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FINANCIAL ACCOUNTING I

2° ANNO BIEM/BIEF

Written by

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CHAPTER 1

- Information:
  - Managers need them to manage operating, investing and financing activities of the firm (internal decision making)
    - ➔ Managerial Accounting
  - Stockholders and Creditors need them to assess whether the company will pay dividends and will be able to pay back its debts (external decision making)
    - ➔ Financial Accounting

- We can divide the activities of a company in 3 sets:
  - Financing activities
    - ➔ Borrowing or paying back money to lenders, receiving additional funds from stockholders, paying dividends
  - Operating activities
    - ➔ daily activities made to ordinarily run the business
  - Investing activities
    - ➔ long-term activities, such as purchasing plants and equipment
- Contributed Capital, the sum of all the contributions of capital is called Shareholder Equity
- Shareholder's equities grow with contributions and with retained earnings (earnings of the company not distributed to shareholders)

- 4 Basic Financial Statements:
  - Balance sheet
    - ➔ Reports the economic resources a firm owns and the sources of finance for those resources
  - Income Statement
    - ➔ Reports the firm's ability to sell goods for more than their cost to produce and sell
  - Statement of stockholders' equity
    - ➔ Reports additional contributions from investors, payments to investors and the amount of income the a firm has reinvested for future growth
  - Statement of cash flow
    - ➔ Reports the firm's ability to generate cash and how it was use
- The four basic financial statements can be prepared at any point in time such as:
  - **End of the year** (for the year ended, annual reports)
  - **Quarterly** (for the quarter ended, quarterly reports)
  - **Monthly** (for the month ended, monthly reports)

BALANCE SHEET

- Reports the financial position of an accounting entity at a given point in time
- The financial statement heading includes:
  - **Name of the entity** (Company name)
  - **Title of the statement** (e.g., Balance Sheet)
  - **Specific date of the statement** (e.g., at December 31, 2018)
  - **Unit of measure** (in millions of dollars)

- Accounting Equation
  - ➔ **Assets = Liabilities + Stockholders Equity**

- ➔ Shows a company's financial position, that is the economic resources it owns and the sources of financing for those resources

- Assets:
  - economic resources owned by the entity
  - are expected to provide future benefits for the firm
  - < 1 year: short-term asset | >1 year: long-term asset
  - Every asset is initially measured at the total cost incurred to acquire it
- Liabilities:
  - amount of financing provided for by creditors
  - Payables arise from the purchase of goods and services from suppliers on credit
  - Deferred/Unearned revenue arises from payments received for goods and services not yet provided
- Shareholder's equity:
  - Capital + retained earnings
  - Common Stock is the investment of cash and other assets in the business by stockholders
  - Retained Earnings are the earnings reinvested in the business

INCOME STATEMENT

- Reports the accountant's primary measure of performance of a business (net income)
- Accounting Period: time period covered by the financial statement
- Income Statement Equation
  - ➔ **Revenues = Expenses + Net Income**
- Revenues:
  - Derive from the sale of goods and services to customers
  - Accounts also for amounts expected to be received for goods and services that have been delivered to a customer, whether or not he has already paid for them
- Expenses:
  - Dollar amount of resources the entity used to earn revenues during the period
  - Expenses reported in one accounting period may be paid for in another accounting period (some payment can be deferred at a later date)
  - Some may require the use of another resource, such as an inventory item, which may have been paid for in a prior period
- Net income:
  - Excess of total revenues over total expenses
  - If expenses exceed revenues, we have a net loss
  - Net Income does not necessarily equal the net cash generated by operations, which is reported for in the Cash Flow Statement

Statement of Stockholders' Equity

- Reports the changes in each of the company's stockholders' equity accounts during that period
- Capital:
  - Amounts invested in the business by stockholders
  - **Ending Capital= Beginning Capital+ Stock Issuance**
- Retained Earnings:

    - Past earnings not distributed to shareholders
    - **Ending Retained Earnings = Beginning Retained Earnings + Net Income – Dividends**
    - Indicates the relationship of the income statement to the balance sheet

Statement of Cash Flows

- Reports inflows and outflows of cash during the accounting period
- Inflows and outflows are divided into the 3 primary categories of cash flows:
    - Cash flows from operating activities (CFO)
        - ➔ Cash flows directly related to earning income
    - Cash flow from investing activities (CFI)
        - ➔ Cash flows related to the acquisition or sale of the company's plant, equipment, and investments
    - Cash flow from financing activities (CFF)
        - ➔ Cash flows directly related to the financing of the enterprise itself, involving receipts and payments of money to investors and creditors
    - **Change in cash = +/- CFO +/- CFI +/- CFF**
      Ending Cash Balance = Change in Cash + Beginning Cash Balance

Relationship between the financial statements
- At the end of each accounting period, assets must equal capital + liabilities
- During the year, if assets increase but liabilities and capital are unchanged, the temporary imbalance is compensated by Net Income (revenues – expenses)
- At the end of the accounting period, net income is transferred to retained earnings and can be used to pay dividends

Notes
- All financial statements should be accompanied by notes that provide the reader with supplemental information to help the reader understand better the financial statements

Generally accepted accounting principles (GAAP)
- The rules that determine the content and measurement rules of the statements are called Generally Accepted Accounting Principles (GAAP)
- The accounting system in use today has a long history. Its foundations are normally traced back to the works of an Italian monk and mathematician, Fr. Luca Pacioli, published in 1494
- Prior to 1933, the management teams of most companies were largely free to choose their own financial reporting practices.

⬇

- US Congress created the Securities and Exchange Commission (SEC) and gave it broad power to determine the measurement rules for financial statements that companies issuing stock to the public must provide to stockholders
- Currently, the Financial Accounting Standards Board (FASB) is recognized as the body to formulate GAAP through the FASB Accounting Standards Codification
- Firms incur the cost of preparing the financial statement and bear the economic consequences of their publication:
    - Effects on selling price of stock

    - Effects on the amount of the bonuses received by management and employees
    - Loss of competitive information to other companies

International perspective

- Since 2002, there has been a substantial movement towards the adoption of International Financial Reporting Standards (IFRS), issued by the International Accounting Standards Board (IASB).
- The S.E.C. allows foreign companies whose stock is traded in the US to use IFRS

Ethical Conduct

- Intentional misreporting of financial statements is unethical and illegal
- To ensure the accuracy of a company's financial information, the management should (ex-ante approach):
    - Maintain a system of control over the records and assets
    - Hire external independent auditors
    - Form a committee of the board of directors to review these other two safeguards
- Investors may report irregularities to the SEC, the FBI and can bring the company to court (ex-post approach)

Types of business entities

- Corporation:
    - ➔ Ownership represented by shares of stock that can be bought and sold, and operates separately from its owners
    - ➔ Advantages
        - Stockholders have limited liability
        - Continuity of life
        - Ease in transferring ownership through stock
        - Opportunity to raise large amounts of money by selling shares of stock to a large number of people
    - ➔ Disadvantages
        - Double taxation: income is taxed when earned and when is distributed as dividends
- Sole proprietorship:
    - ➔ Owned by a single individual
- Partnership:
    - ➔ Owned by two or more individuals

CHAPTER 2

- US GAAP states that a company should release information when the benefits for outsider outweigh the cost for outsiders to know information:
  - ➔ Useful information:
  - Relevant information that are a faithful representation
  - Help individuals make investment decisions
  - Faithful representation requires the information to be complete, neutral, and free from errors

- 3 assumptions behind accounting definitions:
  - Separate entity assumption
  - ➔ Business transactions are different from the transactions of the owner
  - Continuity assumption
  - ➔ Businesses are assumed to continue operate in the foreseeable future
  - Monetary unit assumption
  - ➔ Accounting information should be measured and reported in the national monetary unit without any adjustment for changes in purchasing power
  - Historical cost assumption
  - ➔ Balance sheet elements are recorded at their historical cost on the date of the transaction

- Accounting assumptions are necessary because they reflect the scope of accounting and the expectations that set certain limits on the way accounting information is reported.

Elements of the balance sheet
Assets
- Probable future economic benefits owned or controlled by an entity as a result of past transactions or events
- Many valuable intangible assets (trademarks, patents, copyright) are not reported in the balance sheet. Usually, these are internally developed assets or not purchased assets, but they do not appear in the balance sheet because they cannot be reliably measured
  - Current Assets
  - Resources used or turn into cash within one year
  - Cash, Short-Term Investments, Accounts Receivable, supplies, prepaid expenses
  - Inventory is always considered a current asset
  - Long-term Assets
  - Used or turned into cash after the coming year
  - Property, Equipment, Intangibles

Liabilities
- Probable future sacrifices of economic benefits arising from present obligations of a business to transfer cash or other assets or to provide services as a result of past transactions or events

- Off-balance-sheet financing are liabilities not reported on the balance sheet (equipment or building rentals)
  - Current Liabilities

- ➔ Accounts Payables, Unearned Revenue, Income Taxes Payable, Accrued Expenses Payable
- Non-Current Liabilities

