to find the total value of all assets as shown in *Table 2.1*.

Table 2.1

Current assets GH¢	Non-current assets GH¢	
Cash 50,000	Building 230,000	
Account receivables 20,000		
Inventory 35,000	Long term Investments 35,000	
Prepaid expenses 6,000	Intangible assets 93,000	
Total 111,000	Total 3580,000	
Total assets = $111,000 + 358,000 = 469,000$		

#### **Liability**

A liability is a present obligation of a business arising from past events. A liability can also be a company's obligation to pay money to other people or businesses in the future. It is the amount a business entity or company owes to other people. Types include:

#### **Current Liabilities (short-term liabilities)**

These are obligations that are expected to be settled within one year. Examples:

- 1. Accounts Payable: Money owed to suppliers for goods and services received.
- 2. Short-term Loans: Loans that need to be repaid within a year.
- 3. Accrued Expenses: Expenses that have been incurred but not yet paid, like wages or taxes.

#### Non-current liabilities (Long-term Liabilities)

These are obligations that are due beyond one year. Examples:

- 1. Long-term Loans: Loans that have a repayment period longer than one year, such as a mortgage.
- 2. Bonds Payable: Debt securities issued to investors that must be repaid at a future date.
- 3. Deferred Tax Liabilities: Taxes that are owed but not due until a future date.

#### **Capital**

Capital (owners' equity) is the amount of resources supplied by the owners of a business entity. Owner's equity shows how much of the business the owner really owns after paying all liabilities. It is important because it helps to know business's real worth and how much one has invested or gained over time.

#### **Activity 2.1**

Your teacher will lead a whole class discussion on the components of the accounting equation.

Record in your books the meaning of the following terms:

- 1. Asset
- 2. Liability
- 3. Capital

#### **Activity 2.2 Components of Accounting Equation**

- 1. Your teacher will arrange you in small groups of no more than five.
- 2. In your groups, identify any business enterprise in your community or on the school compound and note down the following:
  - a. Find out the resources that help the business to operate.
  - b. Categorise each of resource (e.g. asset, liability etc.)
  - c. Find out the resources of the business are financed.
  - d. Write down the resources you have identified and its sources on flash cards in the form of table below.

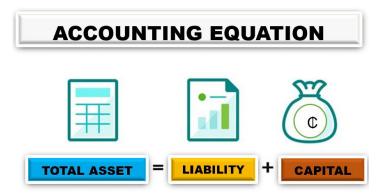
S/N	RESOURCE	CATEGORY OF RESOURCE	
	Building	Asset (non-current asset)	
How business resources are financed			

3. Share and compare the results of your findings with another group for discussion.

# THE ACCOUNTING EQUATION AND ITS IMPORTANCE

#### **The Accounting Equation**

The accounting equation is the backbone of accounting. It shows the relationship between what a business owns, owes, and the owner's stake in it. Think of it as a balance scale. On one side, you have assets — the things your business owns, like cash, equipment, or inventory. On the other side, you have liabilities — what your business owes to others, such as loans or unpaid bills — and owner's equity, which is the owner's share or stake in the business.



The accounting equation is a formula that shows that the sum of a company's liabilities and owners' equity should be equal to its assets. This equation provides a clear summary of how a business's assets are funded and is a way of demonstrating that credits and debits will be equal. This underpins the double entry principle of accounting.

This helps business owners and accountants track exactly how much the business owns, owes, and how much the owner has invested. It helps to understand and record every financial activity in a way that keeps the books accurate and balanced.

The accounting equation can be rearranged to allow you to calculate one of the values if the other two are known. For example:

- 1. Assets = Capital + Liabilities
- 2. Liability = Assets Capital
- 3. Capital = Assets Liabilities

Initially, a business requires resources; these could come from its owners or other individuals. When the owner personally provides all the necessary resources, the accounting equation is:

#### Assets = Capital (Owner's Equity)

In this case, the total assets of the business are equal to the owner's equity (capital), showing that everything the business owns is funded solely by the owner's contribution.

When a business receives resources from sources other than the owners, the accounting equation is:

#### Assets = Liabilities

This means that all the assets the business owns are financed through debts or obligations to external parties, rather than the owner's own funds.

However, the accounting equation is essentially a formula showing that a company's total assets equal the sum of its liabilities and owner's equity:

#### Assets = Capital (owner's equity) + Liabilities

This means that everything the business owns is financed either through what the owner invests or through debts owed to others.

#### **Activity 2.3 The Accounting Equation**

- 1. In groups, study the table below which shows the end of year values of the capital, assets and liabilities of Mr. Osei Agyin who operates a cold store.
- 2. Use your knowledge of the accounting equation to calculate the missing values.
- 3. Share your answers with another group.

Year	Capital	Assets	Liabilities
2010	GH¢4,500	?	GH¢2,800
2011	?	GH¢5,500	GH¢3,000
2012	GH¢3,550	GH¢4,060	?
2013	GH¢5,100	GH¢6,800	?
2014	?	GH¢7,900	GH¢2,000
2015	?	GH¢8,800	GH¢1,300
2016	GH¢7,700	GH¢10,200	?
2017	GH¢7,900	?	GH¢4,800
2018	?	GH¢10,530	GH¢2,100
2019	GH¢9,000	?	GH¢4,980
2020	GH¢9,700	?	GH¢1,400

#### **Importance of the Accounting Equation**

- 1. Fundamental principle: The accounting equation is key in accounting because it highlights the double-entry system. It ensures that every financial transaction keeps the balance between a company's assets and liabilities, maintaining accuracy and consistency.
- 2. Decision making: It offers valuable information about a company's financial position, supporting decisions related to budgeting, investments, and strategic planning.
- 3. Financial analysis: Maintaining the balance in the equation allows stakeholders like investors, creditors, and management to assess the company's financial health and stability effectively.
- 4. Error detection: Any imbalances in the accounting equation show potential recording mistakes, making it an essential tool for identifying errors.
- 5. Accountability: It promotes transparency and responsibility by clearly illustrating how assets are funded through equity and liabilities, as well as how resources are distributed within the business.

#### **Activity 2.4 Importance of the Accounting Equation**

- 1. Find a partner to work with. In your pairs, discuss three reasons why the accounting equation is important.
- 2. Record your explanations in a table such as the one below.
- 3. Share your answers with another pair for feedback.

Importance of Accounting Equation

# EFFECTS OF TRANSACTIONS ON THE ACCOUNTING EQUATION

Every time a business conducts a transaction, it affects the accounting equation and hence, the statement of financial position.

**Table 2.2** illustrates how each transaction affects the three components of the accounting equation, breaking down their individual effects.

Table 2.2

	Transaction	Effect on Accounting Equation		
		Assets	Liabilities	Capital
1	Started business with cash	Increase in assets (cash)		Increase in capital
2	Bought machinery on credit from APC	Increase in asset (machine)	Increase in liability to APC	
3	Deposited cash at bank	Increase in asset (Bank)  Decrease in asset (Cash)		
4	Bought motor van paying in cash	Increase in asset (motor van) Decrease in asset (Cash)		
5	Owner takes money out of business bank account for his own use	Decrease in assets (bank)		Decrease in capital
6	Owner pays suppliers from personal accounts		Decrease in liability (creditors)	Increase in capital

7	Pays suppliers by cheque	Decrease in assets (bank)	Decrease in liabilities (creditors)	
8	Owner deposits more personal money into the business bank accounts	Increase in assets (bank)		Increase in capital
9	Withdraw cash from bank and placed it in cash box	Increase in asset (cash)  Decrease in asset (bank)		
10	Obtained loan from bank	Increase in asset (bank)	Increase in liability (loan)	
11	Owner invests GH¢10,500 in cash into the business.	Increase in assets by GH¢10,500 (Cash)		Increases in capital by GH¢10,500 (owner's equity)
12	Purchases equipment for GH¢5,000 in cash	Increase in assets by GH¢5,000 (Equipment) Decrease in assets by GH¢5,000 (Cash)		
13	The business takes out a loan of GH¢15,000	Increase in assets by GH¢15,000 (Cash)	Increase in liabilities by GH¢15,000 (Loan Payable)	
14	Receives GH¢1,000 in cash from a customer for services rendered	Increase in assets by GH¢1,000 (Cash)		Equity increases by GH¢1,000
15	Pays GH¢3,000 for operating expenses	Assets decrease by GH¢3,000 (Cash)		Decreases in capital GH¢3,000 (owner's equity)

#### **Activity 2.5 Effects of business transactions on the accounting equation**

1. Turn to the person sat next to you and in your pair, study the accounting transactions in each of the scenarios below.

#### **Scenario 1**

Ama has a small business running a food stall at a local market. She:

- a. Buys ingredients for GH¢150, paying cash
- b. Purchases goods from suppliers for GH¢250 on credit to be repaid the following week
- c. Pays business expenses of GH¢20 in cash

- d. Earns GH¢400 in sales for the week in cash
- e. Repays her supplier GH\$100 in cash

#### Scenario 2

The following transactions relate to Mr. Cachito, a sole trader for the month of March 2024. March 1<sup>st</sup>: Started business with GH¢1,000

- 2<sup>nd</sup>: Bought goods worth GH¢520 on credit from Kwaku Acheampong Ventures
- 4th: Contracted a loan of GH¢600 and deposited it in his bank account
- 5th: Bought motor vehicle GH¢400 paying by cheque
- 6th: Cash purchases GH¢270
- 7<sup>th</sup>: Paid Kwaku Acheampong Ventures GH¢520 cash
- 8th: Withdrew GH\$200 for private use from the bank
- 9th: Bought goods on credit from Atanga Enterprise GH¢300
- 11th: Sold goods for GH\$43,550 and the money banked.
- 13<sup>th</sup>: A supplier was paid cash of GH¢1,000.
- 17<sup>th</sup>: One of the receivables gave a cheque for GH¢2,800.
- 20th: Bought office equipment, paying by cheque, for GH¢8,500.
- 24th: Bought goods on credit from Edzisem to the total of GH¢500.
- 27th: Repaid Edzisem by cash.
- 2. For each scenario, prepare a table to show the effect (increase or decrease) of the transactions on assets, capital (owner's equity) and liabilities.
- 3. Compare and discuss your answer with another pair.

You may use the table below for your work.

Date	Transaction	Effect on Accounting Equation			
(N/A for scenario 1)		Assets	Liabilities	Capital	
March 1					
2					
4					
5					
6					
7					
8					
9					
11					
13					
17					
20					
24					
27					

#### **Activity 2.6**

- 1. Practise using the accounting equation to calculate an organisation's assets, liabilities and capital and analyse scenarios to identify how these are affected by different transactions. Examples have been provided below but your teacher may provide you with additional scenarios to work through.
- 2. Present your solutions to the class on flip chart paper.

#### Example 1

Use your knowledge of the accounting equation to complete the following table

	Asset	Capital	Liabilities
<u>A</u>	?	GH¢5,200	<u>GH¢1,550</u>
<u>B</u>	<u>GH¢7,750</u>	?	<u>GH¢2,225</u>
<u>C</u>	<u>GH¢6,400</u>	<u>GH¢5,050</u>	<u>?</u>
<u>D</u>	?	GH¢10,420	GH¢7,850
<u>E</u>	<u>GH¢5,550</u>	?	GH¢3,250
<u>F</u>	GH¢9,775	GH¢3,250	?

#### Example 2

Akua is a baker who runs a small business called "Akua's Artisan Bakes" from a market stall. In the first month of business Akua records the following transactions:

- a. Akua transfers GH¢10,000 from her personal bank account into a new business bank account to purchase a professional-grade mixer.
- b. She buys a bulk order of flour and sugar from a supplier for GH¢2,000 on credit, with the full amount due in 60 days.
- c. A customer pays GH¢3,500 in cash for a large celebration cake.
- d. Akua pays her market stall rental fee of GH¢900 in cash.

Explain how each transaction affects Akua's assets, liabilities, and capital. Justify your answers.

# THE LEDGER AND THE DOUBLE-ENTRY PRINCIPLE

#### Ledger

A ledger is the main record book where all the financial transactions of a business are recorded and summarised. Every transaction that happens—whether a sale, purchase, or payment—is first recorded in a journal. Then, these journal entries are transferred to the ledger, which groups all similar transactions into specific accounts. For example, all cash transactions go into the cash account, while sales are recorded in the sales account.

This organised system helps accountants and business owners easily track how much money is coming in and going out, what the business owns, and what it owes. The ledger also provides the basis for preparing important financial statements like the balance sheet and income statement. It ensures that every financial activity is properly recorded and that the overall financial position of the business is clear and easily understood.

The ledger is divided into two - personal and impersonal.

#### **Personal ledger**

A personal account is a type of account that records transactions related to individuals, firms, or organisations with which a business interacts. It reflects the relationships between the business and the people or entities involved in its financial activities.

Personal accounts help track the financial dealings a business has with other individuals and entities, making transactions clear and organised.

For example, personal accounts include accounts of customers, suppliers, or any other stakeholders. When the business receives money from a customer, or pays a supplier, these transactions are recorded in their respective personal accounts.

The personal ledger is subdivided into two – receivables and payables.

**Receivables**: These are the persons, companies or partnerships that owe the business. That is, the firm has sold goods to these people on credit, and they have not paid.

**Payables**: They are the persons, companies or partnerships to whom the business owes. That is, they are the suppliers of the firm. The firm has purchased goods from them on credit and has not paid.

#### Impersonal ledger

An impersonal account is a type of personal account that does not belong to any particular individual or organisation directly. Instead, it represents a specific obligation, benefit, or a general relationship with an entity. For example, accounts like prepaid expenses or accrued income are impersonal accounts. They represent certain benefits or obligations that relate to some person or organisation but are not tied to any specific individual. These accounts act as placeholders for specific transactions or balances that will finally be settled or transferred.

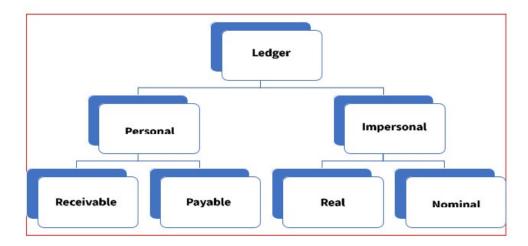
Impersonal accounts help in accurately recording and managing resources or obligations that are not directly linked with a particular individual but are important for financial reporting and examination.

The impersonal ledger is also divided into two - real and nominal accounts.

**Real accounts**: These contain transactions in property and material objects that are tangible. It includes the accounts of buildings, cars, cash, machines, etc. They are permanent accounts that carry forward balances from one accounting period to the next. Basically, they represent things the business owns or controls.

**Nominal accounts**: These are used to record losses, expenses, income and gains. For example, rent and rates, salaries and wages, insurance, etc. They are temporary accounts that are closed at the end of each accounting period to determine the net profit or loss.

The diagram below shows the divisions of the ledger.



#### **Account**

An account is a record used to organise and track all the financial transactions related to a specific group of items in a business.

Think of it as a labelled folder where all activities — like sales, expenses, assets, or liabilities — are recorded.

For example, there could be an account for cash, one for inventory, or one for salaries. Every time money is received or spent related to that category, it's recorded in the respective account.

This helps in keeping detailed and organised information about each part of the business's finances. An account helps business owners and accountants see how much they have, owe, or earn in each area. It makes the process of managing finances clearer and manageable, ensuring accuracy and easy reference.

#### **Activity 2.6 The Ledger**

- 1. Arrange yourself in small groups of no more than five.
- 2. In your groups,
  - a. explain what is meant by a ledger.
  - b. identify examples of the different types of ledgers and discuss how they are used.
- 3. Share your responses with other groups in your class.

#### **Activity 2.7 Types of Account**

1. Copy the table below in to your workbook and complete it to identify which type of account (real, nominal or personal) each of the following transactions should be credited or debited to within a ledger.

Transaction	Personal	Real	Nominal
Purchased land for cash.			
Hired a bulldozer and paid cash.			
Allowances of workers paid by cash.			
Postage bill paid by cash			
Interest on investment received by cheque.			
Received cheque from a debtor			
Received dividend by cheque.			
Purchase office machine on credit.			
Paid electricity bill to VRA by cheque.			

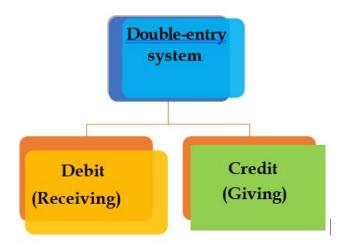
2. Compare your answer with a colleague for feedback. Do you agree? If not discuss your rationales and seek guidance from your teacher if you are still unsure.

#### **The Double Entry Principle**

The double-entry principle is a primary accounting rule which states that every business transaction must be recorded twice—as a debit and as a credit. This means for every debit entry; there must be a corresponding credit entry and vice versa.

Often called the 'Golden Rule of Accounting,' this principle ensures the accuracy of financial records. When accounts are balanced correctly, the total amount of debits should always equal the total amount of credits, maintaining the accounting equation.

The double-entry system not only helps in maintaining balanced books but also provides a complete view of a company's financial position, making it a basic concept in accounting practice.



# **Rules of Entry in the Ledger**

An account is divided into two parts. The left part is called the **debit side** while the right part is called the **credit side**.

Below is a sample of a ledger (also known as a T – account)

Debit side			Credit side			
Date	Details	Amount - GH¢	Date	Details	Amount - GH¢	
01/07/20X1	Sales	XXX	01/08/20X1	Cash	XXX	

#### A debit entry represents

- 1. an increase in the value of an asset
- 2. an increase in an item of expenditure
- 3. a decrease in the amount of liability

#### A credit entry represents:

- 1. a decrease in the value of an asset
- 2. an increase in an item of income
- 3. an increase in the amount of liability

This can be broken down for each type of account within the ledger.

For personal accounts, the rule is					
Debit – the receiver of value, Credit – the giver of value					
For example, paid Ven by cheque:					
Debit	Credit				
Ven's account	Bank account				
For real accounts, the rule is					
Debit- what comes into the business, Credit	- what goes out of the business.				
For example, purchase of a building by cheque:					
Debit	Credit				
Building account	Bank account				
For nominal accounts, the rule is					
Debit- all expenses and losses, Credit- all incomes and gains.					
For example, discount received from Baba Co. Ltd:					
Debit	Credit				
Baba Co Ltd. account	Discount received account				

#### **Activity 2.8 The Double Entry Principle**

- 1. Your teacher will arrange you in small groups.
- 2. In your groups, agree and write down in your workbooks the principle of the double entry rule of accounting.
- 3. Use the discussion with your peers to ensure you are clear on the meaning of "credit" and debit" in the context of the double entry principle.
- 4. If you are unsure, speak to your teacher to clarify.

#### **Activity 2.9 Recording Transactions Part 1**

- 1. In your groups, draw a template ledger, or "T account" on a piece of flip chart paper.
- 2. Review the following business transactions for MFS Enterprise.
  - a. Started business with GH\$\psi\_2,000 cash.
  - b. Purchased a cargo truck with GH¢500 cash.
  - c. Bought furniture for GH¢120 cash.
  - d. Purchased goods worth GH¢2,500 by cheque.
  - e. Sold goods worth GH¢900 receiving cash.
  - f. Purchases inventory valued at GH\$\psi\_2,000 on credit
  - g. Sells products worth GH¢5,000 in cash.
  - h. Pays GH¢3,000 in salaries to employees.
  - i. Takes a loan of GH¢10,000 from a bank.
  - j. Pays GH¢500 for utility expenses.
- 3. Record each transaction in the format of the T account.
- 4. Compare your answers with another group for feedback.
- 5. Present your findings to your teacher.

#### **Activity 2.10 Recording Transactions Part 2**

- 1. You will now have the chance to apply your understanding of the double entry principle to practice recording transactions.
- 2. Choose a partner to work with and attempt each of the examples below.

#### Example 1

Kwame is starting a new business. Record the following transactions in the appropriate accounts for his venture:

- a. Started business with GH¢1,000 cash.
- b. Bought a motor van with cash GH\$\psi\_200.

- c. Purchase of raw materials GH¢100 by cash.
- d. Bought inventory by cheque GH\$43,500.
- e. Sold goods worth GH¢780 by cash.

#### Example 2

Ama starts a new mobile money vending business and has listed the following transactions for her first month:

- a. Starts the business by depositing GH¢5,000 of savings in to her bank account
- b. Purchased a small kiosk from which she can run her business for GH\$\psi\_2,000. She paid by cheque.
- c. Bought GH\$1,500 worth of inventory on credit
- d. A customer withdrew GH¢300 on which Ama received GH¢5 commission in cash.
- e. Paid a supplier GH¢500 by bank transfer
- 3. Record your answers on flip chart paper and be prepared to present your work to the class for discussion and feedback.

# **DAY BOOKS**

# **Daybooks**

A daybook is a book in which daily financial transactions are first recorded in the order in which events happen. The daybook, also known as book of original entry or prime book, records important information about each transaction including the date, description and amount involved. It serves as a source document for the recordings in the ledgers.

# **Types of Day Books**

There are different types of day books and these include.

#### 1. Sales Day Book

The sales daybook, also known as sales journal is used to record all credit sale transactions made by a business. It serves as a detailed record of sales activities, typically including information such as the date of the sale, customer details, items sold, quantities, prices, and total amounts.

The sales day book helps in maintaining accurate records for accounting purposes and facilitates the preparation of financial statements.

The source document used for recording transactions in the sales day book is the sales invoice. *Table 2.3* shows the format of a sales daybook or journal and outlines the information to be recorded in each column.

Table 2.3

S/N	Date	Particulars	Ledger Folio	Invoice	Amount – GH¢		
			rouo	number	Details	Net amount	
1	Date of sale	Name of customer and details of goods sold	Reference number		Detailed calculations	Net amount of the invoice	
2							
3							

#### 2. Purchases Day Book

The purchases daybook, also known as purchases journal is used to record all credit purchase transactions made by the business. It serves as a subsidiary book that helps in organising and summarising purchase transactions before they are posted to the ledger account. Typically, the purchases day book records details such as the date of purchase, supplier's name, invoice number, description of goods, and the amount.

This organised way of recording helps keeps track of credit purchases accurately, makes it easier to match accounts, and helps manage the company's buying activities efficiently. The source document used for recording transactions in the purchase's day book is the purchase invoice. *Table 2.4* shows the format of a purchases daybook or journal and outlines the information to be recorded in each column.

Table 2.4

S/N	Date	Particulars	Ledger	Invoice number	Amount – GH¢		
			Folio		Details	Net amount	
1	Date of purchase	Name of supplier and details of goods bought	Reference number		Detailed calculations	Net amount of the invoice	
2							
3							

#### 3. Return Inwards Day Book

The return inwards day book is also known as the sales returns journal. It is used to record the goods which are returned to a business by a customer. It ensures that the total sales figures are corrected to reflect actual revenue, providing a true picture of the company's income, helps in tracking the volume and reasons for returns, helping better inventory management and quality control.

