FINANCIAL REPORTING SYSTEM

Roles of financial reporting

- **Financial reporting** refers to the way companies show their financial performance to investors, creditors, and other interested parties by preparing and presenting financial statements. The role of financial reporting is described by the International Accounting Standards Board (IASB) in its "Framework for the Preparation and Presentation of Financial Statements":
- "The **objective of financial statements** is to provide information about the financial position, performance and changes in financial position of an entity that is useful to a wide range of users in making economic decisions."

Role of key financial statements

- **Income statement (Profit and Loss Account)** reports on the financial performance of the firm over a period of time. The elements of the income statement include revenues, expenses, and gains and losses.
- ***Revenues*** are inflows from deliveries or producing goods, rendering services, or other activities that constitute the entity's ongoing major or central operations.
- ***Expenses*** are outflows from deliveries or producing goods or services that constitute the entity's ongoing major or central operations.
- ***Gains and losses*** are increases and decreases in equity, or net assets from peripheral or incidental transactions.

Role of key financial statements

- **Balance sheet** reports the firms financial position at a point in time. The balance sheet consists of 3 elements:
- ***Assets***

are probable current and future economic benefits obtained or controlled by a particular entity as a result of past transactions or elements. Assets are a firm's economic resources.

- ***Liabilities***

are probable future economic costs. They arise from present obligations of a particular entity to transfer assets or provide services to other entities in the future as a result or past transactions or events.

- ***Owners' equity***

is the residual interest in the net assets of an entity that remains after deducting its liabilities.

Role of key financial statements

- Transactions are measured so that the fundamental accounting equation holds:

assets = liabilities + owners' equity

- Owners' equity consists of capital contributed by the firm's owners and the cumulative earnings the firm has retained. With that in mind, we can state the expanded accounting equation:

assets = liabilities + contributed capital + ending retained earnings

Or, equivalently,

$$\begin{aligned}\text{Assets} = {} & \text{Liabilities} + \text{Contributed capital} \\ & + \text{Beginning retained earnings} + \text{Revenue} \\ & - \text{Expenses} - \text{Dividends}\end{aligned}$$

Role of key financial statements

- **Cash flow statement** reports the company's cash receipts and payments. These cash flows are classified as follows:
- ***Operating cash flows*** include the cash effects of transactions that involve the normal business of the firm.
- ***Investing cash flows*** are those resulting from the acquisition or sale of property, plant, and equipment, of a subsidiary or segment, of securities, and of investments in other firms.
- ***Financing cash flows*** are those resulting from issuance or retirement of the firm's debt and equity securities, and include dividends paid to stockholders.
- **Statement of changes in owners' equity** reports the amounts and sources of changes in equity investors' investment in the firm over a period of time.

Financial statement notes and supplementary information

- **Financial statement notes (footnotes)** include disclosures that provide further details about the information summarized in the financial statements. Footnotes allow users to improve their assessments of the amount, timing, and uncertainty of the estimates reported in the financial statements.

Footnotes:

- Provide information about accounting methods, assumptions, and estimates used by management.
- Are audited, whereas other disclosures, such as supplementary schedules, are not audited.
- Provide additional information on items such as business acquisitions or disposals, legal actions, employee benefit plans, contingencies and commitments, significant customers, sales to related parties, and segments of the firm.

Financial statement notes and supplementary information

Supplementary schedules contain additional information. Examples of such disclosures include:

- Operating income or sales by region or business segment.
- Information about hedging activities and financial instruments.

Management's Discussion and Analysis (MD&A) provides an assessment of the financial performance and condition of a company from the perspective of its management. For example, it may focus on:

- Results from operations, with a discussion of trends in sales and expenses.
- Capital resources and liquidity with a discussion of trends in cash flows.
- General business overview based on known trends.

Objective of audits of financial statements

Audit is an independent review of an entity's financial statements. Public

accountants conduct audits and examine the financial reports and supporting records.