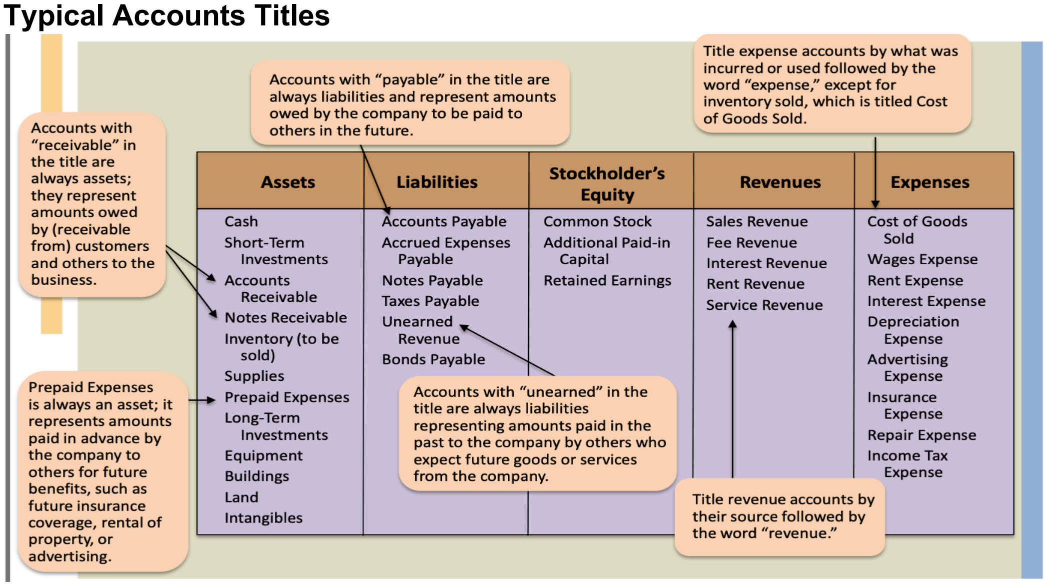
Stockholders' Equity

- ➢ It is the residual interest in the assets of the entity after subtracting liabilities. It is a combination of financing provided by the owners and by operating activities
  - Contributed Capital
  - ➔ Financing provided by stockholders
  - Retained Earnings
  - ➔ Financing provided by operations, reinvested in the company
  - ➔ Profits can be distributed to the owners as dividends or reinvested in the company
  - Additional-Paid-In Capital refers to the difference of the market price of the stock and its par value

Business activities that cause changes in financial statement amounts

- ➢ Transactions
  - ➔ Events recorded as part of the accounting process
  - ➔ Include 2 types if events:
  - ▪ **External events:** exchanges between the entity and one or more parties
  - ▪ **Internal Events:** events that are not exchanges between parties but have a direct and measurable effect on the entity
- ➢ Accounts
  - ➔ Used to help organize information about various transactions
  - ➔ Record in an accounting system that tracks the financial activities of a specific asset, liability, equity, revenue, or expense
  - ➔ Each individual account is stored in the general ledger
- ➢ Transaction analysis:
  - ➔ Process of determining the effects of transactions on the entity in terms of the fundamental equation
  - ➔

Typical Accounts Titles



Dual effect

- Double entry bookkeeping system
  1. Every transaction affects at least 2 accounts
  2. Accounting equation must remain in balance after every transaction (entity receives something in exchange for something else)

- When a company wants to pay dividends, retained earnings are reduced and dividends payables are increased.
  Then, when dividends are actually paid, the cash account is reduced and so do accounts payable.

How companies keep track of the accounting balance

- During the accounting period, transactions that result in exchanges between the company and external parties are analyzed to determine the accounts and effects

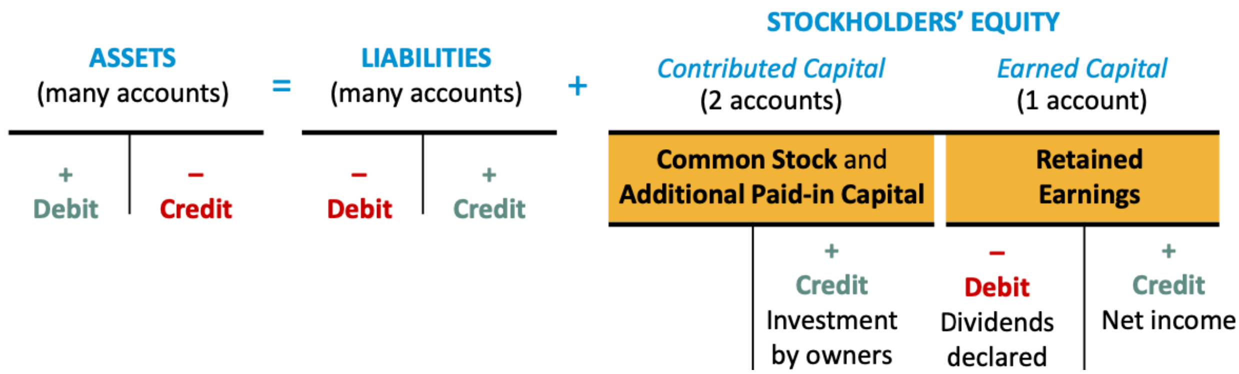
  1. The effects are recorded FIRST in the **general journal**
     - ➔ The general journal is a chronological list of transactions:
       - it indicates the date of the transaction, the amount, the accounts it involved, and if the amounts were debited or credited

  2. To determine account balances, accounts are updated by posting the effects listed in the general journal to the respective accounts in the **general ledger**
     - ➔ The general ledger is a record of effects to and balances of each account

- Both the General Journal and the General Ledger are based on 2 very important tools used in accounting
  - Journal Entries
  - T-Accounts
- Accounting Cycle
  - ➔ Companies establish accounting systems that follow a cycle in order to handle the multitude of daily transactions that businesses generate
  - ➔ During the accounting period, entities:
    - Analyze transactions
    - Record journal entries in the general journal
    - Post amounts to the general ledger
  - ➔ At the end of the accounting period, entities:
    - Prepare a trial balance (check if debits=credits)
    - Adjust revenues and expenses and related balance sheet accounts
    - Prepare financial statements
    - Close revenues, expenses, gains and losses to retained earnings

Basic transaction analysis model

- T-Account is a tool to represent the ledger account
- T-Account has a left side (DEBIT SIDE) and a right side (CREDIT SIDE):
  - ➔ Transactions increase and decrease assets, liabilities and stockholders' equity
  - ➔ The model reflects the direction of these movements
  - ➔ Increase symbol (+) is on the left side of the T-Accounts on the left side of the equation and on the right side of the T for accounts on the right side of the equation



- Increases in the asset accounts are on the left because assets are on the left side of the accounting equation (A=L+SE)
- Increases in liability and stockholders' equity accounts are on the right because they are on the right side of the accounting equation (A=L+SE)
- The words "Debit" and "Credit" have no specific meaning other than that they represent the left and the right sides of the ledger account
    - ➔ **DEBIT** always **LEFT SIDE** of the T
    - ➔ **CREDIT** always **RIGHT SIDE** of the T
    - ➔ Asset accounts increase on the left side, and they normally have debit balance
    - ➔ Liability and SE increase on the right side and they normally have credit balance

Analytical Tools

- Transactions are recorded in a general journal
- Journal Entry
    - ➔ Accounting method for expressing the effects of a transaction on accounts
    - ➔ Typically, debited accounts are written first with the amounts placed in the column labeled "Debit"
    - ➔ Credited accounts are written below the debits and are usually indented, they are placed in the column labeled "Credit"
    - ➔ It is useful to include a reference for each transaction
    - ➔ Moving accounting information from the journal to the ledger is called **posting**

- T-Account
    - ➔ Useful tool for summarizing the transaction effects and determining the balances for individual accounts (simplified version of a ledger account)
    - Increases in Asset are shown on the left, Decreases appear on the right
    - Increases in Liabilities/Equity appear on the right, decreases on the left
    - Every T-Account starts with a beginning balance
    - It is important to include the reference to the journal entry next to the debit or credit in each T-Account in order to trace transactions between journal entries and T-Accounts
    - When all of the transactions have been posted, a horizontal line is drawn to signify that the balance is to be determined and an ending balance is written on the appropriate side of the T-Account

- Trial Balance
    - Is a listing of all accounts in the general ledger
    - The purpose is to make sure that debits and credits are equal before a firm prepares the balance sheet
- Classified Balance Sheet
    - Assets and liabilities are classified in 2 ways, current and non-current
    - Current assets are those to be used and turned into cash within 1 year from the balance sheet publication
    - Non-current assets are those that will last longer than one year
    - Current liabilities are those obligations that must be paid or settled within 1 year, using current assets

- International Perspective
    - Although the IFRS differs from the GAAP, it uses the same system of analyzing, recording, and summarizing the results of a business activity
    - One difference is the formatting of financial statements

	GAAP	IFRS
Balance Sheet Order	**Assets:**	**Assets:**
Similar accounts are shown,	Current	Noncurrent
but the order of liquidity	Noncurrent	Current
(for assets) and the order	**Liabilities:**	**Stockholders' Equity**
of maturity (for liabilities)	Current	**Liabilities:**
differ	Noncurrent	Noncurrent
	Stockholders' Equity	Current

CHAPTER 3

Elements of the Income Statement

- Operating Revenues
  - Increases in assets or settlements of liabilities from the central ongoing operation of the business
  - When it is earned, assets (usually Cash or Accounts Receivables) increase
  - In case of Deferred (Unearned) Revenue a liability account is created, and it is cancelled and recognized as Revenue when the company provides the promised services/goods to the customer
- Gains are increases in assets deriving from peripheral transactions
- Losses are decreases in assets deriving from peripheral transactions
- Operating Expenses
  - Expenditure: outflow of cash for any purpose
  - Expenses: outflows, using up of assets or increases in liabilities from ongoing operations
- $Net\ income = Revenues + Gains - Expenses - Losses$
- Any revenues, expenses, gains or losses that result from these activities are not included as part of operating income but are categorized as Other Items:
  - Interest Revenue: interest and dividends earned on investments in other companies are not included in the operating revenue
  - Interest Expense: any cost deriving from financing activities is not an operating expense
  - Losses/Gains on Sale of Investment
- Income Tax Expense
  - Is the last expense listed on the income statement before determining net income
  - It corresponds to a percentage of pretax income determined by applying the tax rate
- Earnings per Share
  - Corporations are required to disclose earnings per share on the income statement or in the notes to the financial statement
  - Ratio is used to evaluate the profitability of a company
  - EPS= Net Income/ Weighted Average Number of Shares of Stock Outstanding