The source document used for recording transactions in the sales return (return inwards) day book is the credit note. *Table 2.5* shows the format of a return inwards day book or sales return journal and outlines the information to be recorded in each column.

Table 2.5

S/N	Date	Particulars	Particulars Ledger Credit note Folio number	Credit note	Amount – GH¢		
				number	Details	Net amount	
1	Date of sale	Name of customer who returned the goods	Reference number		Detailed calculations	Net amount on the invoice	
2							
3							

#### 4. Return outwards day book

The return outwards day book is also known as the purchases returns journal. It is used to record the goods which are returned to a supplier by the business.

This record is important because it ensures that the business can easily track what has been sent out, verify transactions, and maintain accurate financial records. It also helps in reconciling accounts and provides audit path for future reference.

The source document used for recording transactions in the purchase return (return outwards) day book is the debit note. *Table 2.6* shows the format of a return outwards day book or purchases return journal and outlines the information to be recorded in each column.

Table 2.6

S/N	Date	Particulars	Ledger Folio	Debit note number	Amount – GH¢		
			rollo		Details	Net amount	
1	Date of purchase	Name of supplier to whom goods were returned	Reference number		Detailed calculations	Net amount on the invoice	
2							
3							

# **Discount**

A discount is a reduction in the selling price of goods or services offered by a seller to a buyer. It is a way to encourage purchases, reward loyalty, or clear inventory. The amount of discount will affect how you record figures in both daybook and cashbooks Discounts can be given for various reasons and can be of different types:

**A trade discount** is a reduction in the price of goods offered by a seller to a buyer, typically a retailer or distributor, as a part of business-to-business transactions. It is usually given at the time of sale and is not recorded separately in the accounting books. The trade discount is deducted directly from the invoice amount, and the buyer pays the net price.

**A cash discount** is a reduction offered to a buyer if they pay their invoice promptly, often within a specified period. The primary purpose is to encourage early payment. Unlike trade discounts, cash discounts are recorded separately in accounting records as an incentive for quick settlement of accounts receivable.

#### **Activity 2.11 Daybooks**

- 1. Your teacher will lead a discussion to introduce the different types of day book.
- 2. Study the format of each type and in your workbook record two purposes of:
  - a. Sales day book
  - b. Purchases day book

#### **Activity 2.12 Recording Transactions in Day Books**

- 1. Study the formats of the sales, return inwards, purchases and return outwards day books.
- 2. Create a template for each of the daybooks in your workbook for you to refer to.
- 3. Your teacher will arrange you in small groups of no more than five. Read through the following transactions and record each one in the relevant template on flip chart paper.
  - NaCCA Company Limited deals in general merchandise. Listed below are the transactions for the month of May, 20X1.
  - May 1: Sold goods to Joshua GH¢10,000 less 10% trade discount.
  - May 4: Purchased from Koranteng the following:
  - 150 iron rods at GH¢30 each, 100 filters at GH¢25 each, invoice subject to 15% trade discount.
  - May 6: Purchased from Anaman Ltd. 10 bottles of gin at GH¢35 each.
  - May 7: Returned 40 iron rods purchased on 4th May, to Koranteng.
  - May 9: Sold the following to Mary: 250 bags of cement at GH¢20 each, less 20% trade discount, 200 tins of targets at GH¢15 per ton.
  - May 18: Mary returned 30 bags of cement bought on the 9<sup>th</sup> of May.
  - May 20: Sold to Amoah Frempong: 80 iron rods at GH¢50 each; 110 bags of cement at GH¢16 each 250 Filters at GH¢35 each; invoice subject to 15% trade discount.
  - May 21: Amoah Frempong was allowed 25% reduction on the total invoice price for goods damaged in transit.
  - May 30: Purchased from Afia Nyamekye: 120 bags of cement at GH¢15 each, 50 gallons of oil paint at GH¢20 each, 300 metal sheets at GH¢18 each.
- 4. Share your results in a class discussion with your colleagues.

#### **General Journal**

The general journal is used to record any transaction which does not pass through a book of prime entry. This is a book in which entries are made before they are posted into the ledgers. The general journal maintains a detailed and orderly record of all financial transactions, ensuring transparency and checking. The detailed entries in the general journal make it easier to identify and correct errors before posting to the ledger.

Example of transactions which are recorded through the general journal are correction of errors and records of non-cash transactions.

The table below shows the format of a general journal.

Date	Particulars/ Details of transaction	Debit GH¢	Credit GH¢

#### **Activity 2.13 General Journal**

- 1. Arrange yourself in small groups to discuss the purpose of the general journal.
- 2. Use the information below from the books of Gyasi, a sole trader to prepare a general journal.

	GH¢
Cash in hand	150,000
Furniture and fitting	450,000
Debtors:	
Ahmed	110,000
Tuffour	95,000
Stock	125,000
Plant and machinery	380,000
Bank overdraft	60,000
Creditors:	
Dzifa	50,000
Atiah	30,000
Land and building	450,000

3. Record your answers on flip chart paper and compare your responses with another group. Discuss any discrepancies between your two results and seek clarification from your teacher as needed.

#### **CASH BOOK**

#### **Cash Book**

A cash book is used to record details of cash, bank and discount transactions. It is used to record all cash receipts and payments, including bank deposits and withdrawals. It serves as a primary record for cash transactions and helps in maintaining accurate cash flow management. The cash book is typically used by businesses to track their cash position and ensure proper accounting of all cash-related activities.

The source documents for the recording of transactions in the cash book are receipts, pay-in slips, cheques, etc.

The four types of cash books are:

- 1. Single column
- 2. Double column
- 3. Three or triple column
- 4. Petty cash book

Transactions that are entered on both sides of the cashbook, in the cash and bank column, are known as **contra entries**. Essentially this is where two entries offset each other – a contra entry does not affect a business's financial position.

# Single Column Cash Book

A single column cash book has only one amount column on each of the debit and credit sides. It is either a cash column only or a bank column only. All receipts are entered on the debit side and all payments are entered on the credit side. It functions as both a journal and a ledger, providing a clear record of cash inflows and outflows within a specific period.

This format is typically used by small businesses or for simple cash transactions where only cash receipts and payments are involved, without the need for multiple columns for different types of transactions.

#### Format of a single column cash book

Debit Date	Details	Ledger Folio	Amount GH¢	Credit Date	Details	Ledger Folio	Amount GH¢

# **Double Column Cash Book**

The double-column cash book (also known as a two-column cash book) has two columns on both the debit and the credit sides. One to record cash transactions and the other to record bank transactions, allowing for tracking of both cash and bank balances. This format helps in maintaining accurate and organised financial records, facilitating easier understanding and financial analysis.

#### Format of a double column cash book

Debit Date	Details	Ledger Folio	Cash GH¢	Bank GH¢	Credit Date	Details	Ledger Folio	Cash GH¢	Bank GH¢

#### **Activity 2.14 Cash Book**

- 1. Work in pairs and, use the internet or a business dictionary to research the meaning of a cashbook in the context of business accounting.
- 2. In your workbooks, write down the different types of cashbooks.
- 3. Explain the uses of each type of cashbook and the source documents for recording information.
- 4. Create a template for a single and double column cash book that you can refer back to.

#### **Activity 2.15 Cash Books - Recording Transactions**

- 1. Your teacher will arrange you in small groups to analyse financial transactions and record these either in single or double column cash books.
- 2. Use the templates you have recorded for each type of cash book to record your answers.

#### **Note**

Your teacher may assign you one or both of the following examples.

Example 1

Mama Lucy started a business with GH¢50,000 cash on January 2, 20X3.

The following transactions took place during the month of January.

	GH¢
Jan 3. Paid rent by cash	2,000
Jan 5. Made cash purchases of	20,000
Jan 6. Sold goods for cash	25,000
Jan 8. Obtained a cash loan from Abena Manu	40,000
Jan 9. Paid transport expenses by cash	1,000
Jan 10. Bought a motor vehicle on credit from Nimako Motors	150,000
Jan 12. Paid motor expenses by cash	3,000

Jan 12. Made cash sales	33,000
Jan 20. Cash purchase	25,000
Jan 22. Paid electricity bill by cash	1,000
Jan 23. Paid wages and salaries by cash	2,500
Jan 24. Took cash for personal use	1,500
Jan 25. Cash sales made	15,000

Prepare a **single column** cash book for Mama Lucy.

#### Example 2

SUMASUM Ltd. Recorded the following transactions that took place in May 20X5

May 1: Started business with cash GH¢13,000.

- 2: Andy lent GH¢5,000 to FRANSMART Ltd. paid by cheque
- 5: Deposited GH¢5,000 cash into the bank
- 6: Paid rent by cash GH\$1,000
- 8: Cash sales GH\$1,900
- 9: Paid Paul GH\$1,000 by cheque
- 10: Cash purchases of GH¢1,500
- 14: Cash sales to Amponsah, GH¢1,950 paid into the bank account
- 16: Cash sales paid directly into the bank GH\$1,350
- 18: Paid Bentil GH¢2,500 by cheque
- 20: Paid wages GH\$\psi\_3,600\$ by cheque
- 22: Paid Andy (loan) GH¢5,000 by cheque
- 24: Cash sales GH¢1,000
- 25: Paid motor expenses with cash GH\$1,200
- 27: Purchased goods from Gyimah GH\$\psi\_3,000
- 29: Paid advertising by cash GH\$1,600
- 30: Paid Gyimah his amount due with cash
- 31: Withdrew cash of GH¢500 from the bank for business use

Prepare a **double column** cash book for SUMSASUM Ltd.

3. Record your cash book entries on flip chart paper and present your answers to the class for discussion and feedback.

# **CASH BOOK**

# **Triple/Three Column Cash Book**

A triple/three-column cash book is one in which there are three columns on both the debit and credit side. The first column is used to record cash

transactions, the second column is used to record transactions through the bank and the third column is used to record discounts received and allowed.

This format allows for a broad and organised recording of cash transactions, assisting easier tracking of cash inflows and outflows, as well as discounts.

The triple column cash book is particularly useful for businesses that frequently deal with discounts and need detailed cash transaction records for accurate financial analysis.

#### **Discount Received**

Discounts received are a reduction on the original price of a product or service, usually given by a supplier. For example, if you buy something worth Gh¢100 and get a 10% discount, you only pay Gh¢90 that is Gh¢100 - Gh¢10 (10% \* 100 = 10).

#### **Discount Allowed**

Discount allowed are when the supplier of goods or a service grants a payment discount to a customer. This is a reduction in the amount a customer has to pay. For example, if you sell goods worth Gh¢1,200 to a customer and grants a 5% discount, the customer only pays Gh¢1,140 thus Gh¢1,200 - Gh¢60 (5% \* 1,200 = 60)

#### Format of a triple column cashbook

Debit Credit											
Date	Details	Ledger Folio	Cash GH¢	Bank GH¢	Discount allowed GH¢	Date	Details	Ledger Folio	Cash GH¢	Bank GH¢	Discount received GH¢

# **Activity 2.16 Triple/Three Column Cash Book**

- 1. In small groups, list the column headings of a three-column cash book.
- 2. Explain the differences between a two-column cashbook and a three-column cash book.
- 3. Describe what is recorded in each of the columns.

  You can use the table below to record your answers in your workbook.

s/n	Column heading	Description
A	Date	This column records the date on which the transaction takes place. It helps in keeping track of when each transaction occurred, providing a sequential order to the entries.
В		
С		
D		
Е		
F		

#### **Activity 2.17 Recording Transactions**

Working in your groups create a template for a three-column cashbook. You may want to copy this in to your workbook so that you can refer back to it later.

1. Using the template, you have created, prepare a **three-column** cash book for the month of June, 20X4.

On June 1, KAAKYIRE started with the following balances:

Cash: GH¢5,000 Bank: GH¢10,000

During June, the following transactions occur:

June 3: Sold goods for GH\$2,000, for which you receive GH\$1,000 in cash

and the rest by bank transfer.

June 5: Paid GH¢500 by cheque to a supplier.

June 10: Received GH¢200 cash discount for early payment to a creditor.

June 12: Paid rent of GH\$\psi\$1,000 in cash.

June 15: A customer pays you GH\$\psi\_3,000 by bank transfer and you allow discount of GH\$\psi\_50.

June 20: Withdrew GH\$\psi\_2,000 from the bank for office use.

June 25: Paid salaries of GH\$\psi\$1,500 in cash.

June 30: Received GH¢500 cash from a customer, allowing a discount of GH¢20.

2. Present your work on flip chart paper to the whole class for discussion.

# **Petty Cash Book**

A petty cashbook is a small ledger used to record minor expenses like postage, stationery and refreshments. The person who manages the petty cashbook and handles these small expenses is known as the petty cashier.

At the start of a period, a fixed amount of money is given to the petty cashier to cover petty expenses. This fixed amount is called an imprest or cash float. The petty cashier uses this money to pay for small expenses of the business. All expenditures are recorded in the petty cashbook to keep track of where the money is going. At the end of a period, the petty cashier is given back the money spent on these petty expenses.

The fund always maintains the same fixed amount, ensuring control and easy tracking of petty expenses. This is known as the imprest system.

The individual expenses in the petty cash column are posted to the correct accounts in the general ledger to complete the double entry.

#### Example format of a petty cashbook

Receipt	Date	Details	Folio	Total	Postage	Stationery	Traveling	Cleaning	Ledger

# **Advantages of the Petty Cash Book**

- 1. Efficiency: it simplifies the management of small financial transactions, allowing businesses to quickly pay for minor expenses without needing difficult processes or approvals.
- 2. Accountability: helps maintain transparency and accountability by requiring the petty cashier to keep detailed records of all expenditures.
- 3. Budget Control: assists organisations in monitoring their spending on minor expenses, ensuring they stay within budget and identify any unusual expenditures.

# **Disadvantages of the Petty Cash Book**

- 1. Time consuming: it can be time consuming to maintain as the expenses are often small and repetitive.
- 2. Sufficiency of funds: there is a risk that the cash float is not sufficient to cover the expenses in a given period.
- 3. Risk of theft or loss: these expenses are administered in cash so there is an increased risk of theft or loss.

# **Activity 2.18 Petty cash book**

- 1. In pairs, identify the uses of the petty cashbook.
- 2. Discuss the imprest, or float, system and record its purpose in your workbooks.
- 3. Create a template for a petty cash book in your workbook that you can refer to later on.

# **Activity 2.19 Recording Transactions**

Arrange yourself in small groups to study the following scenario:

Akosua Dokua Enterprise operates a petty cash system with a float of GH¢2,000. Reimbursement is made at the end of every fortnight (i.e. 15<sup>th</sup> and at the end of each month). The transactions below took place in the month of November, 20X3.

20X3		
November 1	Petty cashier was given her first imprest.	
		GH¢
November 2	Postage	150
November 3	Wages	100
November 5	Cleaning	200
November 5	Stationery	100
November 7	Postage	150
November 8	Electricity	100
November 10	Postage	200
November 12	Cleaning	100
November 13	Postage	150
November 14	Paid for wages	300
November 16	Electricity	100
November 18	Cleaning	50
November 20	Stationery	100
November 20	Postage	100
November 21	Wages	250
November 24	Wages	100
November 25	Cleaning	100
November 26	Stationery	200
November 27	Electricity	100
November 27	Stationery	150
November 30	Cleaning	50

1. Record each of these transactions in the format of a petty cash book on flip chart paper.

2. Share your answer with another group for feedback.

# THE TRIAL BALANCE

A trial balance is a financial statement showing the closing balances of all accounts in the general ledger of a business at a point in time.

The trial balance has got two columns; a debit column and a credit column. The debit column shows all the debit balances, and the credit shows all credit balances in the different ledger accounts. The total of the two columns should be equal so the total of the debit column should be the same as the total of the credit column.

The trial balance helps to check that all the money recorded in the company's accounts is balanced. This means that the total amount of money recorded as debits (what the company owns or spends) should equal the total amount of money recorded as credits (what the company owes or earns).

# **Format of a Trial Balance**

NAME OF THE BUSINESS

TRIAL BALANCE AS AT 31st DECEMBER, 20X1

DETAILS	DR GH¢	CR GH¢
Capital		XXX
Purchases	XXX	
Sales		XXX
Rent & Rates	XXX	
General Expenses	XXX	
Drawings	XXX	
Receivables	XXX	
Payables		XXX
Motor Vehicle	XXX	
Furniture & Fittings	XXX	
Allowance for receivable		XXX
Bank	XXX	
Cash	XXX	
Stationery	XXX	

Discount Allowed	XXX	
Discount Received		XXX
Total	XXX	XXX

#### Uses of the trial balance

- 1. It tests the correctness of all entries made in the books of accounts.
- 2. It provides a summary of all the balances in the ledgers.
- 3. It ensures that the double entry principle has been correctly applied
- 4. It serves as a starting point for creating other important financial documents like income statements and balance sheets.

#### **Activity 2.20 Trial Balance**

- 1. Write the meaning of a trial balance on a sticky pad.
- 2. Exchange your response with a colleague.
- 3. Discuss the uses of trial balance with the colleague you exchanged your responses with.

#### **Activity 2.21 Preparing a Trial Balance**

Your teacher will arrange you in small groups of no more than five to prepare a trial balance based on given sets of financial data.

In your groups, work through one of the examples below to prepare a trial balance for the end of each accounting period.

Record your answers on flip chart paper. Be prepared to share your answers with another group or the wider class for discussion and feedback.

#### Example 1

Kofi started a business on 1st March, 20X5, with a capital of GH¢120,000. During March, the following transactions took place:

<u>G</u> H¢
18,000
<u>1,500</u>
<u>45,000</u>
<u>28,000</u>

16th: Cash sales	<u>55,000</u>
20th: Sold goods on credit	32,000
22nd: Paid for transportation by cash	2,500
26th: Paid supplier by cash	30,000
29 <sup>th</sup> : Paid electricity bill by cash 1,800  31st: Paid salaries by cash	8,000

#### Example 2

MFS Consult Limited started business with GH¢50 cash and GH¢150 in the bank account on May 1, 2022. During the month of May 2022, the following transactions were carried out:

- May 2: Rented a store and paid rent for a year of GH¢60 with a cheque.
- May 3: Bought goods for resale with cash of GH\$40, and a cheque GH\$60.
- May 4: Cash sales GH¢80.

Bought goods of GH¢300 on credit from Materiality Concept.

- May 6: Sold goods and received a cheque of GH¢250.
- May 8: Sold goods of GH¢80 to Duality on credit.
- May 15: Cash sales of GH¢190.

Paid Materiality Concept less a cash discount of 4% with cash (50%) and cheque (50%).

- May 17: Purchased goods of GH¢150 from Prudence on credit.
- May 20: Purchased furniture and fittings with a cheque GH¢50
- May 22: Sold goods of GH\$\psi\$100 to Going Concern on credit.
- May 25: Paid general expenses of GH¢20 with cash
- May 26: Duality and Going concern settled their account with cash less 5% cash discount.

Paid Prudence with cash less 4% cash discount.

May 27: Periodicity Concept took cash of GH¢10 and a cheque of GH¢15 for his personal use.

May 31: Paid all cash into bank except a balance of GH\$43.

# **EXTENDED READING**

- Boadi, R. O. (2021). Essentials of Accounting. Tema: National Publishing. (Read pages 20-35)
- Ofori, D., & Boateng, R. (2019). *Introduction to Accounting Systems*. Takoradi, Ghana: Silver Line Publishing. (Read pages 92-130)
- Owusu-Ansah, K. (2020). Financial Accounting for Beginners. Cape Coast: University Press. (Read pages 15-30)
- Quartey, S. K. (2020). *Accounting Techniques: A Practical Approach*. Cape Coast, Ghana: Wisdom Press. (Read pages 70-105)

# **REVIEW QUESTIONS 2**

- 1. Discuss the role of assets, liability and capital in the accounting equation.
- **2.** Evaluate the importance of the accounting equation.
  - a. Analyse the effect of business transactions on capital, assets and liabilities.
  - b. Give three examples of types of transaction and describe the effects they have on capital, assets and liabilities.
- **3.** Describe how a cashbook differs from the general ledger.
- **4.** You are managing your own business and on a particular day, you perform two financial activities:
  - You withdraw cash from the bank to use in the business for everyday expenses.
  - You deposit cash from the business into the bank.

Explain how these activities are recorded in your accounting books and why they are considered "Contra Entries."

- **5.** Your cousin provided you with the following transactions from her business operations.
  - Jan 1: Started business by depositing GH¢5,000 at the bank.
  - Jan 3: Purchased goods with cheque for GH¢2,000.
  - Jan 5: Sold goods for cash GH\$43,000.
  - Jan 7: Paid rent with cheque for GH¢500.
  - Jan 10: Received GH¢1,200 cash from debtor.

Prepare a simple two-column cashbook for your cousin using the information they have provided.

- 6. Imagine you are running a small retail business and use a three-column cashbook to track your daily transactions. One of the columns is labelled "discount." Explain why you use this discount column and how it helps you manage your business finances.
- 7. You are running a small business, and you give one of your employees Gh¢200 at the start of each month to handle minor expenses like buying office supplies or paying for small repairs. At the end of the month, they provide receipts showing they spent Gh¢150, so you give them another Gh¢150 to bring the total back to Gh¢200 for the next month. What is this system called and why is it an effective way to manage small expenses?
- 8. Aunty Esi has given you the following information
  - April 1: Cash purchases GH\$\psi\_2,000
    - 5: Cash sales GH¢1,900
    - " 9: Paid rent GH\$\psi\$1,000 by cash
    - " 14: Credit purchases from K K Fosu GH¢2,500

- " 21: Credit sales to Yaw GH¢1,950
- " 28: Paid electricity Gh¢1,500 by cheque
- " 30: Bought furniture Gh¢3,500 paying by cheque

Prepare a general journal using the information she has provided you.

**9.** You are managing a small business, and you use two different types of daybooks to keep track of your daily transactions. One daybook records sale and the other records purchases.

Explain how each of these daybooks is used and why they are important for managing your business finances.

SECTION

3

# FINAL ACCOUNTS OF A SOLE PROPRIETORSHIP: CONCEPTS, ADJUSTMENTS AND FINANCIAL STATEMENTS



# FINANCIAL ACCOUNTING

# **Financial Reporting**

# INTRODUCTION

This section focuses on how financial statements are prepared for a sole proprietorship within the broader scope of financial accounting. Emphasis is placed on the practical application of financial reporting principles, especially in handling key adjustments such as accruals, prepayments, depreciation and provision for doubtful debts. Through this, you will develop the skills required to present a clear picture of the financial position of a business as well as enable you to grasp and master the essential skills of financial reporting.