The objective of an audit is to enable the auditor to provide an opinion on the fairness and reliability of the financial statements.

- The independent certified public accounting firm employed by the board of directors is responsible for seeing that the financial statements conform to the applicable accounting standards. The auditor examines the company's accounting and internal control systems, confirms assets and liabilities, and generally tries to determine that there are no material errors in the financial statements. The auditor's report is an important source of information.

Objective of audits of financial statements

- The standard auditor's opinion contains 3 parts and states that:

1. Whereas the financial statements are prepared by management and are its responsibility, the auditor has performed an independent review.
2. Generally accepted auditing standards were followed, thus providing *reasonable assurance* that the financial statements contain no material errors.
3. The auditor is satisfied that the statements were prepared in accordance with accepted accounting principles, and that the principles chosen and estimates made are reasonable. The auditor's report must also contain additional explanation when accounting methods have not been used consistently between periods.

Objective of audits of financial statements

- An *unqualified opinion* indicates that the auditor believes the statements are free from material omissions and errors.
- If the statements make any exceptions to the accounting principles, the auditor may issue a *qualified opinion* and explain these exceptions in the audit report.
- The auditor can issue an *adverse opinion* if the statements are not presented fairly or are materially nonconforming with accounting standards.

General requirements for financial statements

International Accounting Standard (IAS) No.1 defines which financial statements are required and how they must be presented. The **required financial statements** are:

- Balance sheet.
- Income statement.
- Cash flow statement.
- Statement of changes in owners' equity.
- Explanatory notes, including a summary of accounting policies.

General requirements for financial statements

- ***Fair presentation*** as faithfully representing the effects of the entity's transactions and events according to the standards for recognizing assets, liabilities, revenues and expenses.
- ***Going concern basis****,* meaning the financial statements are based on the assumption that the firm will continue to exist unless its management intends to (or must) liquidate it.
- ***Accrual basis of accounting*** is used to prepare the financial statements other than the statement of cash flows.
- ***Consistency*** between periods in how items are presented and classified, with prior period amounts disclosed for comparison.
- ***Materiality,*** meaning the financial statements should be free of misstatements or omissions that could influence the decisions of users of financial statements.

General requirements for financial statements

- **PRINCIPLES OF PRESENTATION**:
- 1)**Aggregation** of similar items and **separation** of dissimilar items (i.e. each material class of similar items is presented separately. Dissimilar items are presented separately unless they are immaterial);
- 2) **No offsetting** of assets against liabilities or income against expenses unless a specific standard permits or requires it;
- 3) **Classified balance sheet**
- BS should distinguish between current and non-current assets and liabilities, unless a presentation based on liquidity provides more relevant and reliable information (e.g. in case of a bank or similar financial institution);
- 4) **Minimum information** is required on face of each financial statement and in the notes.
- (e.g. face of balance sheet must show specific items such as cash and cash equivalents, PP&E, and Inventory; items listed on face of IS must include revenues, profit or loss, tax expense, and finance costs among others.

Qualitative characteristics of financial statements:

- Financial statements should be:
- 1)understandable;
- 2)relevant;
- 3)reliable;
- 4)comparable.

Understandability:

- Users with basic knowledge of business and accounting and who
- make reasonable effort to study financial statements should be able to readily understand information that statements present.

Relevance:

- FSs are relevant if information in them can influence users' economic decisions or affect users' evaluations of past events or forecasts of future events. To be relevant, info should be timely and sufficiently detailed.

Qualitative characteristics of financial statements:

Reliability:

- Information is reliable if it reflects economic reality, is unbiased, and free of material errors.
- Specific factors that support reliability include:
- 1) **faithful representation** of transactions and events;
- 2) **substance over form**
- (i.e. information presenting not only legal form of transaction or event, but its economic reality);
- 3) **neutrality** (i.e. information must be free from bias);
- 4) **prudence** (i.e. inclusion of a degree of caution and conservatism;
- 5) **completeness** within the limits of cost and materiality.