Operating Cycle

- Begins when a company receives goods to sell, pays for them, and sells them to customers
- Ends when customers pay cash to the company
  - ➔ The time of completion of the cycle depends on the nature of the business
- Shortening the operating cycle improves a company's cash flow
- Until a company ceases activity, the operating cycle is repeated continuously, however since decision makers need periodical information about the company's financial conditions, accountants follow the **time period assumption**:
  - Assumes that the long life of a company can be reported in shorter time periods
  - Reporting period income may cause 2 issues:
    - When the effects of operating activities should be recognized
    - What amounts should be recognized

Recognizing and Measuring Operating Activities

Cash Basis Accounting

- Revenues are recorded when cash is received and expenses when cash is paid
- Using cash basis accounting may lead to an incorrect interpretation of the company performance
- Cash basis accounting is used to build the cash flow statement

Accrual Accounting

- Revenues and expenses are recognized when the transaction occurs, not necessarily when cash is paid or received
  - ➔ Revenues are recognized when earned and expenses when are incurred to generate revenues
- 2 basic principles:

1. ***Revenue Recognition Principle***

- Specifies both timing and amount of revenue to be recognized during an accounting period
- It requires that a company recognizes revenue when it transfers promised goods to customers or in the amount that it expects to be entitled to receive
  - ➔ Revenue is recognized when the firm transfers goods/services to its customers, regardless of when cash is received, in the amount that it expects to be entitled to receive
- Cash can be received from customers:
  - Before delivery (Deferred Revenue), and the firm will have to create a liability account and will be able to transform it into a revenue account only when the good is provided to the customer
  - Same period as delivery
  - After delivery, and revenue is earned at the time of delivery of the good. When cash is received, the firm will be able to turn the Accounts Receivables into Cash

2. ***Expense Recognition Principle***

- Requires that the costs incurred to generate revenues are recognized in the same period
  - Salaries and wages during the period
  - Supplies during the period
  - Facilities rented during the period
  - Equipment used during the period
    - ➔ Expenses are recorded as incurred in earning revenue, regardless of when cash is paid
- Cash can be actually paid:
  - Before the expense is incurred, companies purchase many assets used to generate revenues in future periods and when revenues are generated in the future, the company records the expense for the portion of the cost of the assets used
  - In the same period when the expense is incurred
  - After the expense is incurred

Expanded Transaction Analysis Model

- Complete transaction analysis includes all five elements:
  Assets, Liabilities, Stockholders' Equity, Revenues, Expenses
- **Retained Earnings** account is an accumulation of all past revenues and expenses minus any income distributed to shareholders as dividends:
  - Positive Net Income → Retained Earnings Increase
  - Net Loss → Retained Earnings Decrease
    - ➔ **Revenues** increase on the **Credit** side
    - ➔ **Expenses** increase on the **Debt** side

- When a revenue or an expense is recorded, either an asset or a liability will be affected:
  - **Revenues** increase Stockholders' Equity through the account Retained Earnings, and therefore have credit balances.
    - Recording revenues requires either increasing an Asset (e.g., Accounts Receivables) or decreasing a Liability (e.g. Unearned Revenue)

  - **Expenses** decrease Stockholders' Equity through Retained Earnings, and therefore have debit balances
    - Increasing an expense means debiting it, thus reducing revenues, and retained earnings.
    - Recording an expense requires either decreasing an asset (e.g., Supplies) or increasing a liability (e.g. Wages Payable)

- T-Accounts begin with the trial balance amounts:
  - When a Revenue is recorded, we insert (+R; +SE)
  - When an Expense is recorded, we insert (+E; -SE)

Revenue recognition for More Complex Customer Contracts

- FASB and IASB issued a joint revenue recognition accounting standard effective for 2018 financial statements
- The standard specifies 5 steps to recognizing revenues:
  - Identify the contract between the company and the customer
  - Identify the performance of obligations
  - Determine the transaction time
  - Allocate the transaction price to the performance obligations (difficult part)
  - Recognize revenue when each performance obligation is satisfied

CHAPTER 4

- Most operating activities take place over a period of time or over several periods of time
  - Because recording these activities daily is costly, companies use adjustments at the end of the period
- Accounting systems are designed to record daily transactions, particularly those involving cash
  - ➔ Since cash is not always received in the period in which the company earns revenue and is not always paid in the accounting period in which the company incurs an expense, entries must be adjusted so that:

    - Revenues are recorded when earned (Revenue Recognition Principle)
    - Expenses are recorded when incurred to generate revenue (Expense recognition principle)
    - Assets are reported at amounts that represent the probable future benefit remaining at the end of the period
    - Liabilities are reported at amounts that represent the probable future sacrifices of assets or services owed at the end of the period

- We can recognize 4 main types of adjustments, 2 in which cash has been already received/paid and 2 in which cash will be received/paid
  - **Deferred Revenues**
    - Previously recorded liabilities created when cash was received from customers in advance of being earned
    - must be reduced by the amount of revenue actually earned during the period
  - **Deferred Expenses**
    - Previously recorded assets created when cash was paid by the company in advance of the asset being used
    - Must be reduced by the amount of expense actually incurred during the period through the use of assets
  - **Accrued Revenues**
    - Revenues earned but not yet recorded
    - Cash is received after goods are delivered or services are performed
  - **Accrued Expenses**
    - Expenses incurred but not yet recorded
    - Cash will be paid after goods or services are used

Adjustment Process

1. *Was revenue earned or expense incurred that is not yet recorded?*
   - If YES, debit the revenue account or debit the expense account

2. *Was the related cash received or paid in the past or will it be received or paid in the future?*
   - Cash was Received in the past
     - A Deferred Revenue account was recorded in the past
     - Debit the Deferred Revenue(liability) account and credit revenue
   - Cash will be Received in the future
     - Debit the receivable account to record the amount to be received
   - Cash was Paid in the past
     - Deferred Expense account was created in the past

- Credit the asset account because some or all of the asset has been used
- Cash will be Paid in the future
  - Credit the Payable Account to record what is owed by the company to others

3. *Compute the amount of revenue earned or expense incurred*

NB→ Cash is never included in an adjusting entry because it was recorded already in the past or will be recorded in the future. Adjustments are required to record revenues and expenses in the proper period because the cash part of the transaction is at a different point in time

NB→ Each adjusting entry always include 1 income statement account and 1 balance sheet account

Adjusting Journal Entries

- ***Unearned Revenue***
  - If part or all of the revenue has been earned, increase revenue
  - Then, debit the Unearned Revenue account
  - Credit the amount of revenue earned
- ***Accrued revenues***
  - Revenues earned from customers and that has not yet been recorded
  - Assume that an investment pays interest revenue for the quarter, but the cash will be received next quarter
    - Credit the Revenue account
    - Debit the Interest Receivable
    - Record the revenue in the adjusted journal entry
- ***Deferred Expenses***
  - Assets that are used over time to earn revenue, therefore at the end of every period, adjustments must be made to record the amount of the asset used in the period

1. *Prepaid Expenses*
- Expenses like rent, insurance and advertising paid for a period of time
  - Debit the expenses separately as Rent Expense, Insurance Expense, Advertising Expense (E)
  - Since the expenses were paid in the past, Credit the account Prepaid Expenses(A)
  - Compute the amount of prepaid expenses used by dividing the total cost by the time of use, and record it in the adjusting entry

2. *Buildings and Equipment*
- Building and Equipment accounts increase by the cost of the assets when acquired and decrease by the cost of the assets when sold
- Since assets are used over time to generate revenue, a part of their cost is recorded as an expense in the same period (**depreciation**)
- Depreciation is an allocation of the cost of buildings and equipment over their estimated useful lives to the organization
- To keep track of the asset initial cost, the amount that has been used is accumulated in a different account called Contra-account (account directly linked to another one but with opposite balance) called Accumulated Depreciation (+XA, -A), which has a credit balance
- NA=A-XA→ Net assets equal Asset Accounts minus Contra-asset accounts
- A+XL+XSE+EXP+XRE=L+SE+XA+REV+XEXP
- On the balance sheet, the amount reported for Total Property and Equipment is its

Net Book Value, which is the Ending Balance in the Land, Buildings and Equipment accounts minus the ending balance in the Accumulated Depreciation account

- When the company uses assets, a depreciation expense is incurred, thus it must be credited
- Then, the net book value must be credited by the increase in the Contra-account Accumulated Depreciation

➢ ***Accrued Expenses***

- Numerous expenses are incurred in the current period without being paid until the next one (Wages, Interest Expense, Utilities Expense, Income Taxes Expense)

1. *Wages*
    - If the company uses employee labor near the end of the quarter and will pay them at the end of the next quarter, Wages Expense must be Debited
    - The company will pay employees in the future, thus it must Credit the Wages Payable account
    - Record the amount of wages owed to employees in the adjusting entry
2. *Interest on Debt*

- When money is borrowed, it must be repaid at the end of the period with interest
- As the borrowed funds are used over time, interest expense is incurred, even though it will be paid in the future according to the loan agreement
    - If funds are borrowed but the interest expense is not recognized, it must be debited
    - Since it is then paid in the future, the Interest Payable account must be credited
    - Compute the amount of expense incurred based on the annual interest rate and the considered accounting period and record it in the adjusting entry.