#### **KEY IDEAS**

- Adjustments are accounting entries made at the end of an accounting period to allocate income and expenses to the appropriate period, ensuring that financial statements reflect the true financial position.
- Final accounts refer to the set of financial statements prepared at the end of an accounting period to summarise the financial performance and position of a business.
- Profit and Loss Account is a financial statement that shows a company's revenues and expenses over a specific period, resulting in the net profit or loss for that period.
- Statement of Financial Position, which is also known as the balance sheet, presents the financial position of a company at a specific point in time, detailing assets, liabilities, and shareholders' equity.
- Trading Account is a part of the income statement that shows the results of buying and selling goods and services. It calculates the gross profit by comparing net sales with the cost of goods sold.

# FINANCIAL STATEMENT OF A SOLE PROPRIETOR

# **Sole Proprietorship**

A sole proprietorship is a type of business that is owned and run by one person. This person is in charge of everything in the business — they make decisions, invest money and handle day-to-day activities.

One important thing to note is that the sole proprietor (or owner) has unlimited liability. This means that if the business loses money or cannot pay its debts, the owner is personally responsible. They may have to use their own money or sell personal belongings (like a car or house) to pay what the business owes. However, if the business makes a profit, the owner gets to keep all of it. The owner does not share the profit with anyone else.

In order for the owner of a sole proprietorship business to know whether profit or loss has been made, as well as to assess the assets and liabilities of the business, final accounts must be prepared.

# **Final Accounts**

Final accounts are the financial statements that a business prepares at the end of each financial year. These accounts help show whether the business made a profit or a loss, and what the business owns and owes.

These accounts are useful for many people, such as:

- 1. The owner (to know how well the business is doing),
- 2. Investors (who may want to put money into the business),
- 3. Lenders (like banks, to decide if they can give loans),
- 4. Government (to check if the business is paying the right amount of tax).

The final accounts of a sole proprietorship usually include two main parts:

- 1. Income Statement (also called the Trading, Profit and Loss Account),
- 2. Statement of Financial Position (also called the Balance Sheet).

To prepare the final accounts, the business first creates a trial balance, which lists all the account balances from the ledger.

# **Trading Account**

The Trading Account is the first part of the income statement. It helps the business to find out if it made a gross profit or a gross loss from its trading activities.

Here is how it works:

#### On the Debit Side (left side), the business records

- 1. Opening Inventory (goods available at the start of the year),
- 2. Purchases (goods bought for resale),
- 3. Carriage Inwards (transport cost of bringing goods into the business),
- 4. Returns Outwards (goods returned to suppliers),
- 5. Wages (if directly related to producing or selling goods),
- 6. Any other direct costs.

#### On the Credit Side (right side), the business records

Net Sales – This is the total sales minus any returns from customers (returns inwards).

The difference between the credit side and debit side is the **gross profit** (if sales are higher than costs) or **gross loss** (if costs are higher than sales).

**Gross Profit** = Net Sales - Cost of Sales

# **Profit and Loss Account**

The **Profit and Loss Account** is the second part of the income statement. It starts with the **gross profit** from the trading account. The aim is to find out the **net profit** (real profit after all other income and expenses).

Here is how it works:

# On the Credit Side (right side), the business records

- 1. Gross Profit
- 2. Other incomes, such as:
  - a. Commission received,
  - b. Rent receivable,
  - c. Discount received,
  - d. Profit from sale of assets, etc.

# On the Debit Side (left side), the business records

Operating and administrative expenses, such as:

- 1. Salaries and wages,
- 2. Maintenance and repairs,
- 3. Depreciation (reduction in value of fixed assets over time),
- 4. Sales tax.
- 5. Selling and distribution expenses (e.g., advertising),
- 6. Freight and carriage on sales,
- 7. Provisions (e.g., money set aside for doubtful debts).

After subtracting all these expenses from the gross profit and adding any other income, the business calculates the **net profit** (if income is more than expenses) or **net loss** (if expenses are more than income).

An income statement format is shown below:

#### Example of profit or loss account for the year ended 31ST December, 20X1

	GH¢	GH¢	GH¢
Sales			XXX
Less: Sales returns			XXX
Net sales			XXX
Less: Cost of Sales			
Opening inventory		XXX	
Add: Purchases	XXX		
Add: Carriage inwards	XXX		
Less: Return outwards	XXX		
Net purchase		XXX	
COGAS		XXX	
Less: Closing inventory		XXX	
Cost of goods sold		XXX	
Add: wages		XXX	
Cost of sales			XXX

Gross profit c/d		XXX
Add: other incomes		
Commission received	XXX	
Discount received	XXX	
Rent received	XXX	
Decrease in provision for bad debts	xxx	
Interest received	XXX	XXX
		XXX
Less: Operating expenses		
Wages and salaries	XXX	
Insurance	XXX	
Bad debts	XXX	
Electricity	XXX	
Advertisement	XXX	
Increase in provision for bad debts	XXX	
Depreciation	XXX	XXX
Net profit/loss		XXX

#### **Statement of Financial Position (also called the Balance Sheet)**

The Statement of Financial Position, also known as the Balance Sheet, is a financial report that shows what a business owns, what it owes, and how much money the owner has invested in the business. It gives a picture of the business's financial condition at a specific point in time — usually at the end of the year. The statement includes three main parts which you will already be familiar with:

- 1. **Assets** These are the things the business **owns** or controls that have value. Examples: Cash, inventory (goods for sale), buildings, equipment, money owed by customers (debtors), etc.
- 2. **Liabilities** These are the amounts the business **owes to others**. Examples: Loans, unpaid bills, money owed to suppliers (creditors), salaries yet to be paid, etc.
- 3. Capital (or Equity) This is the money the owner has put into the business, plus any profits that have been kept in the business. Capital can also be called the net worth of the business what is left after all debts have been paid.

The Balance Sheet is always based on the accounting equation which is **Assets** = **Liabilities** + **Capital** (**Equity**).

This means everything the business owns (assets) has been financed either by:

- 1. Borrowing from others (liabilities), and/or
- 2. **The owner's own money** (capital/equity).

For example, if a business has GH¢10,000 in assets, and owes GH¢3,000 (liabilities), then the owner's capital is GH¢7,000.

Refer to Section 2 if you need to revise the accounting equation.

#### **Purpose of the Statement of Financial Position**

- 1. It helps the owner, banks, investors, and others understand the strength of the business.
- 2. It shows if the business has enough assets to pay its debts.
- 3. It shows how much the owner would have left if the business sold everything and paid off all debts.
- 4. It helps in making important business decisions like taking loans, investing, or expanding.

The statement is prepared by taking the **closing balances** of various ledger accounts (after all transactions have been recorded) and organising them into:

- a. **Assets** (fixed and current),
- b. Liabilities (long-term and short-term),
- c. Capital (including net profit or loss and adjustment of drawings).

The result gives a clear and complete snapshot of the business's finances on a specific date, as at a specific date

Fixed Assets	Cost	Acc. Dep.	NBV
Motor Van	xxx	XXX	xxx
Building	XXX	XXX	XXX
Fixtures & Fittings	XXX	XXX	XXX
Premises	XXX	XXX	XXX
Land	XXX	XXX	XXX
Goodwill	XXX	XXX	XXX
Current Assets			
Stock		XXX	
Receivable	XXX		
Less prov. for doubtful debts	XXX	XXX	
Bank		XXX	
Cash		XXX	
Expense prepaid		XXX	
		XXX	
<b>Less Current Liabilities</b>			
Payables	XXX		
Expenses owing	XXX		
Income prepaid	XXX	XXX	
Working capital			XXX
Net Assets			XXX
Financed by			
Capital			XXX
Add Net profit			XXX
			XXX
Less Drawings			(xxx)

		XXX
Long-term liabilities		
5% Debentures		XXX
Capital employed		XXX

#### **Activity 3.1 Characteristics of Sole Proprietorships**

- 1. Identify sole proprietorship businesses in your community.
- 2. Summarise the advantages of sole proprietorship for these businesses.
- 3. Summarise the disadvantages that these businesses face as sole proprietors.
- 4. Make a poster presentation of your answers and display it in your classroom

#### Activity 3.2 Purpose of Trading and Profit & Loss account

Describe the purpose of a trading account and a profit and loss account.

You can use the table such as the one below to support your response. Record your answers in your workbook.

Type of account	Purpose
Trading account	
Profit and loss account	
Balance sheet	

# **Activity 3.3 Preparation of Income Statement**

- 1. Your teacher will arrange you in small groups to create a template for the income statement of a sole proprietor.
- 2. In your groups, discuss the categories of items that need to be included in an income statement.
- 3. Analyse the following information and use it to prepare an income statement of a sole proprietor using the template you created in part 1.

Trial balance as of 30th June, 20X4.

	Dr - GH¢	Cr - GH¢
Return inwards	2,000	
Sales		90,000
Discount allowed	7,000	
Discount received		1,500

Inventory (31st May, 20X3)	20,000	
Purchases	50,000	
Carriage inwards	1,000	
Return outwards		12,000
Insurance	4,800	
Rates	2,000	
Electricity	4,500	
Bad debt	2,200	
Rent	12,000	
Total	103,500	103,500

#### **Note**

Closing inventory on 30th June, 20X4, Gh¢30,000

4. Present your responses on a flip chart and compare with another group for feedback and discussion.

#### **Activity 3.4 Preparation of Statement of Financial Position**

- 1. In your groups, discuss the purpose of statement of financial position.
- 2. Create a template for a statement of financial position.
- 3. Discuss the categories of items that need to be included in the statement.
- 4. Analyse the information below which relates to GTP Enterprises as of June 30, 20X6. Using the template you have created, prepare the statement of financial position.

	GH¢
Capital	25,000
Cash	12,000
Accounts Receivable	9,000
Inventory	15,000
Office Furniture	7,000
Net profit	10,000
Accounts Payable	5,000
Bank	5,000
Creditors	8,000

5. Compare your responses with another group for feedback and discussion

#### **Extension Task 1**

What does your answer to Activity 3.4 tell you about the financial position of GTP Enterprises at this point in time?

#### **Extension Task 2**

Answer the following question to support the review of your learning.

The following trial balance was extracted from the books of Greatness Enterprise for the year ended 30th September, 20X2.

Trial balance as of 30th September, 20X2.

	Dr - GH¢	Cr - GH¢
Salaries	1,000	
Receivables and Payables	20,000	16,500
Return inwards	3,000	
Sales		91,000
Discount allowed	7,000	
Discount received		3,000
Inventory (31st August, 20X1)	20,000	
Purchases	52,500	
Carriage inwards	2,000	
Return outwards		14,000
Bad debt	2,200	
Cash in hand	30,000	
Drawings	40,000	
Bank overdraft		25,000
Insurance	6,300	
Rates	1,000	
Electricity	4,500	
Capital		153,500
Land and building	43,000	
Furniture and fitting	37,000	
Equipment	33,500	
Total	303,000	303,000

#### **Note**

Closing inventory on 30th September, 20X2, Gh¢30,000

Use the information provided in the trial balance to prepare the:

- 1. Income statement for the year ended 30th September, 20X2
- 2. Statement of financial position as of 30th September, 20X2.

# **ADJUSTMENTS IN FINAL ACCOUNTS**

In the last lesson, you learned how to prepare the final accounts (Income Statement and Statement of Financial Position) for a sole proprietor using a trial balance without any adjustments. In this lesson, we will learn about the adjustments that need to be made at the end of the accounting period to show the true profit or loss and the real financial position of the business.

# **Adjustments**

Adjustments are the changes we make to the accounts of a business at the end of the year to ensure that the financial report follow accounting rules. These changes help to:

- Record all incomes and expenses in the correct year.
- Show the correct profit or loss.
- Show the correct value of assets and liabilities.

# Types of adjustment in a final account include

- 1. Closing inventory
- 2. Outstanding or accrued expenses
- 3. Outstanding or accrued income
- 4. Prepaid expenses
- 5. Prepaid income
- 6. Bad debts
- 7. Allowance for receivable (Provision for doubtful debt)
- 8. Depreciation

# **Closing inventory**

This is the value of goods that are still left in the shop or warehouse and have not been sold by the end of the accounting period. Closing inventory includes raw materials, finished goods, work in progress and so on.

#### Example

You have goods worth GH¢12,000. You sell GH¢9,500 worth of goods before the year ends. This means GH¢2,500 worth of goods remain. That is your closing inventory.

#### **Treatment**

- 1. In the Income Statement: Subtract it from the "cost of goods available for sale"
- 2. In the Statement of Financial Position: Show it under Current Assets.

# **Outstanding or accrued expenses**

Accrued expenses are the costs of goods or services that a business has used or consumed in its operations during an accounting period, but for which payment has not yet been made.

#### **Example**

If you used water worth GH¢140 but have not paid it yet, it is an outstanding expense.

#### **Treatment**

- 1. In the Income Statement: Add it to the related expense.
- 2. In the Statement of Financial Position: Show it as a Current Liability.

# **Outstanding or accrued income**

This is money the business has earned but has not yet been received.

#### **Example**

Let us say a business invests GH¢10,000 in treasury bills at an interest rate of 15% p.a. and earns GH¢1,500 interest at the end of the year but the interest earned has not yet been received by the business.

#### **Treatment**

- 1. In the Income Statement: Add it to other incomes.
- 2. In the Statement of Financial Position: Show it as a current asset.

#### **Prepaid expenses**

This is when the business pays for an expense **in advance**, more than what is needed for the current year.

#### **Example**

Assume you paid GH¢3,000 as rent within an accounting period, but the total amount that you were supposed to pay for the period was GH¢ 1,800. This means that the extra GH¢1,200 is a prepaid expense.

#### **Treatment**

- 1. In the **Income Statement**: Subtract it from the total expense paid
- 2. In the **Statement of Financial Position**: Show it under current assets.

# **Prepaid income**

This is an amount of income that is received in excess of the amount that was earned in that accounting period.

# **Example**

Assume you receive a rent payment of GH\$(800,000 from a tenant for a period of five years. However, the rent you charge the tenant is <math>GH\$(160,000 a year. Therefore, the prepaid income is <math>GH\$(640,000 over the next 4 years.)

#### **Treatment**

- 1. In the Income Statement: Subtract it from the "amount received".
- 2. In the Statement of Financial Position: Show it as a current liability.

#### **Bad debt**

Bad debt is an amount money that the sole proprietorship cannot collect from its customers,

after all reasonable attempts of recovery have been made. Bad debt usually occurs when the debtor goes into bankruptcy, becomes untraceable, through death, or when the additional cost of pursuing the debt is more than the amount the creditor could collect. This debt, once considered to be bad, will be written off by the company as an expense.

#### **Example**

A buyer, who is supposed to pay GH\$1,000 to the sole proprietorship, was declared bankrupt and the amount was later written off as bad debt.

From the sole proprietor's perspective, the debt of GH¢1,000 should be treated as bad debt (expense) in the income statement and deducted from the total receivables figure.

#### **Treatment**

In the Income Statement: Record it as an expense.

In the Statement of Financial Position: Deducted it from the "total receivables".

#### Note

If the bad debt figure is in the trial balance, do not deduct it from the receivables. However, if there is additional bad debt in the footnote, the bad debt figure in the footnote must be added to the bad debt figure in the trial balance and treated as an expense and then deduct only the bad debt in the footnote from the receivables (debtors) before calculating provision for bad debts if there is any

#### Allowance for receivables or provision for doubtful debt

Provisions are amounts set aside out of profit and other surpluses to provide for depreciation, renewal, uncollectible debts, etc. This is an estimate of how much of the debts may not be collected in the future. It is like saying: "Out of all the money customers owe, some may not pay. So, let us prepare for it." The reasons for potential non-payment include disputes over quantity supplied, delivery, the conditions of the item, or the financial stress of a customer's operations.

#### Treatment for allowance for receivables (provision for doubtful debt)

- 1. If the provision (estimate) increases from last year:
  - a. In the Income Statement: treat the increase as an expense.
  - b. In the statement of financial position: subtract the end of year provision figure from the receivables (debtors) under current assets.
- 2. If the provision (estimate) decreases:
  - a. In the Income Statement: treat the decrease as an income.
  - b. In the statement of financial position: Subtract the end of year provision figure from the receivables (debtors) under current assets.
- 3. If there is no provision (estimate) in the trial balance but only in the footnotes:
  - a. In the Income Statement: treat the entire provision as an expense.
  - b. In the statement of financial position: subtract the same provision figure from the receivables (debtors) under current assets.

# **Activity 3.5 Meaning, Types and Purpose of Adjustment**

- 1. Find a partner to work with and discuss the meaning of "adjustments" in the context of final accounts.
- 2. Identify the purpose of adjustments.
- 3. Describe seven (7) types of adjustments.
- 4. Record your answers in your workbook and share with another pair for feedback. If you are unsure, seek clarification from your teacher.

#### **Activity 3.6 Identification of Adjustment**

1. Analyse the following scenario and answer the questions that follow in your workbook:

Your parents rent a shop in which they sell shoes and dresses. They pay GH¢ 2,500 per year as rent. In the year 20X3, they decided to pay GH¢4,000 to the shop owner as rent in that year.

- a. Identify the term used in accounting for the excess money paid by your parents.
- b. Describe how the excess money would be treated in your parent's books of account.
- c. If circumstances were different and your parents had paid GH¢ 1,800 to the shop owner as rent for the year 20X3, how that would be treated in their books of account?
- 2. Share your answers with a colleague for feedback

# **Activity 3.7 Treatment of Adjustment**

- 1. Your teacher will arrange you in small groups of no more than five to discuss how the following accounting adjustments would be treated in the final accounts of a sole proprietor.
  - a. Bad debt
  - b. Accrued expenses
  - c. Allowance for receivable
- 2. Make a presentation of your responses using a flip chart.

You could use a table such as the one below to present your answers:

Type of adjustment	How is the adjustment applied?
Bad debt	
Accrued expenses	
Allowance for receivable	

# MEANING, REASONS, METHODS AND CAUSES OF DEPRECIATION

# What is Depreciation?

Depreciation is the reduction in the value of a **non-current asset** (like machines, vehicles, or buildings) over time. This happens because the asset becomes old, or is affected by weather or technology.

# Why Do We Depreciate Assets?

Here are some reasons why depreciation is important:

- 1. To spread the cost over time: Instead of charging the full cost of an asset in one year, depreciation allows us to spread the cost over the number of years the asset will be used.
- 2. To know the real value of the asset: At any point, we can know how much the asset is worth now (called net book value), not just how much we bought it for.
- 3. To help with selling: If we want to sell the asset, the reduced value helps set a fair price.
- 4. To show correct profit: Depreciation is an expense. Recording it helps show the true profit of the business. Otherwise, profits may be overstated.
- 5. To calculate gain or loss on disposal: When the asset is sold, we compare its selling price with its book value to know if we made a profit or loss.
- 6. To protect business capital: Depreciation keeps part of the income from being shared as dividends. This helps the business maintain its strength.
- 7. To help with insurance claims: If the asset is damaged or destroyed, depreciation helps calculate the right amount to claim.
- 8. To plan for replacement: It helps the business decide when to buy a new asset before the old one becomes useless.

# **Causes of Depreciation**

Depreciation happens for several reasons. Some of them are as follows

- 1. Wear and tear: Using an asset regularly causes it to wear out.
- 2. Weather damage: Exposure to rain, sun, wind, etc., can cause rust, rot, or erosion.
- 3. Becoming outdated (Obsolescence): New technology may replace the old asset.

- 4. Inadequacy (Superfluity): The asset may no longer be enough for the growing needs of the business.
- 5. Passage of time (Effluxion of time): Some assets like patents, leases, or licenses expire after a set period.
- 6. Depletion: Natural resources like oil, gold, or timber reduce as we extract them.

# **Methods of Depreciation**

There are different ways to calculate depreciation. Here are four common methods:

# **Straight-Line Method (Fixed Amount Every Year)**

In this method, the **same amount** of depreciation is charged every year. We calculate this by subtracting the **residual value** (what the asset will be worth at the end) from the **cost** and dividing it by the number of years.

Formula: (Cost – Residual Value) ÷ Useful Life = Depreciation per year

**Example**: Ama bought office furniture for **GH¢5,000**. She expects to use it for **5 years** and then sell it for **GH¢500**.

```
(5,000-500) \div 5 = 900
```

So, depreciation is GH¢900 every year.

#### Reducing Balance Method (Declining Value Each Year)

Here, we calculate depreciation by applying a fixed percentage on the **book value** (remaining value) each year. The amount decreases every year.

**Example**: Kojo bought a laptop for **GH¢10,000** and the rate of depreciation is **25**% per year.

#### Year 1:

 $25\% \text{ of } 10,000 = \mathbf{GH} + \mathbf{2,500}$ 

Book value now = 10,000 - 2,500 = GH\$(7,500)

#### Year 2:

 $25\% \text{ of } 7,500 = \mathbf{GH} + \mathbf{1,875}$ 

Book value now = 7,500 - 1,875 = GH\$c\$5,625

So, the depreciation keeps getting smaller.

#### **Revaluation Method**

This method is used when we don't know the asset's original cost. The asset is simply revalued at the beginning and end of the year. The difference is treated as depreciation.

**Example**: A printer was worth GH¢1,200 on 1st January. At the end of the year (31st December), its value dropped to GH¢950.

1,200 - 950 = GH¢250 depreciation

#### **Sum of the Years' Digits Method (More in Early Years)**

This method gives more depreciation in the early years and less in the later years.

We add the digits of the asset's useful life and then divide each year's digit (starting from the highest) by the total.

**Example**: A delivery truck costs **GH¢150,000** and will be used for **5 years**.

**Step 1: Add the digits** -1 + 2 + 3 + 4 + 5 = 15

# Step 2: Calculate each year's depreciation

1. Year 1:  $5/15 \times 150,000 = GH$ ¢50,000

2. Year 2:  $4/15 \times 150,000 = GH$ ¢40,000

3. Year 3:  $3/15 \times 150,000 = GH$(30,000)$ 

#### **Summary Table of Depreciation Methods**

Method	Depreciation Pattern	Best For
Straight-Line	Same amount every year	Simple assets with equal usage each year
Reducing Balance	Declining amount each year	High-tech or fast-depreciating items
Revaluation	Based on new value each year	Assets with unknown or changing market value
Sum of Years' Digits	Higher early, lower later	Expensive assets that lose value quickly early

# **Activity 3.8 Meaning and Causes of Depreciation**

- 1. In pairs, define the meaning of depreciation.
- 2. Explain the reasons for depreciation
- 3. Discuss the causes of depreciation.
- 4. Compare your responses with another pair for feedback

# **Activity 3.9 Methods of Calculating Depreciation**

- 1. Discuss the different methods of calculating depreciation with a partner.
- 2. Make a poster presentation of the key points of your discussions to share with the class. Your poster should summarise each of the methods covered in the lesson. Include examples to help show how these methods are used in practice.