Comparability:

- FS presentation should be consistent among firms and across time periods (i.e. so that users could make significant comparisons over time and between entities)

Business Activities for Investment Advisers, Ltd.

- **31 December 2005**

File documents with regulatory authorities to establish a separate legal entity. Initially capitalize the company through deposit of $150,000 from the three owners.

Financial Reporting Mechanics

31 December 2005

	Business Activity	Accounting Treatment
1	File documents with regulatory authorities to establish a separate legal entity. Initially capitalize the company through deposit of $150,000 from the three owners.	**Cash** [A] is increased by $150,000, and **contributed capital** [E][6] is increased by $150,000.

Investment Advisers, Ltd.
Balance Sheet

31 December 2005	
Assets	
Cash	$150,000
Total assets	$150,000
Liabilities and owners' equity	
Contributed capital	$150,000
Total liabilities and owners' equity	$150,000

Financial Reporting Mechanics

- **2 January 2006**

Set up a $100,000 investment account and purchase a portfolio of equities and fixed-income securities.

- **2 January 3006**

Pay $3,000 to landlord for office/warehouse. $2,000 represents a refundable deposit, and $1,000 represents the first month's rent.

Financial Reporting Mechanics

2 January 2006

	Business Activity	Accounting Treatment
2	Set up a $100,000 investment account and purchase a portfolio of equities and fixed-income securities.	**Investments** [A] were increased by $100,000, and **cash** [A] was decreased by $100,000.

2 January 2006

	Business Activity	Accounting Treatment
3	Pay $3,000 to landlord for office/warehouse. $2,000 represents a refundable deposit, and $1,000 represents the first month's rent.	**Cash** [A] was decreased by $3,000, **deposits** [A] were increased by $2,000, and **prepaid rent** [A] was increased by $1,000.

Investment Advisers, Ltd.
Balance Sheet
As of 2 January 2006

Assets	
Cash	$ 47,000
Investments	100,000
Prepaid rent	1,000
Deposits	2,000
Total assets	$150,000
Liabilities and owners' equity	
Contributed capital	$150,000
Total liabilities and owners' equity	$150,000

Financial Reporting Mechanics

- **3 January 2006**

Purchase office equipment for $6,000 in cash. The equipment has an estimated life of 2 years with no salvage value.

- **3 January 2006**

Receive $1,200 cash for a one - year subscription to the monthly newsletter.

Financial Reporting Mechanics

3 January 2006

	Business Activity	Accounting Treatment
4	Purchase office equipment for $6,000 in cash. The equipment has an estimated life of two years with no salvage value.	**Cash** [A] was decreased by $6,000, and **office equipment** [A] was increased by $6,000.

3 January 2006

	Business Activity	Accounting Treatment
5	Receive $1,200 cash for a one-year subscription to the monthly newsletter.	**Cash** [A] was increased by $1,200, and **unearned fees** [L] was increased by $1,200.

Financial Reporting Mechanics

Investment Advisers, Ltd.
Balance Sheet
As of 3 January 2006

Assets	
Cash	$ 42,200
Investments	100,000
Prepaid rent	1,000
Deposits	2,000
Office equipment	6,000
Total assets	$151,200
Liabilities and owners' equity	
Liabilities	
Unearned fees	$ 1,200
Equity	
Contributed capital	150,000
Total liabilities and owners' equity	$151,200

Financial Reporting Mechanics

- **10 January 2006**

Purchase and receive 500 books at a cost of $20 per book for a total of $10,000. Invoice terms are that payment from IAL is due in 30 days. No cash changes hands. These books are intended for resale.

- **10 January 2006**

Spend $600 on newspaper and trade magazine advertising for the month.

Financial Reporting Mechanics

10 January 2006

	Business Activity	Accounting Treatment
6	Purchase and receive 500 books at a cost of $20 per book for a total of $10,000. Invoice terms are that payment from IAL is due in 30 days. No cash changes hands. These books are intended for resale.	**Inventory** [A] is increased by $10,000, and **accounts payable** [L] is increased by $10,000.