3. *Utilities*

- Organizations receive utility bills after using utility services (water, gas, electricity)
    - If the expense was incurred, Debit Utilities Expense
    - Since it will be paid in the future, credit the Utilities Expense account
    - Record the amount in the adjusting entry

4. *Income Taxes*
    - If taxes are to be paid, the Tax Expense account must be debited
    - Since taxes will have to be paid in the future, the Income Taxes Payable account must be credited
    - After computing the amount of taxes on the pretax income with the tax rate, record the expense in the adjusting entry

Preparing financial statements

➢ Financial statements are interrelated:

- Balance Sheet accounts are permanent accounts
    - ➔ They retain their balances from the end of one period to the beginning of the next one
- Revenue, Expense, Gain and Loss accounts are temporary accounts
    - ➔ Their balances accumulate for a period of time but start with a zero balance at the beginning of next period

➢ Revenues minus expenses yields net income on the Income Statement

➢ Net Income and dividends declared to stockholders affect Retained Earnings and any additional issuances of stock during the period affect the balances in Common Stock and Additional Paid-in Capital, all of which appear in the Statement of Stockholders' Equity

- Stockholders' Equity is a component of the Balance Sheet

  - ➔ Statement of Stockholders' Equity
    - Net income is carried forward to the Retained Earnings column of the statement of Stockholders' Equity
    - Dividends declared and any additional stock issuance also are included in the statement

  - ➔ Balance Sheet
    - The ending balances from the Statement of Stockholders' Equity are also included in the Balance Sheet
    - Accumulated Depreciation is subtracted from the total of the land, buildings and equipment accounts to reflect the net book value at the end of the period
    - Assets are listed in order of liquidity
    - Liabilities are listed in order of due dates

Closing the Books

- Closing Process is needed as the last step in the accounting cycle to mark the end of the current period and the beginning of the next
- Balance sheet accounts are permanent accounts, so the ending balance in each asset, liability and stockholders' equity account becomes the beginning balance for the next period
- Revenue, Expense, Loss and Gain accounts are temporary accounts since they are used to accumulate data for the current accounting period only. Therefore, they have to be reduced to 0$ at the end of each period.

- Closing Entries have two purposes:
  - Transfer the balances in the temporary accounts to Retained Earnings
  - Establish a zero-balance in each of the temporary accounts to start the accumulation in the next accounting period
  - In order to close the books in the General Journal
    - ➔ temporary accounts with credit balance are debited (Revenues)
    - ➔ temporary accounts with debit balance are credited (Expenses)
    - ➔ The net amount, equal to net earnings, affects Retained Earnings

- After the closing process is completed, all income statements have 0 balance and are ready to record revenues and expenses in the next accounting period
  - The ending balance in Retained Earnings now is up-to-date and is carried forward as the beginning balance for the next period
- Post-Closing Trial Balance
  - ➔ Prepared as a check that debits equal credits and that all temporary accounts have been closed
  - ➔ It has the same structure of the trial balance with only balance sheets accounts having balances
  - ➔ The income statement accounts should be $0

CHAPTER 6

ACCOUNTING FOR NET SALES REVENUE

- Revenue recognition principle requires revenues to be recorded when the company transfers goods and services to customers, in the amount it expects to be entitled to receive
- The point at which the good changes ownership is determined by the shipping terms of the contract:
  - ***Free on Board (FOB) shipping point***
    → title changes hands at shipment and the buyer normally pays for shipment
    →Revenues are recognized at shipment
  - ***Free on Board (FOB) destination***
    →title changes hands on delivery and the seller normally pays for shipment
    →revenues are recognized at delivery

Motivating sales and collection

- Sales practices differ depending on whether sales are made to businesses or consumers
- Companies use a variety of methods to motivate both groups of customers to buy its products and make payment for their purchases
  - Allow customers to use credit cards for purchases
  - Provide business customers direct credit and discounts for early payment
  - Allow return from customers under certain circumstances

➔ These 3 methods affect how we compute net sales revenue because of:
  - Credit Card fees
  - Sales discount
  - Sales Returns

Credit cards sales (+XR, -R, -SE)

- Retailers accept credit cards for a variety of reasons:
  - Increasing customer traffic
  - Avoid the costs of providing direct credit (e.g., recordkeeping, bad debts)
  - Lowering losses due to bad checks
  - Avoiding losses from fraudulent credit card sales
  - Receiving money faster
- ***Credit Card Discount*** ➔ fees the credit card company charges for the service it provides

Sales Discount to Businesses (+XR, -R, -SE)

- Sale discount is granted to the purchaser in order to encourage early payment
  - Prompt receipt of cash from customers reduces the necessity to borrow money to meet operating needs
  - Sales discount reduces the chances that the customer will run out of funds before the company's bill is paid
- Companies report sales discounts taken by subtracting the discount from sales if payment is made within the discount period. If payment is made after the discount period, the full amount is to be paid and would be reported as net sales
  - $\frac{2}{10}, \frac{n}{30}$ ➔ 2% discount for payment within 10 days, otherwise the full amount is due within 30 days

Sales Returns and Allowances (+XR, -R, -SE)

- Retailers and consumers have a right to return merchandise and receive a refund or adjustment to their bills
- **Sales Returns and Allowances** ➔ must be deducted from the gross sales revenue in determining net sales

Reporting net sales

- Credit Card Discounts, Sales Discounts, Sales Returns and Allowances are accounted for separately to allow managers to monitor the costs of Credit Card Discount, Sales Discounts, and Returns
- Credit Card Discounts, Sales Discounts, Sales Returns and Allowances are Contra-Revenue account
  - ➔ They are Contra-Revenue accounts because of the revenue recognition principle, which states that revenue must be recognized in the amount a company is entitled to receive: Credit Card Fees, Sales Discount and Sales Returns are agreements that reduce the amount a firm is entitled to receive
- The income statement only reports net sales

Income Shifting

- Managers may have incentive to shift credit card discounts, sales discounts, sales returns and bad debt expenses to the next accounting period in order to make the firm's Net Sales Revenue higher for the year:
  - Issuing stocks at higher price
  - Private benefits for the manager

Revenue recognition for Bundled Goods and Services

- When a seller promises to provide more than one good or service in a single sales contract, FASB standards specify a 5-step process to determine the amount to be recognized as revenue:
  1. Identify the contract between company and customer
  2. Identify the performance obligations
  3. Determine the transaction price
  4. Allocate the transaction price to the performance obligations
  5. Recognize revenue when each performance obligation is satisfied

Measuring and reporting receivables

- Receivables are generally classified in three ways:
  1. Accounts or Notes Receivable
     - Accounts Receivable is created by a credit sale on an open account
     - Notes Receivable is a promise in writing to pay a principal and a specified amount of interest
  2. Trade or Non-Trade Receivable
     - Trade Receivable is created is created in the course of business activity when a sale of merchandise or services on credit occurs
     - Non-Trade Receivable arises from transactions other than the normal sales of merchandise or services
  3. Current or Non-Current Receivable
     - Current receivable is expected to be collected in <1 year

- Non-Current receivable is expected to be collected in >1 year

➢ When a country receives a payment in a foreign currency, it must be converted using the exchange rate and recorded in the national currency

➢ When firms sell on credit to commercial customers, they know that some of the customers will not pay their debts

→Expense recognition principle requires the recording of bad debt expense in the same accounting period in which the related sales are made
→The main issue is that firms may not learn which customer will not pay its debts until the next accounting period

➢ Firms solve this problem by using the **allowance method**, to measure bad debt expense
  - It is based on estimates of the expected amount of bad debts
  - The 2 primary steps to employ the method are:
    1. Making end-of-period adjusting entries to record estimated bad debt expense
    2. Writing off specific accounts determined to be uncollectible during the period

1. **Bad debt expense** is the expense associated with estimated uncollectible accounts receivable
  - An adjusting journal entry at the end of the period records the bad debt estimate
  - Bad debt expense is included as "General and Administrative Expenses" on the income statement
  - **Allowance for Doubtful Accounts** is a contra-asset account subtracted from the Accounts Receivable

2. If during the year a customer will not pay its debt, the write-off of that individual bad-debt is recorded through a journal entry
  - Allowance for doubtful accounts is DEBITED
  - Accounts Receivable is CREDITED

  - **NB ➔** The income statement accounts are not affected because the estimated expense was recorded with an adjusting entry in the period of sale
  - **NB ➔** The entry did not change the net book value of accounts receivable because the decrease in the asset account was offset by the decrease in the contra-asset account, thus it also did not affect total assets

➢ Firms may report in the balance sheet Accounts Receivable, net of allowance for doubtful accounts or may report the balance of Allowance for Doubtful Accounts in anote

Estimating Bad Debt

➢ Bad debt expense amount recorded in the end-of-the-period adjustments is estimated in 2 ways:
  - A percentage of total credit sales for the period

  - Aging of accounts receivable
    →More accurate method used on a monthly or quarterly basis to check the accuracy of the earlier estimates

1. Percentage of Credit Sales Method

- Bases bad debt expense on the historical percentage of credit sales that resulted in bad debt
- $\frac{Total\ Debt\ Losses}{Total\ Credit\ Sales}$
- The approach directly compute the amount to be recorded as Bad Debt Expense on the income statement for the period of the adjusting journal entry

2. Aging of Accounts Receivable

- Relies on the fact that, as accounts receivable become older and more overdue, it is less likely that they will be collected
- Management can split Accounts Receivable in age categories and estimate the probable bad debt loss for each category
- The approach computes the estimated ending balance we would like to have in the Allowance for Doubtful Accounts on the balance sheet after we make the necessary adjusting entries

    - ➔ If uncollectible accounts actually written off differ from the estimated amount previously recorded, a higher/lower amount of bad debt expense is recorded in the next period to make up for the previous period's error in estimate
    - ➔ When estimate are found to be incorrect, financial statement values for prior annual accounting periods are not correct

- Firms may be able to minimize bad debts by:
    - Require approval of customers' credit history by an independent person
    - Age account receivables periodically and contact consumers with overdue payments
    - Reward sales and collection personnel for speedy collections

CHAPTER 7

- The primary goals of inventory management are:
    - Having enough high-quality inventory available to serve customers' needs
    - Minimizing the costs of carrying inventory

        - ➔ Inventory-carrying costs relate to production, storage, obsolescence, and financing
        - ➔ Low-quality inventory leads to customers dissatisfaction, returns, and decline in future sales
        - ➔ Purchasing or producing too few units can cause stock-outs, which means losing sales revenue and decrease customer satisfaction
        - ➔ Purchasing too many units increases storage costs, as well as interest costs to finance such expense, and it may also lead to losses if merchandize cannot be sold at normal prices

- The accounting system plays 2 main roles:
    - Provides accurate information for preparation of periodic financial statements and tax returns
    - Provides up-to-date information on inventory quantities and costs, in order to facilitate ordering and manufacturing decisions