#### **Activity 3.10 Calculation of Depreciation**

- 1. Arrange yourself in small groups to analyse and answer the following questions
  - a. Zebilla Ltd. purchased a delivery van on January 1, 20X4, at a cost of GH¢50,000. The estimated useful life of the van is 5 years, and its residual value at the end of its useful life is expected to be GH¢5,000.

Calculate the annual depreciation for the van using the following methods:

- i. Straight line method
- ii. Reducing balance method (using a 20% depreciation rate)
- iii. Sum of the years' digits method

For each method remember to calculate the depreciation for **each** of the five years.

Show your workings for each stage of your calculations.

b. Kumi and Sons Company owns machinery that was purchased on January 1, 20X3, for GH¢80,000. The company uses the Revaluation Method to calculate depreciation. The machinery's value was re-assessed at the end of each year, with the following revalued amounts:

Date	Value (GH¢)
January 1, 20X3	80,000
December 31, 20X3	72,000
December 31, 20X4	64,000
December 31, 20X5	56,000
December 31, 20X6	48,000

Calculate the depreciation to be charged for each year using the Revaluation Method.

2. Present your response using a flip chart and share with another group for feedback.

#### **Extension Task 1**

Using one of your worked examples from activity 3.10, explain how depreciation would be treated in the final accounts of that business.

#### **Extension Task 2**

Answer the following questions to support the review of your learning.

#### Scenario 1

Joman Manufacturing purchased a piece of equipment on January 1, 20X4, for GH¢100,000. The equipment has an estimated useful life of five years and a residual value of GH¢10.000.

At the end of each year, Joman Manufacturing reassesses the value of the equipment for the Revaluation Method as follows:

December 31, 2024: GH¢85,000

December 31, 2025: GH¢70,000

December 31, 2026: GH¢55,000

December 31, 2027: GH\$40,000

December 31, 2028: GH¢25,000

Calculate the annual depreciation for each of the five years using the following methods:

- 1. Straight Line Method
- 2. Reducing Balance Method (with a depreciation rate of 25%)
- 3. Sum of the Years' Digits Method
- 4. Revaluation Method

For each method remember to calculate the depreciation for **each** of the five years. Show your workings for each stage of your calculations.

#### Scenario 2

The cost of a motor vehicle is GH¢30,000 and the rate of depreciation is 5% per annum.

Calculate the depreciation charge for each of the first five years of the asset using the straight-line method.

An asset costs GH¢18,000 on 1st January, 20X5. As of 31st December 20X5, the value placed on the asset was GH¢15,000.

What is the depreciation charge for the year using the revaluation method?

Present your answers to your teacher for feedback.

# PREPARATION OF FINAL ACCOUNTS OF SOLE PROPRIETORSHIP

This section allows you to practice including the adjustments you have just covered in the financial statements of a sole trader.

Before completing these exercises, it will be useful to refer back to start of this section and revisit the format of a trading, profit and loss account and balance sheet.

### Activity 3.11 Preparing the final account of a sole trader

1. Your teacher will arrange you in small groups to prepare the final accounts of a sole trader. Carefully analyse the information below, paying particular attention to the adjustments and how these will need to be reflected in the business's financial statements.

Santo Enterprise is a business owned and managed by Bob Santo. The business has been operating throughout the year, and as the year ends, Bob Santo wants to prepare the financial statements to understand the financial position and performance of his business.

Below are the balances extracted from the books of Santo Enterprise as of December 31, 2016:

	GH¢
Capital	315,200
Purchases	259,800
Sales	484,700
Carriage inwards	17,410
Premises at cost	215,000
Equipment at cost	198,000
Trade debtors	76,800
Bank overdraft	63,509
Trade creditors	64,820
Cash in hand	13,400
Stock (Jan. 1, 2016)	27,680
Salaries and wages	56,700
Provision for doubtful debts	13,000
Discount allowed	11,450
Drawings	70,000
Discount received	22,800
Electricity	29,229
General expenses	37,060
Rent	43,000
9% Debentures	100,000
Return inwards	24,500
Return outwards	16,000

### Additional information:

- a. Stock in trade on December 31, 2016 was GH¢29,400;
- b. Provision for doubtful debt to remain at 8% of debtors.
- c. General expenses owing totalled GH¢12,860;
- d. Rent prepaid GH¢19,500.

Depreciation is to be provided as follows:

- a. Premises 12.5% on cost
- b. Equipment 10% on cost
- 2. Prepare the following final accounts for Santo Enterprise
  - a. Trading, Profit and Loss Account for the year ended December 31, 2016.

- b. Balance Sheet as of December 31, 2016.
- 3. Type your answer in MS Excel format and compare with other groups for feedback. Ask your teacher to clarification if needed.

### **Activity 3.12 Preparation of financial statements**

1. Study the information below.

Esi Kwansima owns a small dressmaking business. On 31st December 2004, the following balances appeared in her books:

	GH¢	GH¢
Capital, 1st January 2004		20,000
Equipment at cost	7,200	
Stock, 1st January 2004	5,800	
Purchases and sales	22,000	51,600
Returns inwards and outwards	1,000	600
Carriage inwards	300	
Carriage outwards	500	
Trade debtors	10,000	
Trade creditors		5,980
Provision for bad debts		600
Bad debts written off	380	
Wages and salaries	7,360	
Discount allowed and received	240	1,100
Advertising	1,400	
Electricity	1,000	
Rent and rates	2,320	
General expenses	440	
Cash	7,120	
Bank	14,820	
Provision for depreciation of equipment		2,000
		81,880 81,880

### Additional information:

- a. Stock on 31st December 2004 was valued at GH¢7,400.
- b. Wages owing on 31st December 2004 amounted to GH¢10,000.
- c. Provide for bad debt 5% on debtors.
- d. Provide for depreciation on equipment at 10% on cost.
- 2. Prepare the following financial statements:
  - a. Trading, Profit and Loss account for the year ended 31st December 2004

b. A Balance sheet as of that date.

Remember to include all relevant adjustments.

3. Share your answers with your colleague for feedback. Seek clarification from your teacher as needed.

### Activity 3.13 Preparing the final account of a sole trader

1. Working in small groups, examine the following trial balance that was extracted from the books of *Free SHS Trading Enterprises* on 31<sup>st</sup> December 2018.

	DEBIT	CREDIT
	GH¢	GH¢
Sales		2,400,000
Purchases	2,110,000	
Freehold Buildings at cost	250,000	
Freehold land	80,000	
Capital		571,000
Investments	50,000	
Bank overdrafts		12,500
Trade creditors		74,000
Trade Debtors	165,000	
5% Loan		100,000
Discount Allowed	2,500	
Discount Received		6,500
Provision for depreciation:		
Freehold buildings		25,000
Fixtures and fittings		128,000
Fixtures and fittings at cost	320,000	
Stock 1st Jan. 2018	210,000	
Returns outwards		40,000
Miscellaneous expenses	65,000	
Administration expenses	28,000	
Selling and distribution expenses	83,500	
Bad debts written off	2,000	
Provision for doubtful debts		9,000
	3,366,000	3,366,000

### Additional information:

a. Write off GH¢ 5,000 as bad debt.

- b. Provision for doubtful debts is to be made at 5% of trade debtors.
- c. Miscellaneous expenses prepaid at  $31^{st}$  December 2018 amounted to  $GH \not = 2,000$ .
- d. Administration expenses accrued at  $31^{st}$  December 2018 amounted to  $GH \not = 3,500$ .
- e. A years' interest on the loan is due and unpaid.
- f. Stock on  $31^{st}$  December 2018 amounted to GH¢360,000.
- g. Provide for depreciation as follows:
  - i. Freehold building 5% on cost,
  - ii. Fixtures and fittings 10% on cost.
- 2. In your groups discuss the treatment of the various adjustments that will need to be made to SHS Trading Enterprises' financial statements.
- 3. Prepare the Trading, Profit and Loss Account for the year ended 31<sup>st</sup> December 2018; and a balance Sheet as at that date for Free SHS Enterprise. Remember to include all adjustments.
- 4. Share your answers with another group for feedback and discussion. Seek clarification from your teacher as needed.

#### **Extension Task**

Answer the following question to support the review of your learning

- 1. Based on the following information, prepare final accounts for Adwumawura, a general merchant based in Akim Oda, for the year ended 31st December 20X3.
  - a. Stocks on 31st December 20X3 were valued at GH¢436,740.
  - b. Outstanding liabilities were GH $^{\,\,}$ 5,640 for wages due and GH $^{\,\,}$ 1,020 for unpaid rent.
  - c. Insurance had been prepaid by GH\$720.
  - d. You are to write off GH\$4,800 as irrecoverable debts while a provision of 5% on the remaining debtors balance is to be made for doubtful debts.
  - e. Depreciation is to be calculated at 5% and 20% per annum of Fixtures and Fittings and Motor van respectfully.

This is Adwumawura's trial balance on 31st December, 20X3.

	GH¢	GH¢
Advertising	93,900	
Bank Loan		89,280
Capital		600,000
Carriage inwards	24,180	
Carriage outwards	52,500	
Cash at bank	25,500	

Cash in hand	1,320	
Creditors		186,120
Debtors	412,800	
Discount	25,080	
Drawings	144,000	
Fixtures and Fittings	75,600	
Lighting and heating	11,220	
Motor vans	41,100	
Office salaries	30,600	
Postage and internet data	4,080	
Provision for bad debts		19,200
Purchases	1,274,280	
Purchases returns		66,600
Rates and insurance	30,120	
Rent	3,060	
Sales		2,054,100
Sales returns	99,120	
Salesmen's salaries and commission	97,080	
Stationery	7,200	
Stocks, 1st January 20X3	352,560	
Wages	210,000	•••
-	3,015,300	3,015,300

2. Share your answer with your teacher for feedback.

### **EXTENDED READING**

- Agyemang, G., & Osei, Y. (2020). Corporate Financial Reporting in Ghana. Kumasi, Ghana: Asante & Sons Publishing. (**Read pages 102-145**)
- Asiedu, N. A., & Ofori, B. (2019). Essentials of Financial Accounting. Takoradi, Ghana: Heritage Press. (**Read pages 87-130**)
- Kwesi, J. A., & Boateng, S. K. (2018). Fundamentals of Financial Accounting. Tema, Ghana: Ghanaian Academic Press. (**Read pages 150-200**)
- Mensah, P. K. (2015). Advanced Financial Accounting. Accra, Ghana: Kwadwoan Publishing. (Read pages 130-180)

# **REVIEW QUESTIONS 3**

- 1. Your brother, who is the owner of a business enterprise, is preparing his financial statements for the year ending December 31, 2016. As he reviews the accounts, he notices that not all expenses and incomes are straightforward. For example, he has prepaid rent, some general expenses that haven't been paid yet, and a provision for doubtful debts that needs to be adjusted. Your brother asks you, "Why do I need to make these adjustments before finalising my accounts? Can't I just use the figures as they are?"
  - Explain the purpose of making adjustments in the final accounts. Use examples from your brother's business to make your explanation practical and relevant to his situation.
- 2. Describe what depreciation means and highlight three key factors that cause it.
- **3.** What are three practical methods you can use to account for depreciation on your assets as a sole proprietor, and what is the ideal situation under which each method will be used?
- **4.** Suppose you purchased an asset for GH¢26,000, which is expected to last for five years with a scrap value of GH¢9,000.
  - How much would the depreciation charge be over each of the five years using the following methods?
  - a. Straight Line Method
  - b. Sum of Years' Digits Method
- 5. Joe Lapinto has given you details about a machine as of March 1, 20X2. The machine's cost is GH¢15,000, and it has an accumulated depreciation of GH¢7,000. The machine is depreciated using the reducing balance method at a rate of 10% per annum.
  - What is the depreciation expense for the year?
- **6.** How do the income statement and the statement of financial position help us to understand a company's financial health?

**SECTION** 

4

# INTRODUCTION TO COST ACCOUNTING



# COST ACCOUNTING

# **Controlling Cost to Improve Organisational Performance**

### INTRODUCTION

In this section, we will explore the essential concepts of cost accounting, which is crucial for effective management and decision-making. We will cover the purpose and basic terminologies such as direct costs, indirect costs, fixed costs and variable costs. Understanding these concepts is key to developing cost management strategies. We will also classify costs based on common characteristics to understand cost structures better and examine the composition of costs in services and operations. By the end of the section, you should understand the importance of cost management and control in enhancing organisational performance.

#### **KEY IDEAS**

- **Cost Accounting** is a branch of accounting that focuses on recording, classifying and analysing the costs associated with producing goods or providing services. Its main objective is to control and reduce costs, enhance decision-making and determine product profitability.
- **Cost Centre** is a segment or area within an organisation where costs are incurred and tracked. It may be a department, machine, a person, time or specific activity.
- **Cost Unit** is a unit of output or service to which costs can be allocated or measured. It represents the measure of quantity, such as a single product, service, or job, for which cost is calculated.
- **Unit Cost** is the total cost incurred to produce a single unit of output. It is calculated by dividing the total cost by the number of units produced.
- **Element of Cost** are the basic categories of costs that make up the total cost of production, typically classified into three elements: materials, labour and expenses.
- **Direct Costs** are made up of costs that can be directly traced to a specific product, service or cost object. These include expenses like direct materials and direct labour which are linked with the production of a particular good or service.
- **Cost Classification** is the process of grouping costs based on their nature or purpose, such as direct and indirect costs, fixed and variable costs or product and period costs, to facilitate decision-making and control.

# NATURE, SCOPE AND FUNCTIONS OF COST ACCOUNTING

# **Meaning of cost accounting**

**Cost Accounting** is a branch of accounting that focuses on recording, classifying and analysing the costs associated with producing goods or providing services. It records all incurred costs associated with the production of goods or provision of a service and enables businesses to track costs over time.

Cost accounting is a form of management accounting and is the process by which all the costs of a business activity or production are examined to support effective decision making.

### **Scope of Cost Accounting**

Cost accounting includes:

- 1. Cost classification and analysis
- 2. Cost estimation and forecasting
- 3. Cost control and reduction
- 4. Budgeting and variance analysis
- 5. Decision making and performance

Cost accounting can be applied to various industries and sectors, including manufacturing, service and construction.

### **Functions of Cost Accounting**

Cost accounting is used by businesses to:

- 1. Provide important information to management; this is done by collecting and sharing financial and business data to help them make good decisions.
- 2. Help management plan, check progress and control activities. This involves setting goals, tracking how things are going and making sure everything matches the company's plans.
- 3. Assign costs to products and services by calculating how much each product or service costs so the company can see which one is more profitable.
- 4. Collect costs by gathering all the data on expenses in an organised way for analysis.
- 5. Set budgets and standards. This involves creating financial plans and goals to guide the business.
- 6. Help them to evaluate the performance of different departments to see if they are working efficiently and effectively.

# **Activity 4.1 Nature, Scope and Functions of Cost Accounting**

- 1. In pairs or small groups, think about things you or your family buy regularly (for example, bread, soap, phone data).
  - a. Write down 3–5 of these items and their prices.
  - b. Share your list with another pair/group.
  - c. Discuss what these costs mean for you and how they might be recorded in a business.
- 2. Talk about what cost accounting means using examples from the previous activity. Use these questions to guide your discussion:
  - a. What does cost accounting involve?

- b. Why might a business need it?
- c. Explain five functions of cost accounting
- 3. Write down your explanations in your own words.
- 4. Present your explanations to other pairs/groups.
- 5. Listen to their presentations and write down any points you did not know before.

# BASIC TERMINOLOGIES USED IN COST ACCOUNTING

### **Basic Cost Accounting Terminologies**

To understand cost accounting, it is necessary to explain the terminology that is used. Some of the basic terms are explained below:

#### Cost

Cost is the measurement of expenses incurred in the production of goods or services. It is the monetary value or expense incurred to produce, acquire or maintain a product or service. It involves all the expenses involved in the process, including materials, labour and other expenses.

Understanding cost is essential for pricing, budgeting, and financial analysis within any organisation or project.

#### **Cost Centre**

Cost centres allow businesses or departments to organise their accounts based on their specific activities. Each cost is assigned to a cost centre to enable monitoring or performance and control over expenditure.

A cost centre could be

- 1. a location, e.g. a department or a sales area of the business.
- 2. a person e.g. a salesman or machine operator.
- 3. an item of equipment e.g. a delivery van or a machine.

### **Cost Unit / Cost Object**

A cost unit is defined as a product, service or time to which cost may be expressed. Cost unit refers to the product or service that a company produces for example: a tin of milk, a car, a bag of rice, etc.

#### **Unit Cost**

A unit cost refers to the cost incurred per unit of output. It is the cost price of a product. It is measured as total cost divided by the total number of units produced.

### **Cost Sheet**

A cost sheet is a detailed statement that shows all the costs involved in producing a product or providing a service. It helps businesses understand how much it costs to make something by listing all the costs involved.

### **Profit Centre**

A profit centre is a part of a business that is responsible for its own revenues and expenses. It operates somewhat independently, and its performance is measured by the profit it generates. For example, a specific store or product line within a larger company can be a profit centre.

### **Direct Cost**

Direct costs are expenses that can be directly traced to the production of a specific good or service. Examples include raw materials and wages of workers who make the product.

#### **Indirect Cost**

Indirect costs are expenses that cannot be directly linked to a specific product or service. They are shared costs, such as rent, electricity, or salaries of administrative staff, which support the overall business.

### **Prime Cost**

Prime cost is the sum of direct costs involved in production, mainly direct materials, direct labour and direct expenses. It represents the basic cost of making a product before adding indirect costs.

### **Standard Cost**

Standard cost is a predetermined or estimated cost of producing a product or providing a service, based on efficient operations. It serves as a benchmark to compare actual costs and help control expenses.

### **Budget**

A budget is a financial plan that estimates income and expenses over a specific period. It helps businesses plan their activities, control spending, and achieve financial goals.

### **Activity 4.2 Basic Terminologies used in Cost Accounting**

1. In groups complete the table below by writing the appropriate costing terminologies for the following definitions.

	Definition	Terminology
1	A predetermined or estimated cost of producing a product or providing a service, based on efficient operations. It serves as a benchmark to compare actual costs and help control expenses	
2	Expenses that cannot be directly linked to a specific product or service. They are shared costs, such as rent, electricity, or salaries of administrative staff, which support the overall business.	
3	A detailed statement that shows all the costs involved in producing a product or providing a service. It helps businesses understand how much it costs to make something by listing the costs involved.	

4	A financial plan that estimates income and expenses over a specific period. It helps businesses plan their activities, control spending, and achieve financial goals.		
5	A product, service or time to which cost may be expressed. Cost unit refers to the product or service that a company produces for example: a tin of milk, a car, a bag of rice, etc.		
6	The monetary value or expense incurred to produce, acquire, or maintain a product, service, or resource		
7	Expenses that can be directly traced to the production of a specific good or service. Examples include raw materials and wages of workers who make the product.		
8	The cost incurred per unit of output. It is the cost price of a product. It is measured as total cost divided by the total number of units produced.		
9	The sum of direct costs involved in production, mainly direct materials, direct labour and direct expenses. It represents the basic cost of making a product before adding indirect costs.		
10	Part of a business that is responsible for its own revenues and expenses. It operates somewhat independently, and its performance is measured by the profit it generates. For example, a specific store or product line within a larger company can be a profit centre.		

2. Make a presentation of your responses using a flip chart to share with the wider class.

#### **Extension task**

Answer the following question to support the review of your learning.

Describe the difference between:

- 1. An indirect and direct cost
- 2. Cost unit and unit cost
- 3. Cost centre and profit centre

Write up your response in your workbook and share with your teacher for feedback.

# FACTORS TO CONSIDER WHEN INSTALLING A COST ACCOUNTING SYSTEM

# **Cost Accounting System**

A cost accounting system is a method or process used by organisations to record, analyse, and monitor the costs associated with producing goods or providing services. Its primary purpose is to determine the cost of products or services accurately, enabling management to make informed decisions related to pricing, budgeting, cost control and financial planning.

An effective cost accounting system can streamline the cost accounting process within a business. The system should suit the environment of the business and should be simple, economical and practical.

Factors a business should consider when planning to implement a cost accounting system include.

- 1. Organisational objectives and needs: Understand the specific information required for decision-making, control and planning. Determine whether the system should support product costing, pricing, budgeting or performance evaluation.
- 2. Nature of products or services: Consider the diversity and production processes of the products or services offered. For example, batch production may require different cost allocation methods than mass production.
- 3. Cost structure and types of costs: Identify fixed, variable, direct and indirect costs to determine appropriate cost classification and allocation methods.
- 4. Cost data availability and accuracy: Assess the existing data collection systems for completeness, accuracy and timeliness. Ensure that the data sources can support the required level of detail in cost reporting.
- 5. Choice of costing method: Decide on suitable costing techniques such as job costing, process costing, activity-based costing or standard costing based on operational needs.
- 6. Integration with existing systems: Evaluate how the new cost accounting system will integrate with financial accounting, inventory management and other systems.
- 7. Cost of implementation and maintenance: Analyse the resources (time, personnel, financial) required to implement and sustain the system. Balance the benefits against the costs involved.
- 8. Organisational structure and responsibilities: Define roles and responsibilities for data collection, processing and analysis. Ensure staff are trained to use the system effectively.
- 9. Management support and commitment: Secure buy-in from top management to facilitate smooth implementation and utilisation.
- 10. Flexibility: Ensure the system can adapt to changes in production processes, product lines, or organisational growth.

# Type of information produced by a cost accounting system

A good cost accounting system produces various types of valuable information essential for effective management and decision-making. These include:

- 1. Cost of Goods Sold (COGS): Accurate calculation of the direct costs attributable to production help assess profitability.
- 2. Product costing data: Detailed information on direct materials, direct labour and manufacturing overhead for each product or service.
- 3. Work-in-Progress and finished goods inventory values: Valuation of inventory at different stages, aiding in financial reporting and inventory management.
- 4. Budget variance reports: Comparison of actual costs with budgeted costs to identify variances and control expenses.
- 5. Cost control data: Insights into areas where costs can be reduced.

- 6. Profitability analysis: Data on the profitability of individual products, departments or segments.
- 7. Pricing information: information to support setting or adjusting product prices based on cost structures.
- 8. Cost behaviour patterns: Understanding fixed and variable cost relationships to forecast and plan effectively.
- 9. Decision-making data: Information supporting decisions like product discontinuation, process improvements, or investment opportunities.