10 January 2006

	Business Activity	Accounting Treatment
7	Spend $600 on newspaper and trade magazine advertising for the month.	**Cash** [A] was decreased by $600, and **advertising expense** [X] was increased by $600.

Investment Advisers, Ltd.
Income Statement
For the Period 1 January through 10 January 2006

Total revenue		$ 0
Expenses		
Advertising	$ 600	
Total expense		600
Net income (loss)		$ (600)

Financial Reporting Mechanics

Investment Advisers, Ltd.
Balance Sheet
As of 10 January 2006

Assets	
Cash	$ 41,600
Investments	100,000
Inventory	10,000
Prepaid rent	1,000
Deposits	2,000
Office equipment	6,000
Total assets	$160,600
Liabilities and owners' equity	
Liabilities	
Accounts payable	$ 10,000
Unearned fees	1,200
Total liabilities	11,200
Equity	
Contributed capital	150,000
Retained earnings	(600)
Total equity	149,400
Total liabilities and owners' equity	$160,600

Financial Reporting Mechanics

- **15 January 2006**

Borrow $12,000 from a bank for working capital. Interest is payable annually at 10%. The principal is due in 2 years.

- **15 January 2006**

Ship first order to a customer consisting of 5 books at $25 per book. Invoice terms are that payment is due in 30 days. No cash changes hands.

- **15 January 2006**

Sell for cash 10 books at $25 per book at an investment conference.

Financial Reporting Mechanics

15 January 2006

	Business Activity	Accounting Treatment
8	Borrow $12,000 from a bank for working capital. Interest is payable annually at 10 percent. The principal is due in two years.	**Cash** [A] is increased by $12,000, and **bank debt** [L] is increased by $12,000.

15 January 2006

	Business Activity	Accounting Treatment
9	Ship first order to a customer consisting of five books at $25 per book. Invoice terms are that payment is due in 30 days. No cash changes hands.	**Accounts receivable** [A] increased by $125, and **revenue** [R] increased by $125. Additionally, **inventory** [A] decreased by $100, and **cost of goods sold** [X] increased by $100.

15 January 2006

	Business Activity	Accounting Treatment
10	Sell for cash 10 books at $25 per book at an investment conference.	**Cash** [A] is increased by $250, and **revenue** [R] is increased by $250. Additionally, **inventory** [A] is decreased by $200, and **cost of goods sold** [X] is increased by $200.

Financial Reporting Mechanics

Investment Advisers, Ltd. Income Statement For the Period 1 January through 15 January 2006		
Total revenue		$ 375
Expenses		
Cost of goods sold	$300	
Advertising	600	
Total expenses		900
Net income (loss)		$(525)

Investment Advisers, Ltd. Balance Sheet As of 15 January 2006	
Assets	
Cash	$ 53,850
Accounts receivable	125
Investments	100,000
Inventory	9,700
Prepaid rent	1,000
Deposits	2,000
Office equipment	6,000
Total assets	$172,675

Financial Reporting Mechanics

Investment Advisers, Ltd.
Balance Sheet
As of 15 January 2006 (*Continued*)

Liabilities and owners' equity	
Liabilities	
Accounts payable	$ 10,000
Unearned fees	1,200
Bank debt	12,000
Total liabilities	23,200
Equity	
Contributed capital	150,000
Retained earnings	(525)
Total equity	149,475
Total liabilities and owners' equity	$172,675

Financial Reporting Mechanics

- **30 January 2006**

Hire a part-time clerk. The clerk is hired through an agency that also handles all payroll taxes. The company is to pay $15 per hour to the agency. The clerk works six hours prior to 31 January, but no cash will be paid until February.