Nature of Inventory and Cost of Goods Sold

- Inventory is a tangible property that is either held for sale in the normal course of business or used in producing goods or services for sale
- <u>Merchandizers:</u>
    - Hold Merchandize Inventory, which are usually finished goods ready to be sold

- <u>Manufacturers</u> hold 3 types of inventory:
    - *Raw Materials Inventory*, which are items acquired for processing into finished goods
    - *Work in Process Inventory*, which are goods in the process of being manufactured, but not yet completed
    - *Finished Goods Inventory,* which are manufactured goods that are complete and ready for sale

- <u>Supplies inventory</u>
    - Firms that have a very short-term Work in Progress Inventory and Finished Goods Inventory, will not account for the latter 2, and will only increase or decrease supplies
    - An example may be restaurants

Costs included in inventory purchases

- Goods in inventory are initially recorded at cost
- ***Inventory Cost*** is the sum of costs incurred in bringing an article to usable or sellable condition and location
    - It should include the invoice price to be paid plus other expenditures associated to the purchase, such as freight charges to deliver the items to its warehouses (freight-in), inspection and preparation costs
- *Purchase Returns and Allowances* and *Purchase Discounts* are subtracted

- Generally, companies stop accumulating purchasing costs when raw materials are ready for use or when the merchandise inventory is ready for shipment
  - ➔ Any additional cost related to selling the inventory to the dealers are incurred after the inventory is ready for use, so they are recorded in Selling, General and Administrative Expense in the period in which they are incurred

Flow of inventory cost

- Merchandizers:
  - Purchase merchandize and increase the Merchandize Inventory account
  - When the goods are sold, Cost of Goods Sold is Increased and Merchandize Inventory is decreased

- Manufacturers:
  - Purchase raw materials
  - When raw materials are used, their cost is removed from Raw Material Inventory and added to the Work in Process Inventory
    - ➔ The 2 main components of manufacturing costs are:
      1. ***Direct Labor,*** earnings of employees that directly work on the products
      2. ***Factory Overhead,*** which include all other manufacturing costs
  - When goods are completed and ready for sale, the related amounts of work in process inventory are transferred to finished goods inventory
    - ➔ When finished goods are sold, cost of goods sold increases and finished goods inventory decreases

Cost of Goods Sold

- COGS is an expense directly related to sales revenue:
  - ➔ Number of units sold * Unitary Cost

- Each accounting period is started with a stock of inventory called **Beginning Inventory (BI)**
- During the accounting period, **Net Purchases (P)** are added to inventory
  - ➔ *BI+P = Good Available for Sale*
- Unsold items at the end of the period become **Ending Inventory (EI),** which are the Beginning Inventory for the next period
  - ➔ *Cost of Goods Sold = BI+P-EI*
  - ➔ *Cost of Goods Sold = Cost of Goods Available for Sale – Ending Inventory*

Net Purchases

- Purchase discounts and Purchase Returns are discounted from the Total Purchases (Just like with Net Revenues)
- Freight-In charges are added to Total Purchases (purchases include the costs of transportation of the supplies purchased)
- Invoice Price + Freight-In + Inspection Costs + Preparation Costs – Returns – Discounts

Perpetual Inventory System

- Information on Cost of Goods Sold and Remaining Inventory is available on a continuous basis
- Purchase transactions are recorded directly in an inventory account
- When each sale is recorded, a Cost of Goods Sold entry is made, thus decreasing inventory, and recording cost of goods sold
- A detailed record is maintained for each type of merchandize stocked, showing:
  - Units and costs of beginning inventory
  - Units and cost of each purchase

- Units and cost of the goods for each sale
- Units and cost of the goods on hand at any point in time

Periodic Inventory System

- No up-to-date record of inventory is maintained during the year
- An actual physical count of the items remaining on hand is required at the end of each period
    - ➔ The number of units of each item is multiplied by unit cost to compute the dollar amount of the ending inventory
    - ➔ Cost of Goods Sold is computed using the Cost of Goods Sold equation

- The actual amount of Cost of Goods Sold cannot be computed until the inventory count is completed, thus leading to a lack of information

- Whenever a new purchase of inventory is made, a transitory expense account is increased in order to keep track of the purchases of inventories
- At the end of the period, the transitory account is closed and transferred in part to an expense account, and in part to an inventory account→ The latter is determined through a counting process

Hybrid system

- It is used to deal with supplies and puts together features of both perpetual and periodic systems
- Cash is credited and Supplies are debited when bought
- At the end of the period, a supplies expense is debited, and supplies are credited
    - ➔ For Merchandize and Manufactures we use Cost of Goods Sold
    - ➔ For Supplies we use Supplies Expense

Inventory Costing Method

- When inventory costs have changed during an accounting period, which inventory items are treated as sold or remaining in inventory can turn profits into losses and cause companies to pay or save taxes
- The amount recorded as cost of goods sold depends on which specific goods we assume are sold
- 4 generally accepted inventory costing methods are available for determining the cost of goods sold:
    1. ***Specific Identification***
    2. ***First-In, First-Out (FIFO)***
    3. ***Last-In, First-Out (LIFO)***
    4. ***Average Cost***

    - ➔ The first method identifies individual items that either are sold, or remain in inventory
    - ➔ The three remaining methods assume that the inventory costs follow a certain flow

1. Specific Identification

- Cost of each item sold is individually identified and recorded as cost of goods sold:

➔ The method requires keeping track of the purchase cost of each item

- The method is useful when dealing with expensive unique items, otherwise it is impractical

Cost Flow Assumptions ➔ The choice of an inventory costing method is NOT based on the physical flow of goods on and off the shelves

2. First-In, First-Out (FIFO)

- Assumes that the earliest goods purchased are the first to be sold, and the last goods purchased are left in ending inventory
- The method allocates the oldest units' costs to cost of goods sold and the newest unit costs to ending inventory

3. Last-In, First-Out (LIFO)

- Assumes that the most recent purchased goods are sold first, and the oldest units are left in ending inventory
- The method allocates the newest unit costs to cost of goods sold, and the oldest unit costs to ending inventory
- LIFO is usually not used by companies→ US GAAP allows it, IFRS does not allow it
- With Inflation, LIFO generates higher COGS and lower Assets

4. Average Cost

- Assigns the average cost of the goods available for sale to cost of goods sold
- Uses the weighted average unit cost of goods available for sale for both cost of goods sold and ending inventory

US GAAP

- Allows different accounting methods to be used for different types of inventory system
- Companies may choose between LIFO and FIFO

IFRS

- Does not allow the use of LIFO
- Inventory with the same nature must be accounted for with the same accounting method

Perpetual Inventory Systems and Cost Flow Assumptions

- LIFO and Average Cost COGS are higher if measured on a periodic basis rather than on a perpetual basis (assuming that prices are increasing)
- FIFO inventory and COGS are the same, whether computed on a perpetual or periodic basis
- Accounting systems that keep track of the costs of individual items normally do so on a FIFO or average cost basis, regardless of the cost flow assumption used for financial reporting
  - ➔ Companies that wish to report under LIFO, convert the outputs of their perpetual inventory system to LIFO with an adjusting entry at the end of each period

Financial Statement Effects on Inventory Methods

- Managers choose different inventory methods in different circumstances
  - ➔ Since methods differ only in the dollar amount of goods available for sale allocated to cost of goods sold versus ending inventory, the method that gives the highest ending inventory amount, also gives the lowest cost of

goods sold and the highest gross profit, income tax expense and net income amounts

➔ Weighted average method gives net income and inventory that are between LIFO and FIFO extremes

Increasing Costs: Normal Financial Statement Effects

	FIFO	LIFO
Cost of goods sold on income statement	Lower	Higher
Net income	Higher	Lower
Income taxes	Higher	Lower
Inventory on balance sheet	Higher	Lower

Decreasing Costs: Normal Financial Statement Effects

	FIFO	LIFO
Cost of goods sold on income statement	Higher	Lower
Net income	Lower	Higher
Income taxes	Lower	Higher
Inventory on balance sheet	Lower	Higher

- Managers choose the accounting method based on 2 factors:
  - *Net Income Effects* ➔ Managers want to report higher earnings for their companies
  - *Income Tax Effects*➔ Managers prefer to pay the least amount of taxes allowed

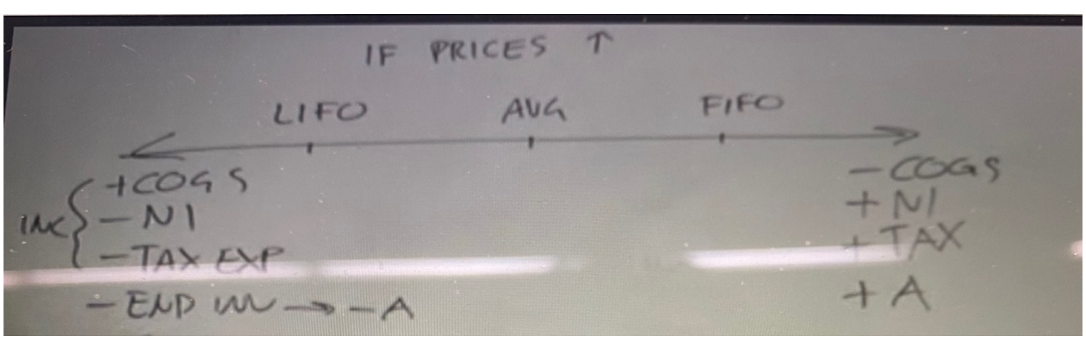
➔ Any conflicts between the 2 motives are generally solved by choosing one accounting method for external financial statements and a different one for preparing a company's tax returns

➔ <u>LIFO *conformity rule*</u> states that companies that use LIFO in the tax statement, also must use it to report income to shareholders

➔ <u>Therefore</u>, companies that wish to report under LIFO convert the outputs of their perpetual inventory system to LIFO with an adjusting entry at the end of the accounting period

- For inventory with increasing costs, LIFO is used on the tax return because it usually allows to save on income taxes
- For inventory with decreasing costs, FIFO is most often used for both the tax return and financial statements, because it produces the lowest tax payments for companies with decreasing costs of inventory