### Activity 4.3 Factors to Consider When Installing a Cost Accounting System

- 1. In groups, consider the scenario below and answer the questions that follow: Nyamekye has been running a bakery for two years. He has not been recording all the costs associated with producing his products, such as bread, chips, and doughnuts. He recently hired an accounting graduate to assist him, who recommended implementing a cost accounting system to record, analyse, and monitor the costs associated with producing goods. As a student of cost accounting.
  - a. Explain to him the factors he should consider when setting up the cost accounting system
  - b. Describe the types of information this system will generate.
- 2. Present your work for discussion to the larger class.

# DIFFERENCES BETWEEN COST ACCOUNTING AND FINANCIAL ACCOUNTING

Cost and financial accounting are related but different branches of accounting. To recap Section 1, financial accounting is a branch of accounting that focuses on recording, summarising, and reporting an organisation's financial transactions over a specific period. Cost accounting is a subset of management accounting and focuses on identifying, measuring and controlling costs of producing goods and services.

The differences between the two types of accounting reflect the different user group which they address. The main areas of comparison are summarised in the table below.

S/N	Aspect	Financial Accounting	Cost Accounting
1	Legal requirements	Financial reports, for many organisations are subject to accounting regulations which try to ensure that they are produced in conformity with a standardised format. These regulations are imposed by law and accounting professional bodies. In effect, financial accounting information is determined by concepts, standards and legal provisions.	Cost accounting reports are not guided by any such regulations from external sources dictating the form and content. Management reports are for internal use only and can be tailored to meet the needs of a particular management. Cost accounting information is therefore, determined by management on the basis of relevance and cost benefit considerations.

	NT. 4	The second secon	God on Lorent
2	Nature of the reports produced	Financial reports tend to be general- purpose reports. That is, they contain financial information that can be useful for a wide range of accounting users as well as decisions rather than being specifically developed for the needs of a particular group or set of decisions.	Cost and management accounting reports are often designed for specific purpose. They are designed either with a particular decision in mind or for a specific level of management.
3	Level of details	Financial accounting reports provide users with a broad overview of proposition and operational performance of the business for a defined period. Consequently, information is generally aggregated and presented at a high level rather than in granular detail.	Cost accounting reports, however, often provide management with considerable details to help them with a particular operational decision.
4	Reporting intervals and frequency	For most businesses, financial accounting reports are produced on an annual basis. However, large companies may produce semi-annual reports and a few also produce quarterly reports.	Cost accounting reports may be produced as frequently as required by management. In most businesses, management teams are provided with certain reports on a weekly or monthly basis which permit constant review of operational performance.
5	Time horizon	Financial accounting reports reflect the operational performance and financial health of the business for the past period. In short, financial accounting reports are historical information or derived from past activities. Financial statements do not incorporate future expectations. Occasionally, businesses do issue financial forecast reports to other users in order to raise additional capital or to fight off possible take-over bid.	Cost accounting reports, on the other hand, often provide information concerning future costs and revenues as well as past activities.
6	Range and quality of information	Financial accounting reports concentrate on information which can be quantified in monetary terms. Financial accounting reports place much premium on the use of objective, verifiable evidence when preparing annual reports.	Cost accounting reports also produce such reports, but they are also more likely to include information of a non-financial nature such as measures of physical quantities of stocks and output. Cost accounting reports may use information which is less objective and verifiable in order to provide managers with information which they require.
7	Precision of information	Financial accounting information must be more precise. There is usually an audit by independent external auditors to confirm the reliability of information.	In cost accounting, approximations are permitted due to uncertainties in making estimates, but must be precise and accurate.

8	Objectives	Financial accounting information is	Cost accounting information is meant
		required to satisfy the stewardship	to aid planning, control, decision
		function of management i.e. account	making and performance evaluation.
		for the use of resources entrusted	
		to management (Principal-Agency	
		relationship)	

### **Activity 4.4 Cost Accounting and Financial Accounting**

1. Your teacher will arrange you in small groups of no more than five. Read the following scenario and answer the questions that follow:

You are the manager of Aba Klewiah Company that makes traditional woven mats. Your team is considering whether to switch to a new, more efficient weaving process to produce more mats in less time. Before making the decision, you need to understand the financial implications of the change based on. To do this you gather the following information from the finance department:

- a. Data on the costs involved in making mats:
  - i. cost of threads, dyes, etc.
  - ii. wages paid to weavers.
  - iii. electricity, equipment maintenance, etc.
- b. Reports that show the financial position of the company for stakeholders like government agencies, banks or investors;
- c. The total revenues from sales and the total expenses (costs)
- d. Income Statement
- e. Balance Sheet.

These statements show whether the company made a profit or loss over a certain period, but they don't go into the detailed cost analysis of the new process.

- 2. In your groups, discuss the importance and uses of both the financial and cost accounting information gathered in this scenario and how they might influence decision making
- 3. Discuss the difference between cost accounting with financial accounting.
- 4. Ensure everybody in your group gets the opportunity to contribute to the discussion. You could choose to role play aspects of the discussion, for example with ne person acting as the manager of the company and another as the accountant.
- 5. Record the outcomes of your discussion on flip chart paper.
- 6. Present your answers to the teacher and the rest of the class for feedback.

### **COST CLASSIFICATION AND ITS IMPORTANCE**

### **Cost classification**

Cost classification refers to the process of grouping costs according to their common features or characteristics. This ensures effective reporting and communication of costs.

# **Different Methods of Classifying Costs**

### 1. Classification according to nature of cost

Under this method, a cost can be described as **direct** or **indirect**.

- a. Direct costs are those costs that are traced or conveniently identified with a particular cost centre or cost unit. For example, the cost of wood used in making a table.
- b. Indirect costs are those costs which cannot be traced to any particular cost centre. They are general costs that are incurred for the benefit of a number of cost centres. *Examples are insurance, rent and managerial salaries*.

### 2. Classification according to behaviour

Here, cost is classified as fixed or variable.

- a. Fixed costs are those costs that remain constant in total over a range of activities for a period of time. That is, a fixed cost does not change as output changes. For example, rent, depreciation and insurance on vehicles.
- b. Variable costs are those costs that tend to vary in direct proportion to output. That is, as output rises, variable cost also increases and vice versa. *For example. cost of raw materials.*

### 3. Classification according to function

A cost item can be described based on the functional areas of the business. In this regard, cost may be classified as:

- a. **Production cost**: these are the indirect cost of manufacturing a cost unit. It comprises of indirect materials consumed in the factory, indirect factory wages and other indirect expenses incurred in connection with production. For example, cost of raw materials, indirect labour.
- b. **Administration cost**: these are the costs of formulating policy, directing and controlling operations not related directly to production, selling, distribution or research and development. For example, salaries of management, stationery.
- c. **Distribution cost**: these are the costs incurred in making the finished goods ready for dispatch and the delivery of the product to customers. For example, cost of carriage outwards.
- d. **Selling cost:** these are marketing costs incurred in securing orders. For examples sales promotion cost, salaries of salesmen.

### 4. Classification according to profit determination

Under this method, a cost can be classified as a product cost or a period cost.

- a. Product costs are costs that are necessary for the production of goods. Such costs are not incurred when there is no production. They include the cost of raw materials and direct labour.
- b. Period costs are those costs that are made even when there is no production. They include rent, insurance, salaries of management, etc. Period costs are written off as expenses in the period in which they are incurred.

### 5. Classification according to element of cost

Costs can be classified by element. There are three basic elements of cost: material, labour and expenses/overheads.

- a. Material Costs: These are the costs of materials introduced into product or consumed in the operations of an organisation. In other words, they are the cost of materials input into the production of goods and services.
  - For example, the cost of: raw materials, component parts, work in progress, primary packing materials, lubricating oil, consumable tools, stationary, cleaning materials.
- b. Labour Costs: These are the cost of employee remuneration. In other words, payments made to and on behalf of employees for offering labour services in the production function.
- c. Expenses: These are all other costs other than material cost and labour costs. For example, the cost of: hiring special equipment and maintaining such equipment, royalty payments, copyrights and patent payments, utilities such as electricity and water, rent, etc.

In addition to these cost classifications, costs may also be seen as:

- 1. Relevant cost refers to any cost that can be changed by a management decision. It is a cost that differs among decisions. Such costs are necessary for a particular decision.
- 2. Irrelevant cost is any cost that does not change in the decision-making process. For example, in deciding to increase the number of goods in the warehouse, the salary of the storekeeper is an irrelevant cost but the price of the product is relevant.
- 3. Sunk cost is a past or previous cost that cannot be changed by any decision. It refers to the cost of resources already acquired and the total cost shall be unaffected by the choice between two alternatives. For example, the cost of a machine purchased five years ago.
- 4. Opportunity cost values the cost of a forgone alternative or a sacrificed choice of action. Where there is no alternative use for a resource, then the opportunity cost is zero.
- 5. Avoidable cost is any cost that management can choose not to incur. Management can decide to do away with such expenses. Examples are advertising, overtime allowances, medical bills of staff, etc.

- 6. Incremental /differential cost is the difference in total relevant cost between two alternatives. It is a cost that differs as a result of changing levels of activities.
- 7. Marginal cost refers to the additional cost of producing one extra unit of a product.
- 8. Conversion cost is the cost of transforming raw materials, direct labour and overheads into finished goods. It is the amount of direct labour and overheads that are required to turn raw materials into finished products.

# Importance of cost classification

The importance of cost classification lies in its ability to enhance managerial decision-making, control, and planning within an organisation. Reasons why cost classification is important are that it:

- 1. Facilitates cost control: Classifying costs helps management identify and monitor different expense categories, enabling better control over spending and resource allocation.
- 2. Aids in cost analysis and decision-making: Understanding which costs are fixed, variable, or semi-variable allows managers to analyse profitability, forecast profits, and make informed decisions regarding pricing, production, and budgeting.
- 3. Enables accurate costing and pricing: Proper classification ensures that products or services are accurately priced by considering the relevant costs, leading to competitive and profitable pricing strategies.
- 4. Supports budgeting and planning: Cost classifications assist in preparing detailed budgets, setting financial targets, and planning for future activities.
- 5. Assists in cost control and reduction: By identifying specific cost components, organisations can focus on reducing or controlling unnecessary expenses in targeted areas.
- 6. Enhances financial reporting: Cost classification aligns with accounting standards, providing clear and meaningful financial reports to stakeholders.
- 7. Facilitates performance evaluation: Enables performance measurement of departments, products, or projects, fostering accountability and efficiency.

# **Activity 4.5 Cost Classification and its Importance**

- 1. Arrange yourself in small groups to discuss the basis of cost classification. Answer the following questions through your discussion:
  - a. What is meant by cost classification?
  - b. What different methods could a business use to classify their costs?
  - c. Why is cost classification important?

- 2. Record the outcomes of your discussion on flip chart paper and be prepared to present your work to the rest of the class.
- 3. Record the core definitions In your workbook so that you can refer back to them later.

### **Activity 4.6 Cost Classification in Practice**

- 1. In pairs, arrange to visit any shop/food vendor in the community or school. Alternatively, you could arrange to interview a business owner or research a chosen business online.
- 2. For your chosen business find out the types of cost they incur in producing the goods or services they deliver.
- 3. Group these costs and identify the relevant classification.
- 4. Explain why you have classified each cost in this way and why it is important.
- 5. Compile your research and present it to the wider class for discussion and feedback. You could choose to do this as a short presentation or poster.

# COMPOSITION OF COST OF PRODUCTS, SERVICES AND OPERATIONS

Elements of cost are the components that make up the cost of a product or service. The main elements of cost are materials, labour and other expenses (overhead).

## **Materials**

These are all the ingredients, or inputs that go into the production process before the final product or service is provided. Material cost is made up of direct materials and indirect materials.

### **Direct material cost**

This is the cost of raw materials that go into production to be transformed through the manufacturing process to become finished products or services. For example, leather used for shoes, cement used for building, palm oil used for soap and cassava used for gari.

### **Indirect material cost**

This is the cost incurred on physical components that do not form part of the final product. Indirect materials cannot be easily traced to a particular product or service. For example, cleaning materials, lubricants used in machines and packaging materials.

### Labour

This is all the human effort (physical or mental) used in the production of goods and services. Labour cost is made up of direct labour and indirect labour and can be made up of wages, salaries, bonuses, overtime, etc.

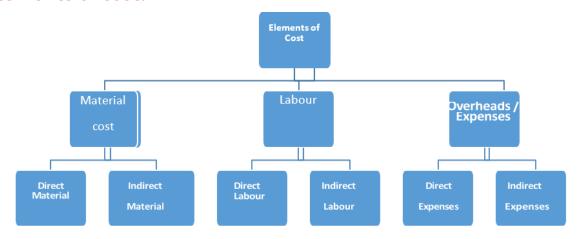
- 1. Direct labour this is the remuneration paid to workers whose services can be identified directly with a particular product or service. For example, the wages of a mason building a house and, the salaries of a machine operator, carpenter or a tailor.
- 2. Indirect labour this is the remuneration paid for services that cannot be easily traced to a product or service. Examples are salaries of supervisors, cleaners and security men.

# **Expenses**

Expenses are all costs incurred other than materials and labour. They are the costs of services paid or unpaid, rendered to an organisation.

- 1. Direct expenses these are expenses that can be easily traced to or identified with a particular product or service. For example, royalties paid on patents and mining, the cost of hiring a special machine, fees of architects or consultants and experimental costs.
- 2. Indirect expenses these are expenses that cannot be easily traced or identified with a particular product or service. For example, rent and rates, telephone bills, depreciation and insurance.

# The diagram below illustrates the breakdown of the different elements of cost.



### Activity 4.7 Composition of Cost of Products, Services and Operations

- 1. Working in groups, discuss the following elements of cost and write down your agreed definitions.
  - a. Material cost
  - b. Labour cost
  - c. Other expenses
- 2. For each of these components of cost, give three examples of:
  - a. Direct cost
  - b. Indirect cost

- 3. Present your responses on manila cards. You could use a table such as the one shown below to record your responses.
- 4. Share your response with another group for feedback and discussion.

Definition Type Ex	camples		
			1.
		Direct	2.
			3.
			1.
		Indirect	2.
			3.
			1.
		Direct	2.
Labour			3.
Luovui		Indirect	1.
			2.
			3.
			1.
	Di	Direct	2.
Other expenses			3.
			1.
		Indirect	2.
			3.

### **Extension activity**

Answer the following question to support the review your learning.

Explain labour as a component of cost and its importance to production.

Record your answer in your workbook and share with your teacher for feedback.

### **EXTENDED READING**

- 1. Eric Oduro (2012), Principles of Cost Accounting for Senior High Schools 4<sup>th</sup> Edition. Accra: Terror Publications. (**Pages 1 30**)
- 2. Dadzie Barnabas (2013) Costing for "U", 5<sup>th</sup> Edition. Obuasi: For U Printing House (**Pages 1-11**)

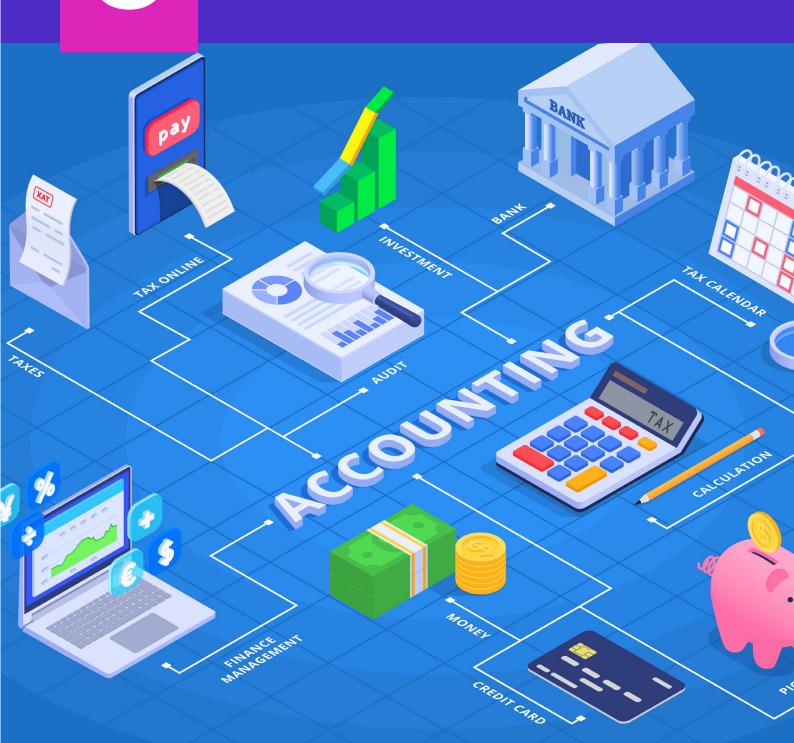
# **REVIEW QUESTIONS 4**

- **1.** How can cost accounting help a business identify and manage production costs more effectively?
- **2.** Define the following cost accounting terms:
  - a. Cost Centre
  - b. Cost Unit
  - c. Unit Cost
- 3. Explain how costs are classified.
- **4.** What are overheads?

**SECTION** 

5

# ACCOUNTING FOR OVERHEADS AND COSTING METHODS



# **COST ACCOUNTING**

# **Controlling Cost to Improve Organisational Performance**

### INTRODUCTION

In this section, you will explore how businesses determine the cost of producing goods and services, which is important for setting prices and making informed decisions. You will learn about overheads, including the terms used in overhead analysis and the different types of overheads. The section also covers specific order costing methods such as job, batch and contract costing, helping you understand how costs are calculated in different situations. You will examine processing organisations and their operations, as well as service organisations and the nature of the services they provide. By the end of this section, you should be able to explain how different cost determination methods are used in various types of organisations. This understanding will support your knowledge of pricing control and strategic business decisions. The content also connects with other subjects like finance, business management, and economics, showing the role of cost accounting in the wider business environment.

### **KEY IDEAS**

- Overheads are indirect costs needed to keep a business running.
- Overhead analysis helps share indirect costs fairly across departments or products.
- **Specific Order Costing** is a method used to calculate the cost of products or services that are produced only when a customer places an order. It is applied in job, batch and contract costing.
- **Process costing** is a method used to calculate the cost of products that are mass-produced in a continuous and consistent way.
- **Service costing** is a method used to calculate the cost of providing services, rather than manufacturing physical products. It is used by businesses and organisations that offer intangible services in areas such as transport, education, and healthcare.

# **ACCOUNTING FOR OVERHEADS**

### **Overheads**

Overheads are the total indirect costs a business spends that cannot be linked directly to a particular product or service. These costs are incurred to ensure the continuation of an organisation. Overheads include indirect materials, indirect labour and indirect expenses.

### **Types of Overheads**

1. Factory Overheads (Production Overheads): These are indirect costs that occur in a factory during the production of goods. These costs do not include direct materials

- or wages of workers who make a product, but those that are still incurred to produce goods. Examples are factory rent, lubricants, depreciation of machines, factory power/electricity and factory supervisor's salary.
- 2. **Administration Overheads**: These are indirect costs from the office or management section of a business. The costs are not related to production but help to run a business and make decisions.
  - Examples of administration overheads are office rent, office electricity, stationery, salaries of administrative staff, depreciation of office equipment.
- 3. **Selling and Distribution Overheads**: These are costs that help a business to promote, sell and deliver its goods or services.
  - a. Selling Overheads: These costs are used to encourage people to buy the product. Examples are advertising, salespeople's salaries or commission, samples or promotional items.
  - b. Distribution Overheads: These are costs involved in getting the product from the factory to the customer. Examples include carriage outwards, delivery van maintenance and storage costs.
- 4. **Financial Overheads**: These are indirect costs related to financing the activities of a business, for example in taking loans. Financial overheads are not linked to making or selling products but affect how money is managed. Examples of financial overheads are bank charges, interest on loans, discount allowed.
- 5. **Variable Overheads**: These are overheads that change depending on the level of production. If a firm produces more goods, these costs increase; if production drops, they decrease. Examples are packaging materials, factory electricity, lubricants.
- 6. **Fixed Overheads**: These are overheads that stay the same even if production increases or decreases. Fixed overheads are incurred even if no goods are produced. Examples of fixed overheads are rent, insurance, salaries of permanent staff.
- 7. **Semi-variable Overheads (Mixed Overheads)**: These are overheads that have both fixed and variable parts. A part of the cost stays the same, but the rest changes depending on the level of the activity. Examples are electricity bills, water bill and telephone/internet bills.

### **Activity 5.1 Types of Overheads**

- 1. Your teacher will arrange you in small groups and provide a series of flashcards, or a list, with types of overhead written on them.
- 2. In your groups, discuss each type of overhead and consider:
  - a. How this type of overhead might be classified
  - b. How you would define it
  - c. Examples of this type of overhead
- 3. Summarise the main points of your discussion on flip chart paper. You may want to use a table such as the one below.

4. Make presentation to the class for discussion and feedback.

Group	Type of Overhead	Description of Overhead	Examples of the overhead

# **Overheads Analysis**

This is the process of examining and organising indirect costs — these are costs that cannot be directly linked to a single product or service but are still important for running a business. These costs include things like electricity, rent, salaries of cleaners or security services. Businesses look at these costs to know where they are coming from, how they are used and how they can be controlled or reduced.

Overheads analysis involves:

- 1. Collecting all indirect costs,
- 2. Grouping them into categories like production, office (administration), and sales
- 3. Assigning each cost to the correct department (e.g. the cleaning cost to the department it is meant for),
- 4. Sharing costs that are used by all departments (like rent) fairly,
- 5. Re-allocating the cost from support areas like the canteen or maintenance to the departments that actually produce goods to know the total indirect costs that should be added to the cost of each unit produced.

# **Purpose of Overheads Analysis**

Overheads analysis is important in order to:

- 1. Understand how indirect costs affect total production cost.
- 2. Allocate overheads fairly across departments, products, or services.
- 3. Identify cost-saving opportunities.
- 4. Assist in budgeting and pricing decisions.

# **Terminologies used in Overheads Analysis**

### **Allocation of Overheads**

This is when the whole amount of a cost is given to one department because it belongs **only** to that department. For example, the salary of a cook in the canteen will be given fully to the canteen department.

# **Apportionment of Overheads**

This is when costs are shared between **different** departments because it benefits all of them. For example, if a company pays rent for a building that has three departments, the rent will be shared fairly among the three departments.

### **Re-apportionment of Overheads**

This is when the costs of service departments (like maintenance or canteen) are shared to the main production departments that use their services. This is done because service departments do not make products directly.

### **Absorption of Overheads (Overhead Recovery)**

This is when the total overhead cost of a production department is added to the products made. This is done using a rate, such as cost per machine hour, cost per unit or a percentage of direct materials.