Financial Reporting Mechanics

	Business Activity	Accounting Treatment
11	Hire a part-time clerk. The clerk is hired through an agency that also handles all payroll taxes. The company is to pay $15 per hour to the agency. The clerk works six hours prior to 31 January, but no cash will be paid until February.	The company owes $90 for wages at month end. Under accrual accounting, expenses are recorded when incurred, not when paid. **Accrued wages [L]** is increased by $90, and **payroll expense [X]** is increased by $90. The accrued wage liability will be eliminated when the wages are paid.

Financial Reporting Mechanics

- **31 January 2006**

Mail out the first month's newsletter to customer. This subscription had been sold on 3 January.

- **31 January 2006**

Review of the investment portfolio shows that $100 of interest income was earned and the market value of the portfolio has increased by $2,000. The balance in the investment account is now $102,100.

The securities are classified as "trading" securities.

Financial Reporting Mechanics

	Business Activity	Accounting Treatment
12	Mail out the first month's newsletter to customer. This subscription had been sold on 3 January.	One month (or 1/12) of the $1,200 subscription has been satisfied, so $100 can be recognized as revenue. **Unearned fees** [L] is decreased by $100, and **fee revenue** [R] is increased by $100.
13	Review of the investment portfolio shows that $100 of interest income was earned and the market value of the portfolio has increased by $2,000. The balance in the investment account is now $102,100. The securities are classified as "trading" securities.	**Interest income** [R] is increased by $100, and the **investments** account [A] is increased by $100. The $2,000 increase in the value of the portfolio represents unrealized gains that are part of income for traded securities. The **investments** account [A] is increased by $2,000, and **unrealized gains** [R] is increased by $2,000.

Financial Reporting Mechanics

Investment Advisers, Ltd.
Income Statement
For the Period 1 January through 31 January 2006

Revenues	
Fee revenue	$ 100
Book sales	375
Investment income	2,100
Total revenues	$2,575
Expenses	
Cost of goods sold	$ 300
Advertising	600
Wage	90
Rent	1,000
Depreciation	250
Interest	50
Total expenses	2,290
Net income (loss)	$ 285

Financial Reporting Mechanics

Investment Advisers, Ltd.
Balance Sheet
As of 31 January 2006

Assets	
Cash	$ 53,850
Accounts receivable	125
Investments	102,100
Inventory	9,700
Prepaid rent	0
Office equipment, net	5,750
Deposits	2,000
Total assets	$173,525
Liabilities and owners' equity	
Liabilities	
Accounts payable	$ 10,000
Accrued wages	90
Interest payable	50
Unearned fees	1,100
Bank debt	12,000
Total liabilities	23,240
Equity	
Contributed capital	150,000
Retained earnings	285
Total equity	150,285
Total liabilities and owners' equity	$173,525

Financial Reporting Mechanics

Items 3a, 4a, and 8a reflect adjustments relating to items 3, 4, and 8

3a	In item 3, $3,000 was paid to the landlord for office/warehouse, including a $2,000 refundable deposit and $1,000 for the first month's rent. Now, the first month has ended, so this rent has become a cost of doing business.	To reflect the full amount of the first month's rent as a cost of doing business, **prepaid rent [A]** is decreased by $1,000, and **rent expense [X]** is increased by $1,000.
4a	In item 4, office equipment was purchased for $6,000 in cash. The equipment has an estimated life of two years with no salvage value. Now, one month (or 1/24) of the useful life of the equipment has ended, so a portion of the equipment cost has become a cost of doing business.	A portion (1/24) of the total $6,000 cost of the office equipment is allocated to the current period's cost of doing business. **Depreciation expense [X]** is increased by $250, and **accumulated depreciation [A]** (a contra asset account) is increased by $250. Accumulated depreciation is a contra asset account to office equipment.
8a	The company borrowed $12,000 from a bank on 15 January, with interest payable annually at 10 percent and the principal due in two years. Now, one-half of one month has passed since the borrowing.	One-half of one month of interest expense has become a cost of doing business. $12,000 × 10% = $1,200 of annual interest, equivalent to $100 per month or $50 for one-half month. **Interest expense [X]** is increased by $50, and **interest payable [L]** is increased by $50.