- Even though companies may decide which inventory costing method to use, accounting rules require to use their method on a consistent basis over time:
  - Changes in method are only allowed if the change will improve the measurement of financial results and financial position



Valuation at lower of cost or Net Realizable Value (NRV)

- Inventories should be measured initially at their purchase cost, in conformity with the cost principle
- When the Net Realizable Value (NRV) [Sales Price - Costs to Sell] of goods remaining in ending inventory falls below cost, these goods must be assigned a unit cost to their current estimated Net Realizable Value

  ➔ Rule of measuring inventories at the *Lower of Cost* or *Net Realizable Value*
- The departure from the cost principle is due to the *conservatism constraint*, which requires special care to avoid overstating assets and income

  ➔ It is particularly important for:
  - Technology companies, whose production and selling prices are declining
  - Companies that sell Seasonal goods, whose value drops at the end of each selling season

- Under Net Realizable Value, companies recognize a "holding" loss in the period in which the net realizable value of an item drops, rather than in the period in which the item is sold.
  Holding Loss = Purchase Cost – Lower Net Realizable Value
  → Holding Loss is added to COGS for the period through an adjusting entry, even if the sale has not happened yet (expenses are anticipated based on expectations)
  → US GAAP does not allow recognition of holding gains on inventory, profit may only be booked when inventory is sold

Inventory Management and Financial Statement Analysis

- In order to compare 2 companies that prepared their statements using different inventory accounting methods, one company's statements would need to be converted to a comparable basis

Converting the Income Statement to FIFO

- The choice of cost flow assumption affects how goods available are allocated to ending inventory and cost of goods sold
  → It does not affect the recording of purchases
- Under the alternative methods:
  - Beginning Inventory
  - Ending Inventory
  - Cost of goods sold

    ➔ Will be DIFFERENT wrt alternative methods

Converting Inventory on the Balance Sheet to FIFO

- ***LIFO Reserve (Excess of FIFO over LIFO)***
  - Contra-Inventory account
  - It basically accumulates over the years the gap between LIFO and FIFO
  - Difference between LIFO and FIFO values for beginning and ending inventory, disclosed by LIFO users in their inventory footnotes
  - LIFO inventory = FIFO inventory – LIFO Reserve
  - Beginning LIFO Reserve – Ending LIFO Reserve = COGS adjustment
    ➔ COGS adjustment is the difference between inventory valued at LIFO and inventory valued at FIFO
- Knowing the difference between a company's inventory valued at LIFO and FIFO for both beginning and ending inventory, we can compute the difference of Cost of Goods Sold

- If a firm purchases more than it sells under LIFO, it may carry in its inventory goods purchased further back in time
  - If the firm sells all of its inventory, including those purchased at lower price further back in time, it will pay all the taxes saved until the moment of the sale
  - LIFO has a cyclical behavior:
    ➔ as long as companies continue expanding inventory, and prices are increasing, they will save income taxes
    ➔ when a company liquidates all of its inventory, it will pay again the taxes saved throughout the whole period because COGS refer to goods purchased further back in time at lower prices

- ***LIFO Liquidation***
  - When a company using LIFO sells more inventory than it purchases or manufactures, items from beginning inventory become part of COGS
  - When inventory costs are rising, these lower cost items in beginning inventory produce a higher gross profit, higher taxable income, and higher taxes when they are sold
    - ➔ Therefore, many companies avoid LIFO liquidations by purchasing sufficient quantities of inventory at year-end to ensure that ending inventory quantities are greater than or equal to beginning inventory quantities

- ***FIFO and LIFO Cost of Goods Sold under Periodic and Perpetual Inventory Systems***
  - FIFO ➔ Same COGS under periodic and perpetual
  - LIFO ➔ Different COGS under periodic and perpetual

    - ➔ Since perpetual LIFO is complex and costly to maintain, in periods of rising prices, periodic LIFO has higher COGA and lower amount for income before taxes
    - ➔ Companies keep perpetual inventory records on a FIFO basis and then make end-of-period adjustment entry to convert inventory on the balance sheet and cost of goods sold on the income statement to a LIFO basis

CHAPTER 8 – REPORTING AND INTERPETING PROPERTY, PLANT AND EQUIPMENT; INTANGIBLES; NATURAL RESOURCES

Acquisition of Property, Plant and Equipment

- The resources that determine a company's productive capacity are called *long-lived assets*
    - They are listed as *noncurrent assets* on the balance sheet and may be either *tangible* or *intangible*

- *Tangible assets*:
    - *Land* used in operations
    - *Building, fixtures, and equipment* used in operations
    - *Natural Resources*

- Under the cost principle, all reasonable and necessary expenditures made in acquiring and preparing an asset for use should be recorded as the cost of the asset
    - Sales taxes, legal fees, transportation costs, and installation costs are all **capitalized**, because they are not recorded as expenses in the current period
    - Any interest charges associated with the purchase are recorded as expense as incurred

- When a company purchases land, all of the incidental costs of the purchase are included in the cost

    ➔ Renovation and repair costs should be included as a part of its total cost

- When making a *basket purchase* of land, buildings and equipment, the total cost is allocated to each asset in proportion to the asset's market value relative to the total market value of the asset as a whole

- The amount recorded for the acquisition cost is:
    - Cash amount paid for the asset
    - The fair value of the asset given or received, when noncash assets are used as payment (**cash equivalent price**)

1. *Cash Payments*
    - When cash is used for payments, the asset purchased is debited and cash is credited
    - Cash may come both from operations or loans

2. *Payments using debt*
    - Leases that exceed 1-year in duration are classified as either **finance leases** or **operating leases,** depending on whether the party has effective control of the asset (lessor-original owner, or lessee-pays for the right to use)
    - Leases allow companies to have tax benefits
    - Unlike finance and operating leases, **short-term leases** are not reported on the balance sheet as liabilities and the assets are not included in fixed assets

3. *Payments using equity*
    - When noncash consideration is included in the purchase of an asset, the cash-equivalent cost is determined

4. *Construction*
    - When a company constructs an asset for its own use, it records the costs associated in construction (labor, materials, and a portion of the interest incurred during the construction period called **capitalized interest**)
    - Capitalizing labor, materials and a portion of interest expense:
        - ➔ Increases assets
        - ➔ Decreases expenses
        - ➔ Increases net income in the current period

- ➢ Assets require substantial expenditures during their lives to maintain or enhance their productive capacity:
    1. ***Ordinary repairs and maintenance***
        - Expenditures that maintain the productive capacity of the asset during the current accounting period only
        - Expenditures are recurring nature, involving relatively small amounts at each occurrence, and do NOT increase directly productive life, operating efficiency, or capacity of the asset
        - Cash outlays are recorded as **expenses** in the current period

    2. ***Improvements***
        - Expenditures that increase the productive life, operating efficiency, or capacity of the asset
        - Expenses occur infrequently, involve large amounts of money, and increase the asset's economic usefulness in the future through either increased efficiency or longer life
        - These expenses are **capitalized**

- ➢ Often, managers must exercise professional judgement and make a subjective decision in distinguishing between improvements and ordinary repairs:
    - ➔ Capitalizing expenses increase assets and net income for the current period, but lower it in the future periods because of the annual depreciation
    - ➔ Expensing the amount in the current period will lower taxes immediately

Use, impairment, and disposal of Plant and Equipment

- ➢ Except for land, which is considered to have an unlimited life, long-lived assets with a limited useful life represents the prepaid cost of a bundle of future services or benefits

- ➢ The **expense recognition principle** requires that a portion of an asset's cost is allocated as an expense in the same period that revenues are generated by its use
    - **Depreciation** is the term use to identify the matching of the cost of using buildings and equipment with the revenues they generate

        - ➔ **Depreciation** is the process of allocating the cost of buildings and equipment over their productive lives using a systematic and rational method

- ➢ Depreciation is a process of **cost allocation**

→ When an asset is depreciated, the remaining balance sheet amount probably does NOT represent its current market value

- **Depreciation expense** is the amount reported during each period on the income statement
  - The amount of depreciation expense accumulated since the acquisition date is reported in the balance sheet as a **contra-asset account** called **Accumulated Depreciation**
  - The **net book value** of a long-lived asset is its acquisition cost less the accumulated depreciation from the acquisition date to the balance sheet date

- To calculate the depreciation expense, 3 pieces of information are required:

1. Acquisition cost

2. Estimated useful life to the company
   ➔ Management's estimate of the asset's useful life economic life to the company rather than its total economic life to all potential users

3. Estimated residual value at the end of the asset's useful life to the company
   ➔ Management's estimate of the amount the company expects to recover upon disposal of the asset at the ned of its estimated useful life

   ➔ Since the latter two are estimates, the depreciation expense is necessarily an estimate as well

- Because of significant differences among companies, managers may choose from several acceptable depreciation methods that match depreciation expense with revenues generated in a period:
  - *Straight-line method*
  - *Units-of-production*
  - *Declining balance*

→ It is possible to choose different methods for specific assets or groups of assets, but one selected method should be applied consistently over time

Straight-line method

- An equal portion of an asset's depreciable cost is allocated to each accounting period over the asset's estimated useful life:
  - *Cost - Residual Value* ➔ Depreciable cost
  - $\frac{1}{Useful\ Life}$ ➔ Straight-Line Rate

$$Depreciation\ Expense = \frac{(Cost - Residual\ Value)}{Useful\ Life}$$

- Companies often create a depreciation schedule that shows the computed amount of depreciation expense each year over the entire useful life of the asset
  - Depreciation expense is constant each year
  - Accumulated depreciation increases by the same amount each year
  - Net book value decrease by an equal amount each year

Units-of-product method

- Relates depreciable cost to total estimated productive output

$$Depreciation\ expense = \frac{(Cost - Residual\ Value)}{Estimated\ Total\ Production} * Actual\ Production$$