# **Activity 5.2 Terminologies in Overheads Analysis**

- 1. Copy the task below into your book and draw lines to match each description to the right term used in overheads analysis.
- 2. Share your answer with a colleague for discussion

Terms	Description
Overheads Analysis	A process of examining, grouping, and assigning indirect costs to cost centres before distributing them to products or services.
Apportionment of Overheads	Transferring service department costs to production departments after initial distribution.
Reapportionment of Overheads	Charging the total cost of an expense directly to the cost centre that incurred it without sharing.
Absorption of Overheads	Adding overhead costs to the cost of each unit produced so that they are included in the product's total cost.
Allocation of Overheads	Sharing common overhead costs among different cost centres based on a fair and logical basis.

# **Activity 5.3 Overheads Analysis**

- 1. Working in the same groups as for Activity 5.1, revisit the types of overhead you identified.
- 2. For each example, discuss how that type of overhead would be allocated or apportioned. For example, in each case would the cost be allocated to one function of the business or split? Where and how would this apportionment work?
- 3. Present your work to the class for discussion and feedback.

#### **Extension Activity**

To develop your learning, answer the following question:

How does overhead analysis inform pricing decisions?

Write a short explanation in your workbook and share with your teacher for feedback.

# CHARACTERISTICS OF SPECIFIC JOB ORDER COSTING – JOB AND BATCH

### **Job Costing**

Job costing is a way of finding the cost of a particular job or order made to a customer's request. In job costing, each job is different and done according to the customer's instructions. The customer places an order for the work, and the price is usually agreed before the job begins. Examples might include sewing a wedding dress, building a special table or designing a logo for an organisation.

### **Characteristics of Job Costing**

- 1. Every job is different from another.
- 2. Production follows the customer's exact instructions.
- 3. The selling price is agreed with the customer before starting.
- 4. The price is based on cost estimates.
- 5. A separate record is kept for each job.
- 6. All costs for a job are recorded on a job card.

### **Advantages of Job Costing**

- 1. Profit for each job can be worked out separately.
- 2. It gives a detailed breakdown of all costs for each job.
- 3. Job costing is useful in estimating costs for future jobs.
- 4. Helps compare estimated costs with actual costs.
- 5. Helps identify which jobs are profitable or not.
- 6. Allows accurate quotations for customers.

### **Disadvantages of Job Costing**

- 1. Job costing requires more paperwork and record-keeping.
- 2. It is difficult to prevent unnecessary costs during production.
- 3. There is no fixed method for estimating costs.
- 4. It is not suitable for fast and mass production.
- 5. Controlling costs can be challenging.

### **Batch Costing**

Batch costing is used when producing a set of similar or identical products together. The batch is treated as one job for costing purposes. Each batch is allocated a number and all costs are collected for the whole batch. The cost per unit is found by dividing the total batch cost by the number of units made. Examples include producing 2,000 identical chairs, baking bread in batches or manufacturing medicine.

### **Characteristics of Batch Costing**

- 1. Goods are made in fixed lots or batches, not one by one.
- 2. All costs are collected for the whole batch.
- 3. All items in a batch are the same or very similar in quality.
- 4. The total batch cost is divided by the number of units to get the cost per unit.
- 5. Suitable for products made repeatedly, such as medicines, garments or packaged food.

### **Activity 5.4 Job and Batch Costing**

- 1. Choose a partner to work with to discuss the characteristics of job and batch costing.
- 2. Extend your discussion to consider the advantages and disadvantages of job costing.
- 3. Summarise your discussion in your workbook and share your answers with another pair.
- 4. If you are unsure on the concept of either job or batch costing, speak to your teacher.

### **Activity 5.5 Applying Job or Batch Costing**

- 1. Your teacher will arrange for you to visit a local artisan (e.g., carpenter, builder, seamstress, tailor, etc.) to learn about how they cost their goods or services.
- 2. Ahead of your visit, plan questions you would like to ask.
- 3. If you are not able to visit a local artisan, then choose a small business to research or find a documentary video online showing how artifacts are produced and costed.
- 4. In small groups, discuss what you observed on the trip (or through your own research) regarding duration, location, nature of work and payment methods of the work done by the artisan.
- 5. Make a poster presentation of how your chosen artisan produces goods to illustrate the job or batch approach to costing.
- 6. Share with another group for feedback.

# CHARACTERISTICS OF SPECIFIC JOB ORDER COSTING – CONTRACT

### **Contract Costing**

Contract costing is a method used to find the cost of large projects that are carried out according to a customer's request and usually take a long time to finish. Unlike job or batch costing, contract costing is done mainly at the customer's site. Often contracts are for construction work such as building roads, bridges, schools or ships.

### **Characteristics of Contract Costing**

- 1. The work is done according to the customer's exact instructions.
- 2. Contracts take a long time to complete.
- 3. Work is done at the customer's site or location.
- 4. Each contract is separate from other jobs.
- 5. Contracts are usually large projects.

### **Advantages of Contract Costing**

- 1. Each contract is recorded separately, making it easier to track and control costs.
- 2. Loss is less likely because most costs are recovered from the contract price.
- 3. The contractor earns a fixed percentage of profit.
- 4. Payments are received in stages, which helps cash flow.
- 5. The customer can monitor the work's progress through retention money.
- 6. The contractor can benefit from price increases by including escalation clauses in the contract.

### **Disadvantages of Contract Costing**

- 1. Time can be wasted if work is delayed or not done according to plan.
- 2. Costs may rise if there are production delays.
- 3. Poor record-keeping can lead to wrong profit calculations.
- 4. The contractor may need to spend money upfront before receiving payments.

### Difference between job costing and contract costing

S/N	Aspect	Job Costing	Contract Costing
1	Duration	Short term period.	Takes place over a long-term period.
2	Location of work	Work is done in a workshop or factory.	Work is done at the customer's site.
3	Scope	Involves small and individual jobs.	Involves large-scale projects.

4	Control of work	It is usually internal.	Supervised by the customer's technical professionals (for example engineer or architect).
		Payment made in stages, based on work certified.	

### **Activity 5.6 Contract Costing**

- 1. Working in pairs, explain the meaning of contract costing.
- 2. Discuss the characteristics of contract costing.
- 3. Summarise four (4) advantages and four (4) disadvantages of contract costing
- 4. Discuss the difference between job costing and contract costing.
- 5. Compare your responses with another pair for feedback and discussion.
- 6. Be prepared to share your responses with the wider class at the end of your lesson as part of a general reflection on these types of costing method.

### CHARACTERISTICS OF PROCESS COSTING

# **Process Costing**

Process costing is a method of costing used when identical goods are produced on a large scale. It is commonly used in industries where products are made continuously and each unit is the same as the others, so it is not possible to calculate the cost of each individual unit separately. Examples of businesses that might apply contract costing include breweries, oil refineries, chemical factories, food production and water processing plants.

### **The Main Purpose of Process Costing**

- 1. To find the cost per unit of production.
- 2. To calculate the average cost of production after each stage.
- 3. To find the value of work still in progress.
- 4. To record normal and abnormal losses during production.
- 5. To compare actual costs with estimated costs.

# **Characteristics of Process Costing**

- 1. Production is continuous.
- 2. The products are all the same (homogeneous).
- 3. The production process is standardised.
- 4. The output of one process becomes the input for the next process.

- 5. The final output from the last process becomes finished goods.
- 6. A separate account is kept for each process.
- 7. Finished goods are identical and can only be distinguished by batch coding.

### **Advantages of Process Costing**

Advantages of process costing include that it:

- 1. Ensures costs are spread evenly across all units produced within a specified period of time.
- 2. Is simpler to use in continuous, standardised production compared to job costing as production processes are standardised and often repetitive.
- 3. Shows accurate costs for each stage of production, enabling better cost control and decision making.
- 4. Makes it easy to value work in progress and finished goods inventory at each stage of production.
- 5. Helps check the performance and evaluate efficiency at each stage of production. This can help management identify areas for improvement.
- 6. Encourages standardised production, reducing waste and improving quality and efficiency.
- 7. Tracks costs for each process, making it easier to find cost differences.
- 8. Helps management control costs by monitoring each stage of production.

### **Disadvantages of Process Costing**

Disadvantages of process costing include that it:

- 1. Treats all units as identical, so no room for product individuality. This can be an issue in industries where customisation or variation in products is important.
- 2. Overhead costs may be wrongly allocated, affecting the accuracy of costing information and potentially misinforming decision making.
- 3. May not give enough detailed cost information for tight control because costs are aggregated at process or department level.
- 4. Can be time-consuming and requires a lot of record-keeping.
- 5. Not suitable for small-scale or customised production as it is better suited to industries with large scale and repetitive production processes.

# **Activity 5.7 Processing operations**

#### Part A

- 1. Your teacher will share with you photographs or short videos showing processing operations in different industries.
- 2. You may also watch the short films below:

### https://www.youtube.com/watch?v=b543tIbjoo8

### https://www.youtube.com/watch?v=g5dZpT51IY4

- 3. Make notes while you watch the films on the types of process operations and the types of costs that would need to be considered for each of these businesses.
- 4. Share your thoughts as part of a wider class discussion.

### Part B (optional)

- 1. Your teacher may be able to arrange for you to visit a local processing organisation, or have an industry representative come and present to the class on their processing operations.
- 2. Plan questions to ask during the visit/presentation.
- 3. Take notes and take part in a wider class discussion on what you have seen/heard.

### **Activity 5.8 Key Issues in Process Costing**

- 1. Find a partner to work with and discuss the meaning of process costing
- 2. Summarise four (4) purposes of process costing
- 3. Identify the characteristics of process costing
- 4. Write down four (4) advantages and four (4) disadvantages of process costing
- 5. Compare your responses with another pair for feedback and discussion.

# **NATURE OF SERVICE COSTING**

### **Service Costing**

Service costing is the method used to find out the cost of providing services instead of goods. Services are intangible and cannot be stored. Examples of services include the work of teachers, lawyers, pastors, drivers, barbers and hairdressers.

### **Characteristics of Service Costing**

- 1. No inventory: Services cannot be stored like goods. For example, a haircut today cannot be stored for tomorrow.
- 2. Expiration: If a service is not used when it is offered, it cannot be saved for later.
- 3. Inseparability: The service is usually linked to the person providing it. For example, teaching cannot be separated from the teacher.
- 4. Uniqueness: Every service is different. For example, two lessons by the same teacher may not be exactly the same.

The objectives of Service Costing are to

- 1. find the cost per unit of service.
- 2. help decide how much to charge for the service.

- 3. know whether the service makes a profit or loss.
- 4. give management information to control costs and improve services.

### Organisations that use service costing and units produced

Examples of the types of organisations that apply service costing are listed in the table below. For each organisation, examples have been given of how the cost of the service could be broken down (cost unit).

Organisation	Cost units	
Hospitals	In-patient days, number of surgeries, number of outpatients attended to	
Consultancy	Client hours or days	
Schools	School hours or days, numbers of learners, types of programmes	
Canteen/ Restaurants	Number of plates of meals served	
Maintenance services	Maintenance hours/days	
Power generation organisations	Kilowatts used	
Soliciting firms	Court days/ hours	
Hotels	Occupied beds/ rooms, conference rooms, subscriptions for use of space and gym centres	
Library	Subscription for use of the library, library days/ hours	
Transport services	Tonnes/ kilometre covered, number of passengers, distance covered	

### **Advantages of Service Costing**

- 1. Clear picture of the cost: It shows the cost of each service offered by a business/ organisation, making it easier to set prices.
- 2. Better use of resources: It helps businesses/organisations to use money, time, and staff more efficiently.
- 3. Performance evaluation: It helps businesses/organisations to see which services are profitable and identify areas fo improvement or investment.
- 4. Better decisions: Service costing provides useful information to support decision making, for example related to pricing, outsourcing or improving services.
- 5. Customer analysis: It helps businesses/organisations to know which customers bring more profit.
- 6. Comparison: It allows comparison of costs with other organisations to help businesses/ organisation identify the need for cost reviews or to improve efficiency.

### **Disadvantages of Service Costing**

- 1. Complexity: It can be difficult to undertake when a business offers many different services with different cost structures and revenue streams. It can be difficult to allocate overhead costs and indirect expenses accurately to each service.
- 2. Intangibility: Services are not physical, so costs are harder to measure and allocate.

- 3. Subjectivity: Some cost allocations, such as assigning shared resources, depend on judgment which may not always be fair.
- 4. Difficult measurement: Some services do not have clear cost units which makes it difficult to know how to allocate costs.
- 5. Different customers: Customers use services differently at different times, making cost allocation harder.

## **Activity 5.9 Service Operations**

1. Click on the link below to watch a short video showing service operations in different industries.

Service Industry Definition, Types & List - Lesson -

https://study.com/learn/lesson/video/service-industry-types-list.html

- 2. Make notes while you watch the films on the types of services and the types of costs that would need to be considered for each of these industries.
- 3. Share your thoughts as part of a wider class discussion.

### **Activity 5.10 Nature of Service Costing**

- 1. In pairs or small groups, discuss the meaning of service costing
- 2. Summarise four (4) objectives of service costing
- 3. Identify the characteristics of service costing
- 4. Write down five (5) advantages and five (5) disadvantages of service costing
- 5. Compare your responses with another pair or group for feedback and discussion.

### **Activity 5.11 Costing Methods**

1. Complete the table below to identify the costing method that might be used to determine the total cost of producing goods or services in the following industries.

S/N	Industry	Costing Methods
1	Pharmaceutical industry	
2	Specialised equipment manufacturing	
3	Food processing (e.g., bakery goods)	
4	Infrastructure projects (e.g., highways, bridges)	
5	Custom furniture manufacturing	
6	Cement production	

7	Education (schools, universities)
8	Shipbuilding
9	Hospitality (hotels, resorts)
10	Crude oil refining

2. Share your answer with a colleague for feedback

## **Activity 5.12 Service costing case study**

- 1. Your teacher will arrange you in small groups of no more than five and assign you with a type of service organisation, for example a restaurant or a hospital.
- 2. In your groups, discuss the primary service offered by your assigned organisation and prepare a list of the cost units that would support the costing of this primary service.
- 3. You may find it useful to research examples of your assigned organisation, e.g how a restaurant breaks down its services for costing purposes.
- 4. Make a short presentation of your work to the rest of the class for discussion and feedback.

## **EXTENDED READING**

- Dadzie Barnabas (2013) *Costing for "U"*, 5th Edition. Obuasi: For U Printing House (Pages 174-251)
- Eric Oduro (2012), *Principles of Cost Accounting for Senior High Schools* 4th Edition, Terror Publications. (Pages 205 330)
- Any Cost Accounting book approved by NaCCA

# **REVIEW QUESTIONS 5**

- **1.** As the cost accountant for a company, explain the steps of overheads analysis and why overheads analysis is important.
- **2.** Evaluate the role of cost accounting systems in supporting strategic decision-making in companies that use job order, batch or contract costing methods.
- **3.** Explain how the choice between job, batch or contract costing depends on the nature of the industry and the type of products or services produced.
- 4. Propose strategies for overcoming the disadvantages associated with service costing.

**SECTION** 

6

TECHNIQUES OF COSTING AND BUDGETING FOR CONTROL AND BUSINESS DECISION MAKING



## **COST ACCOUNTING**

## **Analysing Information for Control and Decision Making**

## INTRODUCTION

In this section, you will learn important ways businesses study and control their costs. We begin with Activity-Based Costing (ABC), where you will discover its meaning, benefits, and limitations. You will then compare Marginal Costing and Absorption Costing to see how each helps inform decision making. Next is Break-even Analysis, which explains how costs and revenue affect profit, as well as its assumptions and limitations. We will also cover Standard Costing and Budgetary Control, which are useful for planning and keeping costs under control. You will study different types of budgets, their advantages, challenges, and main features. Finally, you will explore variances and how they are used to measure performance. By the end of this section, you should be able to apply these costing and budgeting tools in real-life business situations.

#### **KEY IDEAS**

- **Activity Based Costing** is a costing method that assigns overheads and indirect costs to products based on the activities they require. It uses cost pools and cost drivers to more accurately trace costs to outputs than traditional costing.
- **Break-even Analysis** is a financial calculation used to determine the point at which total revenues equal total costs, resulting in neither profit nor loss. It helps in assessing the minimum sales required to cover fixed and variable costs.
- **Budgetary Control** is a system where a business prepares budgets (plans of income and expenses) and then compares the actual results with the budgeted figures in order to take corrective actions where there are deviations.
- **Cost drivers** are factors that cause changes in the cost of an activity or resource. Examples include machine hours, number of setups, labour hours, or order quantities; the driver is what drives or increases the cost.
- **Standard Costing** is a costing technique where a business sets pre-determined (expected) costs for producing goods or services. These expected costs are called standards. After production, the actual costs are compared with the standard costs. The difference between the standard cost and the actual cost is called a variance.
- Variance Analysis is a cost accounting technique used to study the difference between what was planned (standard or budgeted costs) and what was actually incurred (actual costs).

# MEANING, IMPORTANCE AND LIMITATIONS AND TERMINOLOGIES OF ACTIVITY-BASED COSTING

## **Meaning of Activity-Based Costing (ABC)**

ABC is a way of working out how much it really costs to make a product or provide a service. It does this by looking at the activities (jobs or tasks) the business does and linking the cost of each activity to every product or service based on how much of that activity each one uses. Unlike the traditional methods that mainly use one measure (like labour hours) to spread costs, ABC uses several cost drivers to show a more accurate cost.

#### **Example**

If a factory assembles, packages and tests goods, ABC looks at how much of each activity each product uses and assigns the costs accordingly.

## **Importance of Activity-Based Costing**

- 1. Accurate Product Costing: ABC makes product cost estimates more accurate by assigning indirect costs to products based on how much activity they actually use.
- 2. Informs Pricing Decisions: If a company understands its costs well, it can price its products or services more accurately.
- 3. Identifies Cost Drivers: Helps organisations identify cost-driving activities and ways to keep those costs down.
- 4. Improves Resource Allocation: ABC guides better decisions on where to put resources so everything works more efficiently.
- 5. Supports Strategic Decision Making: It helps a business see how much profit each product, each customer or each process makes.
- 6. Eliminates Wasteful Activities: We identify non-value-adding tasks and consider eliminating them.

## **Limitations of Activity-Based Costing**

- 1. Complexity in Implementation: Takes time and effort to study processes.
- 2. High Cost of Data Collection: This methodology requires a lot of information on activities.
- 3. Resistance to Change: Employees may not like new ways of working.
- 4. Not Suitable for All Businesses: Very small or simple businesses may not gain much from ABC.
- 5. Frequent Updates Required: Costs and processes change, so the system must be kept current.

## **Key Terminologies in ABC**

Activity: Any task or unit of work that consumes resources and is performed to produce a product or service.

Cost Driver: A factor that causes a change in the cost of an activity. (e.g., number of machine hours, number of setups)

Cost Pool: A grouping of individual costs, typically by department or service centre. In ABC, cost pools are activity-specific.

Overhead Costs: Indirect costs that cannot be traced directly to a product (e.g., utilities, rent, admin salaries).

Resource Cost Driver: A cost driver used to assign resources to activities (e.g., labour hours, power usage).

Activity Cost Driver: A cost driver used to assign activity costs to cost objects (e.g., number of inspections for a product).

Cost Object: Anything for which a separate measurement of costs is desired (e.g., product, service, customer).

## **Key Steps in ABC**

- 1. Identify Activities: List the main cost-causing activities (e.g., purchasing, machine setup, inspection).
- 2. Assign Costs to Activities (Cost Pools): Put overhead costs into activity-specific pools.
- 3. Determine Cost Drivers for Each Activity: Pick measurable factors that cause costs in each activity.
- 4. Collect Activity Data: Measure how much of each driver is used by each product/ service.
- 5. Calculate Activity Rates
  - Calculate the cost per unit of the cost driver. To do this you will need to use the following formula:
  - Activity Rate = Total Activity Cost Pool / Total Cost Driver Units
- 6. Assign Costs to Products/Services: Multiply activity rate by the number of cost driver units consumed by each product.
- 7. Analyse and Interpret Results: Use results to inform pricing, budgeting, process improvement, and cost control decisions.

## **Activity 6.1 Meaning and Importance of Activity Based Costing**

- 1. Your teacher will arrange you in to groups of no more than five. Working in your group, explain the meaning of Activity Based Costing.
- 2. Discuss the importance and limitations of Activity Based Costing and how it compares with traditional costing methods.
- 3. Summarise your discussions on flip chart paper using a table such as the one below.
- 4. Present your work to the class for discussion and feedback

Activity Based Costing is
Importance include:

3	Limitations include:
4.	How ABC compares with other costing methods

## **Activity 6.2 Key Terminologies in ABC**

- 1. In your groups review each of the terminologies associated with activity based costing listed below.
- 2. Match each term with its corresponding definition from the given list.
- 3. Compare your answer with another group for feedback.

Terminologies	Meaning
Cost Driver	Any task or unit of work that consumes resources and is performed to produce a product or service.
Resource Cost Driver	A factor that causes a change in the cost of an activity.
Activity Cost Driver	A grouping of individual costs, typically by department or service centre. In ABC, cost pools are activity-specific.
Cost Object	Indirect costs that cannot be traced directly to a product
Cost Pool	A cost driver used to assign resources to activities
Overhead Costs	A cost driver used to assign activity costs to cost objects
Activity	Anything for which a separate measurement of costs is desired

# MEANING AND IMPORTANCE OF MARGINAL AND ABSORPTION COSTING

## **Marginal Costing**

This is a technique in which variable costs are charged to cost units and the total fixed costs of the period are written off in full against the aggregate contribution.

Marginal costing, also known as direct costing or the contribution approach, distinguishes between variable costs and fixed costs. The marginal cost of a product is the sum of all variable costs incurred on the product.

## **Advantages of Marginal Costing**

Marginal costing can be combined with standard costing and budgetary control to make the control mechanism more effective.

- 1. A clear-cut division of costs into fixed and variable elements makes the flexible budgetary control system easy and effective; thereby, facilitating greater practical cost control.
- 2. It helps profit planning through break-even charts and profit graphs. Comparative profitability can easily be assessed and brought to the notice of management for decision-making.
- 3. It helps in the pricing of products.
- 4. It is an effective tool to support decision making.

## **Disadvantages of Marginal Costing**

- 1. It is often challenging to clearly separate all costs into fixed and variable categories.
- 2. In marginal costing, more emphasis is placed on sales. This can lead to the production process being treated as less important.
- 3. Leaving out fixed costs when valuing inventory does not make much sense. This is because these costs are also part of the production process.
- 4. It is unrealistic to base pricing decisions solely on contribution.

## **Absorption Costing**

Absorption costing is an accounting method that captures all manufacturing costs associated with the production of one unit of goods. It includes the cost of materials, labour and overheads. It is commonly referred to as the Full Costing Method.