Income Statement

- Income statement presents information on the financial results of a company's business activities over a period of time. The income statement communicates how much revenue the company generated during a period and what costs it incurred in connection with generating that revenue.

The basic equation underlying the income statement is:

Revenue - Expense = Net income

Income Statement

EXHIBIT 4-1 Groupe Danone: Consolidated Statements of Income (€ millions)

	Year ended 31 December		
	2002	2003	2004
Net sales	€13,555	€13,131	€13,700
Cost of goods sold	(6,442)	(5,983)	(6,369)
Selling expenses	(4,170)	(4,176)	(4,294)
General and administrative expenses	(964)	(977)	(997)
Research and development expenses	(133)	(130)	(131)
Other (expense) income	(256)	(261)	(204)
Operating income	1,590	1,604	1,705
Nonrecurring items	458	(60)	(105)
Interest expense, net	(110)	(70)	(73)
Income before provision for income taxes and minority interests	1,938	1,474	1,527
Provision for income taxes	(490)	(488)	(457)
Income before minority interests	1,448	986	1,070
Minority interests	(182)	(184)	(189)
Share in net income of affiliates	17	37	(564)
Net income	€1,283	€839	€317

Income Statement

EXHIBIT 4-2 Kraft Foods and Subsidiaries: Consolidated Statements of Earnings ($ millions except per-share data)

	Year Ended 31 December		
	2004	2003	2002
Net revenues	$32,168	$30,498	$29,248
Cost of sales	20,281	18,531	17,463
Gross profit	11,887	11,967	11,785
Marketing, administration, and research costs	6,658	6,136	5,644
Integration costs and a loss on sale of a food factory		(13)	111
Asset impairment and exit costs	603	6	142
Losses (gains) on sales of businesses	3	(31)	(80)
Amortization of intangibles	11	9	7
Operating income	4,612	5,860	5,961
Interest and other debt expense, net	666	665	847
Earnings from continuing operations before income taxes and minority interest	3,946	5,195	5,114
Provision for income taxes	1,274	1,812	1,813
Earnings from continuing operations before minority interest	2,672	3,383	3,301
Minority interest in earnings from continuing operations, net	3	4	4
Earnings from continuing operations	2,669	3,379	3,297
(Loss) earnings from discontinued operations, net of income taxes	(4)	97	97
Net earnings	$2,665	$3,476	$3,394

Revenue Recognition

- A fundamental principle of accrual accounting is that revenue is recognized when it is earned, so the company's financial records reflect the sale when it is made and a related accounts receivable is created. Later, when cash changes hands, the company's financial records simply reflect that cash has been received to settle an account receivable.

- Relation of revenue to cash collected from customers:

Total revenue recorded in given fiscal year = cash collected from customers + increase in net A/R - increase in unearned revenue

Revenue Recognition

International Accounting Standards Board (IASB) provides that revenue for the sale of goods is to be recognized (reported on the income statement) when the following conditions are satisfied:

- The entity has transferred to the buyer the significant risks and rewards of ownership of the goods.
- The entity retains neither continuing managerial involvement to the degree usually associated with ownership nor effective control over the goods sold.
- The amount of revenue can be measured reliably.
- It is probable that the economic benefits associated with the transaction will flow to the entity.
- The costs incurred or to be incurred in respect of the transaction can be measured reliably.

Companies must disclose their revenue recognition policies in the footnotes to their financial statements.

Expense Recognition

Under the IASB Framework, **expenses** are “ decreases in economic benefits during the accounting period in the form of outflows or depletions of assets or incurrences of liabilities that result in decreases in equity, other than those relating to distributions to equity participants.

- In general, a company recognizes expenses in the period that it consumes (i.e., uses up) the economic benefits associated with the expenditure, or loses some previously recognized economic benefit.
- A general principle of expense recognition is the **matching principle,** also known as the “ matching of costs with revenues. ” Under the matching principle, a company directly matches some expenses (e.g., cost of goods sold) with associated revenues.
- The matching principle requires that the company match the cost of goods sold with the revenues of the period.