- Depreciation expense, accumulated depreciation, and book value vary directly with the units produced
    - Depreciation expense is a *variable* expense because it varies with production or use
        - ➔ If the total estimated productive output differs from actual total output, the final adjusting entry to depreciate expense should be for an amount needed to bring the asset's net book value equal to the asset's estimated residual value

Declining-Balance method

- Used when an asset is considered to be more efficient or productive when it is newer
    - The method matches a higher depreciation expense with higher revenues in the early years of an asset's life, and a lower depreciation expense with lower revenues in the later years
    - It is an *accelerated depreciation* method
    - The depreciation rate is *double* the straight-line rate and is termed the *double-declining balance rate*

$$Depreciation\ Expense = (Cost - Accumulated\ Depreciation) * \frac{2}{Useful\ Life}$$

- Since Accumulated Depreciation is included in the formula, the double-declining rate is applied to a lower net book value each year, resulting in a decline in depreciation expense over time
- The net book value should not be depreciated below the residual value:
    - Before the estimated useful life, if the annual computation reduces net book value below residual value, only the amount of depreciation expense needed to make net book value equal to residual value is recorded, and no additional depreciation expense is computed in subsequent years
    - In the last year of the asset's estimated useful life, whatever amount is needed to bring net book value to residual value is recorded, regardless of the amount of the computation

Depreciation Estimates

- Depreciation is based on 2 estimates:
    - Estimated useful life
    - Estimated residual life

        - ➔ If the estimates change, the undepreciated asset balance, less any residual value at the date of the charge, should be depreciated over the remaining useful life
        - ➔ If improvements are made that extend the assets useful life, the depreciation must also be recalculated

- Under IFRS, it is possible to split an asset under different components, which can be depreciated independently:

- For instance, an airline company can depreciate separately the aircraft and its engines

Measuring Asset Impairment

- When an asset is not expected to generate sufficient cash flows at least equal to the book value, we say that the asset's book value is **impaired**
  - ➔ Corporations must review long-lived tangible and most intangible assets for possible impairment using a 2 steps process:

  1. *Test for Impairment*
     - Impairment occurs when events or changed circumstances cause the estimated future cash flows of these assets to fall below their book value
     - If Net Book Value > Estimated Future Cash Flows
       ➔ Asset is impaired

  2. *Computation of Impairment Loss*
     - $Impairment\ Loss = Net\ Book\ Value - Fair\ Value$

Disposal of Property, Plant and Equipment

- In some cases, a firm may dispose of an asset involuntarily, as the result of a casualty
  - ➔ These losses are often covered by an insurance

- However, companies may voluntarily decide not to hold a long-lived asset for its entire estimated life
  - ➔ Indeed, disposals of long-lived assets seldom occur on the last day of the accounting period
  - ➔ Therefore, depreciation must be recorded on the date of disposal for the amount of cost used since the last time depreciation was recorded

- Disposal of a depreciable asset requires 2 journal entries:
  - Entry to update the depreciation expense and accumulated depreciation amount

  - Entry to record the disposal:
  - ➔ The cost of the asset and any accumulated depreciation at the date of disposal must be removed from these accounts
  - ➔ The difference between any resources received on the disposal of an asset and its net book value on the date of disposal is treated as a **gain/loss** on the disposal of the asset
  - ➔ Gain/Loss is reported in operations on the income statement

Intangible assets and natural resources

- Intangible assets are increasingly important resources for organizations
  - It has value because of certain rights and privileges often conferred by law on its owner

- The majority of intangible assets are usually evidenced by a legal document

- Intangible assets are recorded at their **historical cost** only if purchased
  - ➔ If the assets are developed internally, they are expensed when incurred

- Intangibles may have definite or indefinite lives:

  Definite Life
  - The cost is allocated on a straight-line basis each period over its useful life in a process called **amortization**, which is similar to depreciation
  - Most companies do not estimate the residual value for their intangible assets because they are expected to be used by the company, not sold to others
  - Amortization expense is included in the income statement each period, and intangible are recorded at their cost minus the accumulated amortization

  Indefinite Life
  - They are not amortized
  - Must be reviewed at least annually for possible impairment of value

- ***Goodwill***
  - It is the cost in excess of net assets acquired, and refers to the favorable reputation that a company has with its customers
  - It is internally generated and not reported as an asset
  - The only way to record it as an asset is to purchase another business: often the purchase value exceeds the fair value of all of its net assets
    - ➔ Goodwill is the difference between the purchase price and the fair value of all of its assets
  - It is considered to have an indefinite life, but must be controlled periodically for possible impairment
- ***Trademarks***
  - Refer to a special name, image, or slogan identified with a product or a company
  - It is protected by law
  - Are among the most valuable assets a company can own
  - They are not recorded on the balance sheet unless they are purchased
  - Even if companies spend millions in developing trademarks, most of these expenditures are recorded as expenses and not capitalized as intangibles

- ***Copyrights***
  - Give the owner the exclusive right to publish, use, and sell a literary, musical, or artistic piece for a period not exceeding 70 years after the author's death
  - A copyright that is purchased is recorded at cost

- ***Technology***
  - The number of companies reporting technology as an intangible asset continues to rise
  - For *Website Development*, costs related to acquiring a domain name and developing graphics are capitalized as an intangible asset
  - For *Computer Software*, any costs incurred during the preliminary concept phase of a software project should be expensed. Once the software project reaches "technological feasibility", the direct costs of actual development should be capitalized as intangibles
  - If the software is developed for **internal use**, the intangible asset is amortized over a short useful life, with amortization reported on the income statement

- If the software is produced **to be sold, leased, or marketed** to customers, amortization expense is included as a **Cost of Sales**

- ***Patents***
    - Exclusive right granted by the federal government for a period of 20 years, typically granted to the person who invents a new product or discovers a new process
    - Enables the owner to use, manufacture, and sell both the subject of the patent and the patent itself
    - Prevent competitors from simply copying a new invention or discovery until the inventor has had time to earn an economic return for his invention
    - If **purchased**, they are recorded at their purchase price
    - If **developed internally**, they are recorded at their registration and legal cost because GAAP requires to expense research and development costs as incurred

- ***Franchises***
    - May be granted by the government or a business for a specified period and purpose
    - They are contracts that can have a variety of provisions
    - They usually require an investment by the franchisee, therefore they should be accounted for as intangible assets
- ***Licenses and Operating Rights***
    - Obtained through agreements with governmental units or agencies
    - Permit owners to use public property in performing their services

- **Research and Development Costs** are never capitalized under US GAAP, but expensed, because they often do not possess sufficient probability of resulting in measurable future cash flows
    - **IFRS**, however, does not allow to capitalize Research costs but allows to capitalize measurable costs of Developing intangible assets

Acquisition and Depletion of Natural Resources

- Many firms develop raw materials and products from natural resources:
    - Resources are often called **wasting assets** because they are **depleted**

- When natural resources are acquired or developed, they are recorded using the cost principle

- As a natural resource is used up, its acquisition cost must be apportioned among the periods in which revenues are earned, in conformity with the **expense recognition principle**

- **Depletion** describes the process of allocating a natural resource's cost over the period of its exploitation
    - ➔ Usually, depletion is computed using the **units-of-production method**

- When a natural resource is depleted, the company acquires inventory
    - ➔ Since depletion is necessary to obtain inventory, the depletion computed during a period is not expensed immediately but is **capitalized** as part of the cost of the inventory
    - ➔ Only when inventory is sold, it is recorded as an expense (COGS)

CHAPTER 9 – REPORTING AND INTERPRETING LISBILITIES

- From the firm's perspective, debt is considered riskier than equity:
  - Debt payments are legal obligations
  - Creditors can force bankruptcy
  - Creditors can require the sale of assets

➔ The higher the financial leverage, the riskier a company is

Current Liabilities

- Liabilities expected to be paid with current assets within the current operating cycle of the business or within one year from the balance sheet date
- Many current liabilities have a direct relationship to the operating activities of a business
  - Specific operating activities may be financed by a related current liability

1. Accounts Payable

- Companies running their day-to-day operations purchase goods and services from other businesses
  - Usually, these purchases are made on credit, with cash payments only after the goods and services have been provided
  - These transactions create obligations to pay the suppliers in the near future

- Mangers may be tempted to delay payment to suppliers as long as possible to conserve cash
  - However, financial analysts become concerned if a business does not meet its obligations to suppliers on a timely basis because it often indicates that a company is experiencing financial difficulties

2. Accrued Liabilities

- Expenses incurred before the end of the previous accounting period but have not been paid yet
  - These expenses include rent, wages, and utilities

- *Accrued Taxes Payable*:
  - Federal taxes on the income earnt in the previous period

- *Accrued Compensation and Related Costs*:
  - Unpaid salaries that workers have earned at the end of the previous accounting period and have not been paid yet
    → May be included in the General Accrued Liability Account

  - Companies must report the cost of unpaid benefits, including retirement programs, vacation time, and health insurance

- *Payroll Taxes*
  - **Employee Income Taxes**
    - Withheld by the employer for each employee
    - The amount is recorded by the employer as a current liability and remains a liability until the amount is paid to the government

- **Employee and Employer FICA taxes**
    - Social Security taxes required by the Federal Insurance Contribution Act
    - Imposed in equal amounts to both employees and employers
    - Employers pay their portion of the taxes, and withhold the employees' portion from their paychecks as part of an employee's payroll deduction
    - 6.2% Employer, 6.2% Employee → 12.4% total

- **Employer Unemployment Taxes**
    - Employers are charged unemployment taxes through the Federal Unemployment Tax Act (FUTA) and State Unemployment Tax Acts (SUTA)
    - **FUTA tax** → 0.6% on taxable wages up to the first $7000 for each employee

➔ Companies generally record 2 journal entries to account for payroll taxes:
- The first entry records the amount of cash paid to employees and the various deduction withheld from employees' paychecks
- The second entry records the taxes that employers must pay from their own funds

3. Deferred Revenues

➢ Cash collected from customers before the related revenue has been earned:
- As the firm earns the related revenue, the liability account is debited, and the revenue account is credited