## **Advantages of Absorption Costing**

- 1. It is widely used and easy to understand.
- 2. Absorption costing recognises the importance of including fixed production costs when determining product cost and a suitable pricing policy.
- 3. Absorption costing will more accurately show profit compared to variable costing.
- 4. Absorption costing conforms with accrual and matching accounting concepts which require matching costs with revenue for a particular accounting period.
- 5. Absorption costing avoids the separation of costs into fixed and variable elements which cannot be easily and accurately done.
- 6. The process of allocating and apportioning fixed factory overheads to cost centres or departments makes managers more responsible for the costs and services provided to their centres/departments.

## **Disadvantages of Absorption Costing**

1. It can negatively affect decision-making when irrelevant costs are taken into consideration.

2. Fixed costs are treated as product costs which can inflate inventory valuations during periods of low production.

## **Activity 6.3 Meaning and Importance of Marginal and Absorption Costing**

- 1. In pairs (or small groups) discuss the meaning of marginal and absorption costing and compare at least three advantages and three disadvantages of each.
- 2. Share your points with the nearest pair or group for further discussion.

#### **Extension activity**

- 1. In pairs, discuss the suitability of both marginal and absorption costing methods for different types of business. Write a short report summarising the suitability of each method for small, medium and large businesses, justifying your reasons.
- 2. Share your report with your teacher for feedback.

# DIFFERENCES BETWEEN MARGINAL AND ABSORPTION COSTING APPROACHES

Basis of Difference	Marginal Costing	Absorption Costing
Determination of Product cost	A costing technique that considers only variable costs as product costs.	A costing technique that includes both fixed and variable costs as product costs.
Treatment of Fixed Costs	Treated as period costs; charged directly to the profit and loss account.	Treated as part of the cost of production; included in inventory valuation.
Inventory Valuation	Valued at variable cost only.	Valued at total cost (variable + fixed production costs).
Profit Calculation	Profit is affected only by changes in sales volume.	Profit is affected by both sales and production volume.
Usefulness in Decision- Making	More suitable for short-term decision-making and cost control.	More suitable for external financial reporting and inventory valuation.
Cost Per Unit	Cost per unit includes only variable production costs.	Cost per unit includes all production costs, both fixed and variable.
Income Statement Format	Based on contribution margin	Based on traditional format
Impact on Closing Stock	Lower value of closing stock (excludes fixed overheads).	Higher value of closing stock (includes fixed overheads).
Accounting Standards	Not acceptable under most accounting standards for external reporting.	Acceptable under most accounting standards for external reporting

# Activity 6.4 Differences Between Marginal and Absorption Costing Approaches

- 1. Arrange yourself in groups of no more than five to discuss the differences between Marginal and Absorption Costing.
- 2. Prepare a presentation on the differences between the two costing methods, especially with regards to the calculation of profits and financial reporting. You could use a table such as the one below to structure your discussion:

Basis of Difference	Marginal Costing	Absorption Costing
1.		
2.		
3.		
4.		

- 3. Consider the suitability of both marginal and absorption methodologies to support the various reporting requirements of small, medium and large businesses. Which method would be better and why? Provide examples in each case.
- 4. Deliver your presentation to the rest of the class and be prepared to answer questions and take part in a wider discussion to review your learning.

## **BREAK-EVEN ANALYSIS**

Break-even analysis, or cost volume profit analysis (CVP), is the study of the relationship between costs, volume and profit at different levels of activity. It is a system of analysing cost into fixed and variable components to determine the probable profit at any given level of activity.

Break even analysis can be shown graphically. An example is included below:



Graphical presentation of Break-even analysis

### **Assumptions Under Break-Even Analysis**

- 1. All costs can be segregated into fixed and variable.
- 2. The selling price per unit remains constant irrespective of the levels of activity.
- 3. Production volume is equal to sales volume.
- 4. The only factor that affects cost and revenue is volume (output)
- 5. The analysis relates to one product or to a constant product mix
- 6. Production methods (technology) will remain constant.
- 7. Fixed cost per period will remain the same and variable cost in total will vary with the level of activity.
- 8. There is no change in the general price level.

## **Terms Used in Break-Even Analysis**

- 1. Break-even point: This is the point at which total cost is equal to total sales revenue. It can be calculated in units of production and revenue.
- Contribution: Contribution is the excess of sales over variable costs. It shows how much a product is contributing towards fixed costs and profits. It is calculated as sales less variable cost.
- 3. Margin of safety: The margin of safety is the excess of sales or output over the break-even point. It indicates how much sales can fall before the business starts incurring losses.
- 4. Angle of incidence: This is the angle where the sale revenue line and total cost line meet on the break-even chart (or graph). This angle is formed from the start of the break-even point and shows the rate at which a company is making profits. The bigger the angle of incidence, the higher the rate of profits.

## **Advantages/Uses of Break-Even Analysis**

- 1. It helps in setting target profits.
- 2. It helps in setting selling prices.
- 3. It assists in determining the changes in selling price and its impact on profit.
- 4. It can be used to work out the amounts involved in obtaining a particular volume of output.
- 5. It shows at what point the level of sales will start to generate profit on costs.

## **Limitations of Break-Even Analysis**

- 1. Not all costs can be divided into fixed and variable
- 2. The assumption that fixed cost remains fixed is not true because, in the long run, fixed cost becomes variable.
- 3. The assumption that variable costs per unit remain constant is not always true. Quantity discounts can change the variable cost per unit.
- 4. The assumption that technology for production remains the same is not true. Improvements in technology or worker efficiency can reduce costs, but break-even analysis does not consider these changes.

5. The accuracy of break-even analysis depends on estimates of costs and revenues. If these estimates are wrong, the results will also be misleading.

### **Activity 6.5 Break-Even Analysis**

- 1. In pairs, discuss the meaning of break-even analysis.
- 2. Identify and explain the assumptions of break-even analysis.
- 3. Write down four (4) advantages and four (4) limitations of break-even analysis.
- 4. Compare your responses with another pair for discussion and feedback. You may wish to record your answers in a worksheet similar to the one below:

Break-even analysis	
Definition	
Assumptions	
Advantages	Disadvantages
	<u>-</u>

# THE CONCEPT, PURPOSE AND IMPORTANCE OF STANDARD COSTING IN MANAGEMENT

## **Concept of Standard Costing**

Standard Costing is a way of controlling costs in business. It means setting a planned (standard) cost for materials, labour, and overheads before production begins. After production, these standard costs are compared with the actual costs. The difference (called variance) is checked to see if the business spent more or less than expected.

#### Standard costing involves:

- 1. Setting predetermined costs for materials, labour, and overhead.
- 2. Comparing actual costs with the standard (planned) costs.
- 3. Studying the differences (variances) to find out reasons for overspending or savings.
- 4. Using this information to plan, control costs, and measure performance.

## **Purpose of Standard Costing**

- 1. Cost Control: Standard costing helps to check spending. By comparing actual costs with standard (planned) costs, managers can see if the business is overspending or saving and take action to reduce waste.
- 2. Budgeting Tool: Helps in making accurate budgets and forecasts.
- 3. Performance Measurement: Variances show how well departments or workers are performing.

- 4. Decision Making: Provides cost information to guide business choices.
- 5. Efficiency Improvement: Helps identify wastage and areas for better use of resources.
- 6. Pricing Decisions: Assists in setting fair selling prices.
- 7. Inventory Valuation: Makes stock valuation consistent and easy.
- 8. Motivation and Control: Workers are encouraged to meet standards, which increases productivity.

## **Importance of Standard Costing**

- 1. Helps to Control Costs: Standard costing helps businesses to control their expenses. It sets planned costs for materials, labour, and overheads, and these are compared with the actual costs. If there are differences (called variances), management checks the reasons and takes action to reduce waste and control spending.
- 2. Supports Budgeting and Planning: Standard costing is useful when preparing budgets. It makes it easier for businesses to estimate how much production will cost in advance and plan how to use their resources. For example, just like a school or household plans spending with expected costs, businesses also plan with standard costs.
- 3. Measures Performance: By comparing actual results with standard costs, managers can judge how well workers or departments are performing. A favourable variance shows good performance, while an unfavourable variance shows problems that need to be solved. This improves decision-making and accountability.
- 4. Encourages Responsibility: Standard costing links costs and variances to the departments or individuals responsible. This makes managers and workers more careful about how they use resources because they know their decisions affect costs.
- 5. Helps in Decision-Making: Standard costing provides information that helps businesses make informed choices about pricing, production levels, and whether to produce items themselves or buy from others. This makes decision-making quicker and more consistent.
- 6. Simplifies Valuation of Inventory: Instead of recording the actual cost of each unit produced, businesses can use the standard cost to value stock. This makes accounting easier and more consistent, especially in large businesses with many products.
- 7. Reduces Record-Keeping: Since the cost per unit is already fixed, businesses do not need to keep detailed records for every single transaction. This saves time and allows accountants to focus on checking variances rather than recording too many details.
- 8. Encourages Continuous Improvement: By studying cost variances regularly, businesses can find areas of waste, improve efficiency, and reduce unnecessary costs. This creates a culture of improvement and motivates workers to do better.

## **Activity 6.6 Importance of Standard Costing**

- 1. Find a partner to work with to discuss the meaning of standard costing and why businesses use it. Through your discussion try to answer the following questions:
  - a. How does standard costing contribute to effective inventory valuation?
  - b. How does standard costing support record keeping?
- 2. Summarise your discussion on flip chart paper and present your work to the rest of the class for discussion and feedback.

# THE MEANING, PROCESS AND IMPORTANCE OF BUDGETARY CONTROL IN BUSINESS PLANNING

## **Budgetary Control**

Budgetary control is system businesses use to control their costs and activities. It involves preparing budgets (plans in monetary terms), assigning responsibilities to different departments, comparing actual performance with the budget and taking action to achieve maximum profits.

## **Process of Budgetary Control**



## **Objectives of Budgetary Control**

Businesses implement budgetary control for a number of reasons, including:

- 1. To prepare a plan (budget) covering all business activities.
- 2. To state in monetary terms what the business wants to achieve within a period.
- 3. To set up control systems so that work is done according to plan.
- 4. To guide management in using resources efficiently.
- 5. To ensure coordination, since departments depend on one another to reach goals.

## **Advantages of Budgetary Control**

- 1. Better Planning and Forecasting: Budgetary control helps businesses to plan ahead and predict future results.
- 2. Efficiency: It ensures resources are used well, reduces waste, and increases productivity.
- 3. Better Decisions: It provides useful financial information for management at all levels.
- 4. Accountability: Workers and departments have clear targets to meet.
- 5. Cash Flow Management: It provides a clear understanding of cash flow to help businesses make informed decisions about how to manage their cash.
- 6. Control and Monitoring: Provides a systematic way of checking financial activities and avoiding errors.

## **Disadvantages of Budgetary Control**

- 1. Based on Estimates: Budgets are not always exact since they depend on predictions. They need to be monitored and revisions to estimations should be made when variances indicate a change of plan is required.
- 2. Needs Cooperation: Success of implementation requires all departments to work together.
- 3. Flexibility Required: Conditions can change, so budgets must sometimes be adjusted.
- 4. Expensive: Preparing and maintaining budgets is expensive as it requires detailed analysis and planning, which small businesses may find difficult.
- 5. Time-Consuming: It takes a lot of time to prepare, explain, and train staff to implement budgetary controls.

### **Activity 6.7 Advantages and Disadvantages of Budgetary Control**

#### Part A

- 1. In pairs, discuss the meaning of budgetary control and agree on its definition. Discuss why it is important to the planning aspect of business management.
- 2. Share your ideas with another pair. Is there anything you can add to your own answers?

#### Part B

- 1. In your original parings, identify and explain five (5) objectives of budgetary control.
- 2. Write down four (4) advantages and four (4) disadvantages of budgetary control.
- 3. Present your work to the wider class for for feedback and discussion.

  You may wish to record your answers in a worksheet similar to the one below:

Budgetary control	
Definition	
Objectives	
1.	
2.	
3.	
4.	
Advantages	Disadvantages
1.	1.
2.	2.
3.	3.
4.	4.

## **Activity 6.8 Budgetary Control Process**

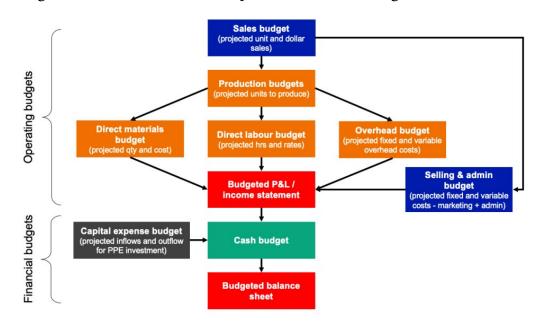
- 1. Copy and complete the flow chart below to summarise the budgetary control process
- 2. Exchange your response with a colleague for discussion and feedback

# TYPES OF BUDGETS AND BUDGETING TERMINOLOGIES

## **Types of Budgets**

- 1. Operating Budget: This type of budget covers the day-to-day income and expenses of a business. It includes sales, production, materials, labour, overhead, and administrative costs. Its main purpose is to plan for profit and efficiency.
  - Example: A sales budget shows the amount of sales expected in the next term, and this affects other parts of the operating budget.
- 2. Financial Budget: This type of budget deals with the financial resources of a business, especially cash and borrowing. It includes the cash budget, budgeted income statement, and budgeted balance sheet. Its purpose is to ensure the business has enough money to operate and pay debts.
  - Example: A cash budget shows expected money coming in and going out, helping to avoid cash shortages.
- 3. Capital Expenditure Budget: This type of budget is for long-term investments in fixed assets such as buildings, machines, or equipment. It helps businesses plan, compare projects, and decide which investments will bring good returns.
- 4. Master Budget: This is a complete budget that combines all other budgets (operating and financial). It gives the overall picture of what the business plans to do. It is often used by the top level of management within an organisation for planning and checking performance.

The diagram below indicates the components of master budget



- 5. Static (Fixed) Budget: This is a budget prepared for only one level of activity and it does not change even if the actual activity changes. It is suitable for stable organisations, but it may not be useful when activities change a lot.
- 6. Flexible Budget: This type of budget changes when the level of activity changes. It is more realistic than a fixed budget because it helps to compare actual results with the correct budgeted figures for that activity level.
- 7. Incremental Budget: This type of budget is made by taking last year's budget and adding or subtracting a small percentage for changes. It is simple and easy to prepare, but it may also continue mistakes or waste from the past.
- 8. Zero-Based Budget (ZBB): In this budget, every item must be justified as if starting from zero. Nothing is automatically included. It helps remove waste and ensures resources are used properly.
- 9. Rolling (Continuous) Budget: This type of budget is updated regularly so that when one period (month or quarter) ends, a new one is added. It is useful in changing environments because it keeps the budget current and relevant.
- 10. Programme/Project Budget: This type of budget is prepared for specific projects such as construction, research, or school projects. It includes costs, resources, time, and expected results. It helps track spending and performance for one-time activities.
- 11. Basic Budget (Base Budget): This is a long-term budget (5–10 years) that shows the cost of keeping things as they are, without major changes. It is used as a benchmark for future planning.
  - Example: A district education office may prepare a basic budget to know the cost of running existing schools for 10 years without adding new ones.
- 12. Current Budget: This type of budget is prepared for the present fiscal year (usually one year). It is based on current conditions like inflation, salary changes, or new policies. It is compared with the basic budget to see if adjustments are needed.
  - Example: A government department may prepare a current budget for 2025, including salary increases and cost of living adjustments.

## **Some Terminologies in Budgeting**

- 1. Forecast: This is an estimate of what might happen in the future. It is based on past data, current trends, and assumptions. Forecasts help in preparing budgets.
- 2. Revenue: The total money a business earns from selling goods or services.
- 3. Expenditure: The total money a business spends. It can be:
  - a. Capital expenditure: money spent on long-term items (e.g., buildings, machines).
  - b. Recurrent expenditure: money spent on daily running costs (e.g., salaries, electricity).
- 4. Variance: The difference between budgeted figures and actual results.
  - a. Favourable variance: when income is higher or expenses are lower than planned.
  - b. Adverse (Unfavourable) variance: when expenses are higher or income is lower than planned.
- 5. Surplus: When income is greater than expenditure, leaving a positive balance.
- 6. Deficit: When expenditure is greater than income, leading to a shortfall.
- 7. Contingency: Money set aside in the budget to meet unexpected costs or emergencies.

- 8. Appropriation: An official approval to use a certain amount of money for a specific purpose.
- 9. Budget Holder: The person in charge of preparing and managing part of the budget, such as a head of department.
- 10. Cost Centre: A unit or department where costs are recorded and controlled, even if it does not bring in revenue directly.
- 11. Responsibility Centre: A part of the organisation where a manager is responsible for meeting budget targets. This can include cost centres and profit centres.
- 12. Budget Manual: A written guide that explains how the budget is prepared and controlled. It usually includes the aims of budgeting, formats for preparing budgets, roles of budget holders, timetable for preparation, review and approval steps and rules for variance reporting
- 13. Budget Committee: A group of managers who plan, check, and approve the budget. The budget committee coordinate the budgeting process, review department budgets, solve conflicts between departments, approve or recommend the master budget, monitor progress and suggest changes.
  - Members of the committee often include CEO or managing director (chairperson), finance manager or accountant, department Heads (e.g., Sales, HR, Production) and budget officer (secretary).
- 14. Budget Period: The time for which a budget is prepared. It may be:
  - a. Short-term: monthly or quarterly
  - b. Medium-term: one year (most common)
  - c. Long-term: 3-5 years or more

The budget period depends on the type of business and its goals. For example, a shop may prepare monthly budgets during the Christmas season but quarterly budgets during the rest of the year.

## **Activity 6.9 Types of Budgets**

- 1. Your teacher will arrange you in to small groups of no more than five. In your groups, choose two or three different types of budget to research and deliver a presentation on.
- 2. For each of your chosen types of budgets, research the following:
  - a. It's features and how it is used
  - b. Advantages
  - c. Limitations
  - d. Terminology specific to that type of budget
- 3. You may use digital devices such as tablets of smartphones to support your research.
- 4. Deliver your presentation on your chosen types of budget to the rest of the class for discussion and feedback.

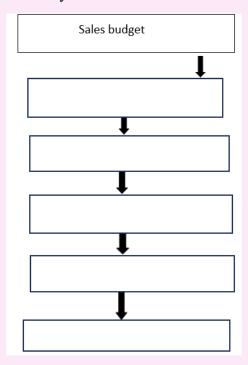
#### **Extension task**

Extend your understanding of budgets by evaluating their application in different organisational settings. Reflect on how their uses may differ between different sectors or types of organisations such as a government department, a cocoa bean processing company or a hospital.

Write a short report and share it with your teacher for feedback,

## **Activity 6.10 Master Budget**

1. Copy the diagram below in to your workbooks



- 2. Complete the flow chart to show each of the steps in the process of preparing a master budget.
- 3. Each of the steps have been jumbled and listed below use these to help you!

Production budget Rolling budget

Cash budget Direct labour budget

Basic budget Budgeted income statement

Budgeted balance sheet

4. Compare your flow chart with a colleague – do you agree? Seek clarification on the steps from your teacher as needed.

## **Activity 6.11 Budgeting Role Play**

- 1. Your teacher will arrange you in small groups of no more than five to take part in a role play exploring the steps in creating a budget.
- 2. You may find it useful to refer to the flow chart that you created in Activity 6.10 to support this activity.
- 3. Your teacher will present you with a scenario, for example a group of department heads are presenting to the budget committee, justifying their request and how it necessary in order for the organisation to achieve its wider goals.
- 4. Allocate roles amongst the group to be either a department head or member of the committee. You should aim to negotiate and agree outcomes for the represented departments.
- 5. As a group, reflect on the process of taking part in the role play. Has it helped you to understand the process of budget preparation and approval? Are there areas you would like to ask questions on?
- 6. Share your reflections as part of a wider class discussion reviewing the activity.

# ADVANTAGES, LIMITATIONS AND KEY ATTRIBUTES OF EFFECTIVE BUDGETS

## **Budgets**

Budgets provide many benefits to organisations. These benefits can be grouped into planning, coordination, resource allocation, control, communication, motivation, and decision-making.

## **Advantages of Budgets**

#### 1. Planning

- a. Helps organisations think ahead by setting goals.
- b. Helps identify possible problems like cash shortages or high expenses.

#### 2. Coordination

- a. Ensures departments work together towards one goal.
- b. Makes sure resources are shared properly.
- c. Connects departmental plans to the overall company plan.

#### 3. Resource Allocation

- a. Helps decide how to use limited resources wisely.
- b. Prevents overspending or waste.

#### 4. Performance Measurement and Control

- a. Provides a standard to measure actual results.
- b. Variance analysis shows differences between budgeted and actual results.

#### 5. Communication and Accountability

- a. Helps staff know the organisation's goals and their role.
- b. Encourages departments to stay within limits.
- 6. **Motivation:** If well-designed, budgets can encourage staff by setting targets and involving them in the process.
- 7. **Decision-Making:** Guides decisions on pricing, staffing, production, and investments.

## **Limitations of Budgets**

Budgets also have challenges. If poorly designed or used, they can be less effective. Some of the challenges of budgets are listed below.

- 1. Estimation Errors: Budgets are based on assumptions which may be wrong due to unexpected changes.
- 2. Rigidity
  - a. Fixed budgets may not adjust to changes in business.
  - b. May stop departments from being creative.
- 3. Time-Consuming and Costly: Preparing budgets can take a lot of time and resources.
- 4. Gaming the System
  - a. Departments may overstate costs or understate income to make targets easier.
  - b. May encourage short-term thinking over long-term value.
- 5. Discourages Initiative: Strict rules may stop workers from trying new opportunities.
- 6. Behavioural Issues
  - a. Unrealistic budgets can discourage workers.
  - b. Departments may fight over limited resources.

## **Key Attributes of Effective Budgets**

For a budget to work well, it must have certain qualities.

- 1. Realistic and Accurate: The budget should base on reliable data, past results, and current conditions.
- 2. Comprehensive: An effective budget must cover all areas: income, expenses, cash and investments.
- 3. Flexible: A good budget should allow changes when conditions change.
- 4. Clear and Understandable: A budget must be simple and easy for everyone to read.
- 5. Time-Bound: A budget should be prepared for a specific period (month, quarter, year).
- 6. Participative: A good budget should have inputs from different departments to increase commitment.
- 7. Linked to Organisational Goals: The budget must support the overall objectives of a business.
- 8. Monitored and Controlled: The implementation of a budget must be checked regularly, with variance analysis in order to make corrections.
- 9. Approved by Management: Final approval must come from senior managers or a budget committee.

## **Activity 6.12 Advantages and Limitations of Budgets**

- 1. Working in pairs or small groups, discuss at least four advantages and four limitations of budgets. Try and think about how they would be reflected in real life institutions.
- 2. Share your points with the nearest pair for further discussion.