Expense Recognition

- **Period costs** , expenditures that less directly match the timing of revenues, are reflected in the period when a company makes the expenditure or incurs the liability to pay.
- Administrative expenses are an example of period costs. Other expenditures that also less directly match the timing of revenues relate more directly to future expected benefits; in this case, the expenditures are allocated systematically with the passage of time. An example is depreciation expense.

Inventory Accounting Methods

Three methods of inventory accounting are:

First In, First Out (FIFO):

- The cost of inventory first acquired (beginning inventory and early purchases) is assigned to the cost of goods sold for the period.
- The cost of the most recent purchases is assigned to ending inventory.

Last In, First Out (LIFO):

- The cost of inventory most recently purchased is assigned to the cost of goods sold for the period.
- The costs of beginning inventory and earlier purchases go to ending inventory.
- Note that in the U.S., companies using LIFO for tax purposes must also use LIFO in their financial statements.

Average cost:

Under the average cost method, cost per unit is calculated by dividing cost of goods available by total units available. This average cost is used to determine both cost of goods sold and ending inventory.

Inventory Accounting Methods

Method	*Assumption*	*Cost of goods sold consists of...*	*Ending inventory consists of...*
FIFO	The items first purchased are the first to be sold.	first purchased	most recent purchases
LIFO	The items last purchased are the first to be sold.	last purchased	earliest purchases
Weighted average cost	Items sold are a mix of purchases.	average cost of all items	average cost of all items

Inventory Accounting Methods

Example: Inventory costing

Use the inventory data in Figure 2 to calculate the cost of goods sold and ending inventory under each of the three methods.

Figure 2: Inventory Data

January 1 (beginning inventory)	2 units @ $2 per unit =	$4
January 7 purchase	3 units @ $3 per unit =	9
January 19 purchase	5 units @ $5 per unit =	25
Cost of goods available	10 units	$38
Units sold during January		7 units

Inventory Accounting Methods

Answer:

FIFO cost of goods sold (value the seven units sold at unit cost of first units purchased). Start with the earliest units purchased and work down as illustrated in Figure 3.

Figure 3: FIFO COGS Calculation

From beginning inventory	2 units @ $2 per unit =	$4
From first purchase	3 units @ $3 per unit =	9
From second purchase	2 units @ $5 per unit =	10
FIFO cost of goods sold	7 units	$23
Ending inventory	3 units @$5 =	$15

Inventory Accounting Methods

LIFO cost of goods sold (value the seven units sold at unit cost of last units purchased). Start with the most recently purchased units and work up as illustrated in Figure 4.

Figure 4: LIFO COGS Calculation

From second purchase	5 units @ $5 per unit	$25
From first purchase	2 units @ $3 per unit	6
LIFO cost of goods sold	7 units	$31
Ending inventory	2@$2 + 1@$3	$7

Inventory Accounting Methods

Average cost of goods sold (value the seven units sold at the average unit cost of goods available).

Figure 5: Weighted Average COGS Calculation

Average unit cost	$38 / 10	$3.80 per unit
Weighted average cost of goods sold	7 units @ $3.80 per unit	$26.60
Ending inventory	3 units @ $3.80 per unit	$11.40

Figure 6: Summary

Inventory system	*COGS*	*Ending Inventory*
FIFO Costing	$23.00	$15.00
LIFO Costing	$31.00	$7.00
Average Costing	$26.60	$11.40

Depreciation Accounting

Depreciation is used to allocate the cost of an asset over a period of time. *Depreciation expense* is the amount of this allocation for a given period.

Land represents space for production facilities (real estate) and is not depreciated. Land remains valued at its original cost.

Plant and equipment, however, have limited lives due to wear and tear and/or obsolescence. Because of this, plant and equipment costs must be allocated to expense over the plant and equipment's estimated economic life.