### **Activity 6.13 Attributes of Effective Budgets**

- 1. Working in small groups of no more than five, discuss key attributes that make budgets effective, using real-world examples. For each attribute, think why it is important to a business's success.
- 2. Present your work on flip chart paper to the rest of the class for discussion and feedback.

### **Activity 6.14 Reflection**

- 1. Reflect on what you have learned this lesson and from listening to the presentations from your peers.
- 2. In your workbooks, note what you think the risks are of using poorly designed or rigid budgets. What might be the impact of this to an organisation?
- 3. You could develop your notes in to a short report and share this with your teacher for feedback.

# MEANING AND TYPES OF VARIANCES IN COST ACCOUNTING

## **Variance Analysis**

Variance analysis is a key tool in cost and management accounting that is used to assess the performance of an organisation by comparing actual results with budgeted or standard costs. It provides insights into why actual costs deviate from expected costs and helps management take corrective actions.

## **Meaning of Variance**

In cost accounting, a variance refers to the difference between a standard (planned or budgeted amount) and the actual amount incurred or realised. Variances can be either:

- 1. Favourable (F): when the result is better than planned (e.g. higher revenue or lower costs).
- 2. Unfavourable or Adverse (A): When the actual cost exceeds the standard cost or actual revenue is less than expected.

Variance analysis is mainly applied to:

- a. Cost elements (i.e. material, labour, overheads)
- b. Sales/revenue
- c. Operating performance

# **Importance of Variance Analysis for Management Control**

Management control refers to the process by which managers ensure that resources are obtained and used effectively and efficiently in the accomplishment of the organisation's objectives. It includes planning, monitoring, evaluating and correcting deviations from set targets.

To be able to effectively carry out these functions or processes to ensure the optimal use of resources, variance analysis plays a critical role in the broader framework of management control systems by helping organisations to monitor performance, enforce accountability, control costs, and make informed decisions.

The following can be identified as some of the reasons why variance analysis is important.

#### 1. Budgetary Control

Variance analysis compares actual results with budgeted or standard figures, enabling managers to determine whether financial targets are being met. It reveals deviations early and highlights cost overruns or underspends and this allows for realignment of operations to meet goals.

### 2. Performance Measurement and Appraisal

It helps in evaluating the performance of departments, teams and individuals. This encourages accountability by assigning responsibility for specific variances and provides a benchmark for rewarding efficient performance or investigating inefficiencies.

#### 3. Cost Control and Efficiency

Variance analysis makes it possible to identify areas of waste, inefficiencies and overspending thereby enabling management to implement cost-saving initiatives as well as encourages operational efficiency by promoting best practices and minimising wastage.

#### 4. Informed Decision-Making

It provides factual and timely insights that aid managerial decisions on pricing, production, sourcing and investment. In other words, variance analysis enables data-driven adjustments to strategy.

#### 5. Strategic Planning and Forecasting

It informs future budgets and forecasts based on current deviations and helps to anticipate future performance trends. Furthermore, it facilitates scenario planning (e.g., if costs continue to rise, how will profit be affected?).

#### 6. Internal Control and Risk Management

Variance acts as a financial control tool/indicator to detect fraud, errors and misappropriation of resources. This helps to strengthen internal checks and balances through routine monitoring of financial and operational metrics.

#### 7. Motivation and Behavioural Influence

When used appropriately, variance reporting can serve as a motivational tool. This is because employees may be incentivised to meet or exceed targets if performance is monitored and rewarded fairly. However, care should be taken not to use variances punitively, as this can demotivate staff.

### **Activity 6.14 Importance of Variance Analysis**

- 1. Take part in a discussion with the rest of your class to brainstorm the meaning of variance analysis. Alternatively, take five minutes to consider its meaning and write your own definition in your workbook.
- 2. Find a partner to work with to discuss the importance of variance analysis.
- 3. Share your answers with the larger class.

## **Types of Variances**

Variance analysis is categorised based on the cost elements or components being analysed. The major types of variances are:

#### 1. Material Cost Variance

Material variance arises when there are differences between the standard cost of materials and the actual cost incurred. Material cost variance measures the total impact of differences in both price and quantity.

Material cost variance is divided into material price variance and material usage (quantity) variance.

Formula for Material Cost Variance (MCV):

# $MCV = (Standard\ Quantity \times Standard\ Price) - (Actual\ Quantity \times Actual\ Price)$

#### a. Material Price Variance (MPV)

This occurs when paying more or less per unit of material than expected. Material price variance may be caused by change in supplier prices, poor bargaining and inflation. It measures the impact of paying more or less than expected for materials.

Formula for Material Price Variance:

 $MPV = (Standard Price - Actual Price) \times Actual Quantity$ 

#### b. Material Usage (Quantity) Variance (MUV)

This type of variance occurs when more or fewer materials than planned are used. It measures efficiency in using materials. Material usage variance is caused by waste, theft, poor quality materials, efficient or inefficient production.

Formula for Material Usage Variance:

MUV = (Standard Quantity – Actual Quantity) × Standard Price

#### 2. Labour Cost Variance

Labour cost variance measures the difference between what the labour (workers' wages) should have cost and what it actually costs. This helps managers know whether

labour was used efficiently and whether workers were paid at expected rates. Labour cost variance is divided into labour rate variance and labour efficiency variance.

Formula for Labour Cost Variance (LCV):

 $LCV = (Standard Hours \times Standard Rate) - (Actual Hours \times Actual Rate)$ 

#### a. Labour Rate Variance (LRV)

This happens when workers are paid higher or lower wages than expected. It Shows if workers were paid more or less than the standard rate. Labour rate variances are caused by wage increases, hiring more skilled/unskilled workers, overtime.

Formula for Labour Rate Variance (LRV):

LRV = (Standard Rate – Actual Rate) × Actual Hours

#### b. Labour Efficiency Variance (LEV)

This occurs when workers take more or less time to complete work. Labour efficiency variance indicates whether more or fewer hours were used than expected. Labour efficiency variances are caused by workers skills, motivation, machine breakdowns, better supervision or training.

Formula for Labour Efficiency Variance:

LEV = (Standard Hours - Actual Hours) × Standard Rate

#### 3. Overhead Cost Variance

Overhead cost variances happen when the actual overhead costs are different from the standard (planned) overhead costs. Overhead cost variance is grouped into variable overhead variance and fixed overhead variance.

#### a. Variable Overhead Variances

These are costs that change with the level of production, like electricity or indirect materials. This shows whether the business spent more or less on variable overhead than planned. Variable overhead cost variance is also divided into variable overhead efficiency variance and variable overhead expenditure variance.

Formula for Variable Overhead Cost Variance (VOCV):

VOCV = Standard Variable Overhead - Actual Variable Overhead

#### i. Variable Overhead Efficiency Variance

This checks if workers used more or fewer hours than expected. This variance is caused by low productivity, machine breakdowns, or better use of time and resources.

Formula for Variable Overhead Efficiency Variance:

(Standard Hours – Actual Hours) × Standard Variable Overhead Rate

### ii. Variable Overhead Expenditure Variance

This looks at the difference between the standard rate per hour and the actual rate paid. This variance occurs because of increase in electricity tariff, fuel price hikes, or unexpected overhead rate changes.

Formula for Variable Overhead Expenditure Variance:

(Standard Rate – Actual Rate) × Actual Hours

#### b. Fixed Overhead Variances

These are overhead costs that do not change with the level of production, like rent, insurance, or salaries of permanent staff. It compares the planned fixed overhead

with what was actually spent. Fixed overhead variances are also divided into fixed overhead volume variance and fixed overhead expenditure variance.

Formula for Fixed Overhead Cost Variances (FOCV):

FOCV = Standard Fixed Overhead - Actual Fixed Overhead

#### i. Fixed Overhead Volume Variance

This shows the effect of producing more or less than expected.

The variance may be caused by power outages, shortage of raw materials, machine breakdowns or higher-than-expected production.

Formula for Fixed Overhead Volume Variance:

(Budgeted Production – Actual Production) × Standard Fixed Overhead Rate

#### ii. Fixed Overhead Expenditure Variance

This is the difference between the budgeted and actual fixed overhead costs. This variance is caused by unexpected repairs, change in salaries or lower utility charges than planned.

Formula for Fixed Overhead Expenditure Variance:

Budgeted Fixed Overhead - Actual Fixed Overhead

#### 4. Sales Variances

Sales variances measure the deviation between actual and expected sales. Sales variances show whether a business made more or less sales revenue than expected. The variance is made up of sales price variance and sales volume variance.

Formula for Sales Value Variance:

Sales Value Variance = Actual Sales – Budgeted Sales

#### a. Sales Price Variance

This shows how selling at a higher or lower price than budgeted affected revenue. Sales price variance happens because of discounts given, changes in market prices or inflation.

Formula for Sales Price Variance:

Sales Price Variance = (Actual Price – Budgeted Price) × Actual Quantity Sold

#### b. Sales Volume Variance

This checks the effect of selling more or fewer units than planned. The causes of this variance include high or low demand, strong competition, strikes or poor distribution.

Formula for Sales Volume Variance:

Sales Volume Variance = (Actual Quantity – Budgeted Quantity) × Budgeted Price

## **General Classification of Variances**

Variances may also be classified as:

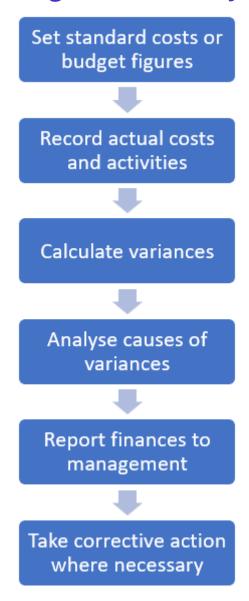
#### Controllable or Uncontrollable Variances

Controllable variances are within the influence of a manager (e.g. overtime, material wastage). On the other hand, uncontrollable variance is mainly caused by external factors and a manager in an organisation is likely to have limited control over it (e.g. inflation, exchange rates).

#### **Favourable or Adverse Variances**

Favourable variances have positive effect on profit while an adverse variance negatively affects profit.

## **Steps in Conducting Variance Analysis**



## **Importance of Variance Analysis for Management Control**

Management control refers to the process by which managers ensure that resources are obtained and used effectively and efficiently in the accomplishment of the organisation's objectives. It includes planning, monitoring, evaluating and correcting deviations from set targets. To be able to effectively carry out these functions or processes to ensure the optimal use of resources, variance analysis plays a critical role in the broader framework of management control systems by helping organisations to monitor performance, enforce accountability, control costs, and make informed decisions.

Some of the key reasons for carrying out variance analysis are listed below.

- 1. **Budgetary Control:** Variance analysis compares actual results with budgeted or standard figures, enabling managers to determine whether financial targets are being met. It reveals deviations early and highlights cost overruns or underspends and this allows for realignment of operations to meet goals.
- 2. **Performance Measurement and Appraisal:** It helps in evaluating the performance of departments, teams and individuals. This **e**ncourages accountability by assigning responsibility for specific variances and provides a benchmark for rewarding efficient performance or investigating inefficiencies.
- 3. **Cost Control and Efficiency:** Variance analysis makes it possible to identify areas of waste, inefficiencies and overspending thereby enabling management to implement cost-saving initiatives as well as encourages operational efficiency by promoting best practices and minimising wastage.
- 4. **Informs Decision-Making:** It provides factual and timely insights that aid managerial decisions on pricing, production, sourcing and investment. In other words, variance analysis enables data-driven adjustments to strategy.
- 5. **Strategic Planning and Forecasting:** It informs future budgets and forecasts based on current deviations and helps to anticipate future performance trends. Furthermore, it facilitates scenario planning (e.g., if costs continue to rise, how will profit be affected?).
- 6. **Internal Control and Risk Management:** Variance acts as a financial control tool/indicator to detect fraud, errors and misappropriation of resources. This helps to strengthen internal checks and balances through routine monitoring of financial and operational metrics.
- 7. **Motivation and Behavioural Influence:** When used appropriately, variance reporting can serve as a motivational tool. This is because employees may be incentivised to meet or exceed targets if performance is monitored and rewarded fairly. However, care should be taken not to use variances punitively, as this can demotivate staff.

## **Activity 6.16 Importance of Variance Analysis**

- 1. Find a partner to work with (try and pick someone you have not worked with recently). In your pairs, discuss why you think variance analysis is important. Try to list at least three reasons between you.
- 2. Record your answers in your workbooks and share your reasons with the rest of the class as part of a wider group discussion.
- 3. Add any extra justifications for variance analysis that arise from your peers to your notes.

## **Activity 6.17 Calculating Variance**

1. Your teacher will arrange you in small groups of no more than five. Your teacher will present you with a scenario from which you must calculate the required variances. Alternatively, choose either Option 1 or Option 2 below.

2. Present your working and answers on flip chart paper to the rest of the class for discussion and feedback.

#### **Option 1**: Materials Price Variance

A company producing school uniforms provides you with the following information:

- a. Standard Price (SP): The company *expected* to pay **GHS 25.00** per metre for its fabric.
- b. Actual Price (AP): Due to a sudden increase in cotton prices, the company *actually* paid **GHS 27.00** per metre.
- c. Actual Quantity (AQ): The company purchased and used **1,230 metres** of fabric.

Calculate the Materials Price Variance. State whether the variance is favourable or adverse.

#### **Option 2**: Labour Efficiency Variance

A company producing school uniforms provides you with the following information:

- a. Standard Rate (SR): The company expects to pay its workers **GHS 15.00** per hour.
- b. Standard Time: It *should* take **2 hours** to sew one complete uniform.
- c. Actual Production: In September, the workers produced **400** uniforms.
- d. Actual Hours (AH): The workers were paid for a total of **850 hours** worked.

Calculate the Labour Efficiency Variance. State whether the variance is favourable or adverse.

## **Activity 6.18 Types of Variances**

- 1. Working in small groups, discuss the causes of variances.
- 2. Your teacher will allocate you with a scenario, or you could use the one outlined below.
- 3. Agree the roles for each member of the group and debate the different types of variance, their causes and potential corrective action.
- 4. Observing members of the group should ask questions for clarification.

#### Example Scenario: The "Kente Krunch" Biscuit Problem

Company: Royal Tastemakers Ltd. (Producers of biscuits and snacks in Tema) Product: The new "Kente Krunch" biscuit, launched last quarter. The Meeting: An emergency performance review called by the accountant.

Roles - Assign these across your group. Other members could observe and ask questions at the end of the role play.

- a. Accountant: You called this meeting. You are worried about costs. Your job is to present the facts and demand a plan to fix the numbers.
- b. The Production Manager: You are in charge of the factory, the workers, and the ingredients. You are proud of the biscuit's quality but are feeling stressed.
- c. The Sales Manager: You are responsible for marketing and getting the biscuits into shops. You are under pressure to meet high sales targets.

The Problem: The Accountant's Report

The accountant presents the following information and wants to discuss the causes of adverse variance.

- a. Materials Price Variance (Flour): We paid 15% *more* per bag of flour than we budgeted for. This cost us thousands of cedis.
- b. Materials Quantity Variance (Butter): We used 10% *more* butter per batch of biscuits than the standard recipe requires.
- c. Labour Efficiency Variance: Our factory workers took 600 *more* hours to produce the biscuits than we planned for.
- d. Sales Volume Variance: We sold 5,000 fewer boxes of biscuits than our target.

In summary, the accountant thinks the company is spending too much to make the biscuits, and aren't selling enough so losing money. They want to know *why* this is happening and what can be done about it.

#### **Activity Instructions**

- a. Accountant: Start the meeting by presenting the four problems above.
- b. Production & Sales: You must debate and explain *why* these variances happened *from your perspective*.
  - i. Hint for Production: Was the flour (problem 1) more expensive because it was higher quality? Did you have to use more butter (problem 2) because the Sales team demanded a "richer taste"? Were your workers slow (problem 3) because the machines are old or the sales orders were rushed?
  - *ii.* Hint for Sales: Were sales low (problem 4) because David's team couldn't produce them fast enough (problem 3)? Or are customers complaining that the biscuit is now too expensive because of the high-cost ingredients (problem 1 & 2)?
- c. All Roles: Conclude by agreeing on at least two actions to take next quarter to solve these problems.

## **EXTENDED READING**

- Dadzie Barnabas (2013) Costing for "U", 5th Edition. Obuasi: For U Printing House (Pages 174-251)
- Eric Oduro (2012), Principles of Cost Accounting for Senior High Schools 4th Edition, Terror Publications. (Pages 205 330)
- Any Cost Accounting book approved by NaCCA

## **REVIEW QUESTIONS 6**

- **1.** Compare and contrast the usefulness of marginal and absorption costing approaches.
- 2. Analyse the importance of variable costs in marginal costing and their impact on profitability.
- 3. Define Activity Based Costing and explain five reasons why it is important.
- **4.** What key conditions need to hold true for break-even analysis to work accurately?
- **5.** As a financial management consultant, describe to a client how to practically setup and run a system for budgetary control.
- **6.** What are four key goals that organisations aim to achieve through effective budget management? For each goal, describe how they help improve financial performance.
  - a. Distinguish between labour efficiency variance and labour rate variance.
  - b. Assume a company has reported a large unfavourable labour efficiency variance for three months in a row. Analyse two likely causes of this variance and suggest two actions.

## **BIBLIOGRAPHY**

- ACCA Manual. (2005). Accounting Framework. AT Foulk Lynch.
- Burns, J., Quinn, M., Warren, L. & Oliveira, J. (2013) *Management Accounting*. Maidenhead: McGraw Hill Education
- Dadzie B. (2024) Costing fior "U", 13th Edition. Obuasi: For U Printing House.
- Drury, C. (2015) *Cost and Management Accounting: An Introduction*. 8th Edition. London: Cengage Learning EMEA.
- ICAG (2019), Study Text Financial Accounting.
- ICAG (2019), Study Text Introduction to Management Accounting
- ICAI, Study Text Introduction to Cost and Management Accounting, India
- NaCCa. (2023). Business Accounting Curriculum.
- Oduro E. (2011), Financial Accounting fior Senior High Schools and Tertiary Institutions in West Afirica (3rd Edition), Accra: Terror Publications.
- Oduro E. (2011), Financial Accounting for Senior High Schools and Tertiary Institutions in West Afirica (3rd Edition), Accra: Terror Publications.
- Oduro E. (2012), *Principles of Cost Accounting for Senior High Schools*, 4th Edition. Accra: Terror Publications.
- Oduro, E. (2001). Principles of Financial Accounting for Senior High Schools (3rd ed.). Terror Publications.
- Wood, F. (1993). Business Accounting 1 (6th ed.). Pitman Publishing.

## **GLOSSARY**

Accounting Equation	A formula showing that $Assets = Liabilities + Equity$ .
8 -1	

**Architect** A professional who oversees design, progress, and contract

compliance.

**Assets** Things owned by the business that hold value.

Balance Sheet Shows a business's position regarding assets, liabilities, and

equity.

Bank Overdraft

A facility allowing withdrawals beyond available balance, up to

a limit.

**Bookkeeping** Systematic recording and organising of financial transactions.

**Break-Even Point** Sales level where Total Revenue = Total Costs (no profit or

loss).

**Budget** A financial plan estimating income and expenditures for a

period.

Budgetary Control Comparing actual results with budgets and taking corrective

action.

Carriage Inwards

Transport cost to bring goods to business premises; a direct

cost.

Carriage Outwards

Transport cost to deliver goods to customers; an indirect

expense.

**Cash Flow** Movement of cash into and out of an organisation over time.

**Cash Flow Statement** Tracks cash movement during an accounting period. Cashbook Records receipts and payments of cash within a business.

Person/entity hiring the contractor and making staged

payments.

Contractor Individual/organisation executing a contract or project.

Contribution Sales Revenue minus Variable Costs.

Cost Monetary value of resources used to produce goods/services. Records daily financial transactions in chronological order. Daybook Long-term debt instruments issued to borrow money from the **Debentures** 

public.

**Double Entry System** Records each transaction twice: debit and credit.

**Drawings** Money/assets withdrawn by the owner for personal use.

Contract provisions allowing price adjustments due to cost **Escalation Clauses** 

changes.

Costs incurred in earning revenue (e.g., rent, salaries, **Expenses** 

materials).

Formal record of financial activities (balance sheet, income, **Financial Statement** 

cash flow).

Estimating future financial outcomes using data and **Forecasting** 

assumptions.

Master account holding all transactions within an accounting **General Ledger** 

period.

**Gross Profit** Net Sales minus Cost of Goods Sold (COGS).

Income Total money earned from operations and other sources. **Income Statement** Revenue minus expenses during an accounting period.

**Indirect Costs** Costs not directly traceable to a product/service but necessary.

Goods/materials held for resale, including raw and finished

goods.

Ledger Record of detailed financial transactions. Liabilities Debts or obligations owed by the business.

Combines all functional budgets for the entire organisation. **Master Budget Monetary** Pertaining to money; financial aspects of costs and revenues. Profit after all expenses, interest, and taxes are deducted. **Net Profit Operating Costing** Costing method for services (e.g., transport, healthcare).

**Overheads** Indirect production costs (e.g., rent, utilities).

Owners' Equity/

**Inventory** 

Contractee

Resources supplied by the owner to the business. **Capital** 

**Patents** Legal rights granting exclusive control over inventions. **Payables** Amounts owed to suppliers/creditors; short-term liabilities.

**Prime Cost** Direct materials + direct labour + direct expenses. **Profitability** Measure of revenue exceeding total costs in a project.

**Receivables** Amounts owed by customers for credit sales; short-term assets.

Remuneration Payments to employees (wages, salaries, bonuses). ResourcesMaterials or capabilities used to achieve business goals.Retention MoneyPayment withheld until project completion and approval.RoyaltiesPayments for using intellectual property (e.g., patents).SalesmanPerson who sells products/services and generates revenue.Scrap ValueEstimated value of an asset at the end of its useful life.

**Source Document** Original record of a financial transaction (e.g., invoice, receipt).

The Double-Entry

Principle Every transaction is recorded in two accounts: debit and credit.

Trademarks Protected symbols/names/logos distinguishing products/

services.

TransactionExchange of goods, services, or funds between parties.Trial BalanceStatement showing closing balances of all ledger accounts.ValuationDetermining the value of an asset, company, or investment.

## **ACKNOWLEDGEMENTS**













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This book is intended to be used for the Year One Accounting Senior High School (SHS) Curriculum. It contains information and activities to support teachers to deliver the curriculum in the classroom as well as additional exercises to support learners' self-study and revision. Learners can use the review questions to assess their understanding and explore concepts and additional content in their own time using the extended reading list provided.

All materials can be accessed electronically from the Ministry of Education's Curriculum Microsite.



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