4. Notes Payable

➢ Contract that specifies the amount borrowed, the date by which it needs to be repaid, and the interest rate associated with the borrowing

➢ Interest is a revenue for the lender, and an expense for the borrower

5. Current Portion of Long-Term Debt

➢ To provide information on how much of the long-term debt must be repaid in the current year, a company must reclassify its long-term debt as a current liability within a year of its maturity date

6. Refinancing a Note Payable

➢ Instead of paying off a loan, a company may choose to refinance by renegotiating the loan or by taking out a new loan and using the proceeds to pay off the loan

➢ If a company intends to refinance a current maturing loan with a new long-term loan and has the ability to do so, the current loan should be classified as long-term liability

➢ US GAAP and IFRS require that refinancing of debt must take place by the balance sheet date to affect the classification as current or long-term

7. Contingent Liabilities

➢ Some recorded liabilities are based on estimates because the exact amount will not be known until a future date
- **Contingent liability** is created when a company offers a warranty with a product it sells

- ➔ Over time, as customers return defective equipment, the firm will decrease the warranty payable account and either refund the customer cash or fix the equipment and return it to the customer

- Some transactions or events create a reasonably possible future sacrifice of economic benefits
  - ➔ These situations are reported in the footnotes, but not in the company balance sheet

- Whether a contingent liability is reported on the balance sheet, in the footnotes, or not at all depends on 2 factors:
  - Probability of the future economic sacrifice
  - Ability of the management to estimate the amount of the liability

	Probable	**Reasonably Possible**	**Remote**
Amount can be reasonably estimated	Record as Liability	Disclose in footnotes	Disclosure not required
Amount cannot be reasonably estimated	Disclose in footnotes	Disclose in footnotes	Disclosure not required

- Under GAAP, “probable” has been defined as *likely to occur*, which is interpreted as having a greater than 70% probability to happen
- Under IFRS, “probable” is defined as *more likely than not to occur*, which implies more than 50% chance of occurring
  - ➔ This means that, for some contingent liabilities, IFRS would require reporting of a liability on the balance sheet, whereas GAAP would simply require footnote disclosure

Working Capital Management

- Liquidity is the ability of a firm to pay current obligations
  - It is measured using the *current ratio* and the dollar amount of *working capital*

- *Working Capital* is the dollar difference between current assets and current liabilities
  - It is important because it has a significant impact on the health and profitability of the company

- The working capital accounts are actively managed to achieve a balance between a company’s short-term obligations and the resources to satisfy those obligations
  - Too little working capital→ runs liquidity risk
  - Too much working capital → inefficiency

Long-Term Liabilities

- Include all obligations that are not classified as current liabilities, such as Long-Term Notes Payable and Bonds Payable
  - Companies borrow money on a long-term basis in order to purchase assets, such as property and equipment

- Debt can be:
  - ***Secured*➔** creditors require the borrower to pledge specific assets as security for long-term liabilities
  - ***Unsecured*➔** when the lender relies on the borrower's integrity and general earning power to repay the loan

1. Long-Term Notes Payable and Bonds

- *Private Placement* ➔ Raising capital from financial institutions such as banks, insurance companies, or pension funds
  - The resulting liability from private placement is a **note payable**, which is a written promise to pay a stated sum at one or more specified future dates called the **maturity date(s)**

- In many cases, a company's needs for capital exceeds the financial ability of any single bank or creditor
  - In these situations, the company can issue publicly traded debt called **bonds** or it can syndicate a loan from different institutions

- Accounting for long-term debt is based on the same concepts used in accounting for short-term notes payable
  - A liability is recorded when the debt is incurred
  - Interest expense is recorded with the passage of time

- When a company borrows from a foreign country in foreign currency:
  - Accountants must convert foreign debt in US dollars at the end of the accounting period in order to report the debt on a US company's balance sheet

2. Lease Liabilities

- Companies often lease assets rather than purchasing them:
  - **Lessor** is the owner of the asset
  - **Lessee** is the party that pays for the right to use the asset

- A lessee can lease an asset by signing either a short-term lease or a longer-term lease
  - ➔ **Longer-term leases** are more common and are classified as either
    - Finance leases
    - Operating leases

    Depending on whether the effective control of the leased asset remains with the lessor or is transferred to the lessee

- GAAP guides accountants to determine if a lease is a **Finance Lease**:
  - The lease transfers ownership of the underlying asset by the end of the lease term
  - The lease grants the lessee the option to purchase the underlying asset that the lessee is reasonably certain to exercise
  - The lease term is for the major remaining economic life of the underlying asset
  - The present value of the sum of lease payments equals or exceeds substantially all of the fair value of the underlying asset
  - The underlying asset is of such a specialized nature that it is expected to have no alternative use to the lessor at the end of the lease term

- If any of the criteria are met, then effective control is transferred to the lessee and the lease is a finance lease
- If none of the criteria are met, effective control remains with the lessor and the lease is an operating lease

- Accounting for a lease differs between Operating and Finance leases
  - Two key aspects of accounting for longer-term leases:
    - The company must record a lease asset and a lease liability upon signing the lease agreement
    - The amount recorded as the lease asset and the lease liability is the current cash equivalent of the required future lease payments

- A short-term lease is a lease for 12 months or less that does not contain a purchase option that the lessee is expected to exercise:
  - A company does not record a lease asset or a lease liability when it signs a short-term lease
  - The company simply records the lease expense over the life of the lease

CHAPTER 10 – ACCOUNTING FOR BONDS

Characteristics of bond securities

- Companies may prefer issuing bonds rather than stocks because:
  - Stockholders maintain control
  - A portion of interest expense is tax deductible
  - Issuing bonds can increase the return to shareholders, because if a company borrows at a low interest rate and invests in projects that earn a higher rate, it can increase the return to shareholders

- However, bonds have some disadvantages:
  - *Risk of Bankruptcy,* because interest payments to bondholders are fixed charges that must be paid each period, whether the corporation earns income or incurs losses
  - *Negative impact on cash flow,* because the management must generate sufficient cash to repay the debt or have the ability to refinance it

- Bond Principal:
  - Amount to be paid at maturity date, which is used to compute periodic cash flows
  - Also known as *face value, par value,* or *maturity value*

- Coupon Rate:
  - Rate at which periodic payments must be made wrt the face value of the bond

- Different types of bonds have different characteristics for good economic reasons:
  - Individual investors have different risk and return preferences

- Secured Bond
  - Bond that pledges an asset as security in case the firm is unable to repay the bond
  - It implies a lower interest rate
  - If no assets are pledged as a guarantee of repayment at maturity, it is called and *unsecured bond* or *debenture*

- Convertible Bond:
  - Gives the opportunity to convert the bond into common stock in the future
  - It implies lower interest rate and unsecured status

- Callable Bonds:
  - Contain a call feature that allows the bond issuer to retire the bonds earlier

Bond Issuance

- When a firm decides to issue a bond, it prepares:
  - *Indenture*➔ Legal document that specifies all the details of the bond offering
  - *Prospectus* ➔ regulatory document filed with the SEC, which also specifies the bond's features

    ➔ The main details include maturity date, rate of interest to be paid, date of each interest payment, and other characteristic of the bond, such as whether it is callable or convertible

    ➔ The prospectus also describes any *covenants* designed to protect bondholders

- Covenants may limit a company's future actions, so management prefers covenant that are not too restrictive
  - However, bondholders prefer more restrictive covenants, which lessen the risk of the investment
  - Covenants are typically reported in the notes to the financial statements

- A company's prospectus and annual report also describe to potential investors how the proceedings from the issuance will be used

- When a bond is issued, a *bond certificate* is issued:
  - Bond certificates for the same issuance all have the same characteristics
  - The *trustee* is an independent party appointed to represent bondholders and to ascertain whether the issuing company has fulfilled all provisions of the bond contract

Reporting Bond Transactions

- When a bond is issued, the firm must specify two types of cash payments in the contract:
  - *Principal*, which is a single payment that is made when the bonds are retired at the end of their life
  - *Coupon Payments,* which represent an annuity and are computed by multiplying the face value by the coupon rate of the bond. The contract specifies if these payments are made quarterly, semi-annually, or annually

- The price at which a bond is sold is determine by the market, by calculating the present value of the bond using the *market interest rate*

  - ***Bond issued at par*** ➔ coupon rate = market rate➔ ➔ Face Value = Present Value

  - ***Bond issued at premium*** ➔ coupon rate > market rate➔ Face Value < Present Value

  - ***Bond issued at discount*** ➔ coupon rate < market rate➔ Face Value < Present Value
    - ➔ For accounting purposes, the only interest rates that matter are the **coupon rate** and the **market interest rate on the date of issuance**

Bond issued at par

- At issuance, the firm receives the present value of the future cash flows associated with the bonds
  - ➔ When a bond is issued at par, the present value of the future cash flows associated with a bond always equals the bond's face value amount

- Interest expense on Bonds issued at par are reported on the income statement:
  - Since interest is related to financing activities, it is typically reported below *income from operations* on the income statement

Bond issued at discount

- There are 2 acceptable ways to report bonds sold at a discount, which result in the same dollar value reported on a company's balance sheet:

1. ***Explicitly*** keeping track of the bond discount by incorporating it into the journal entries (by debiting a *Bond Discount* contra-liability account)
2. ***Implicitly*** keeping track of the bond discount, but not incorporating it into journal entries

- The accounting method used to record interest rate expense is referred to as the *effective-interest rate amortization method*
    - A company computes interest rates in a given period by multiplying the bonds payable book value times the market interest rate on the date of issuance

$$Interest\ Expense\ =\ Payable\ Book\ Value\ *\ Interest\ rate\ on\ issuance\ date$$

        - ➔ When a bond is issued at discount, the interest expense for each period is greater than the cash coupon payment
        - ➔ The difference between Interest Expense and Coupon Payment gives the ***Amortization amount***

Bonds Issued at Premium

- Similarly to bonds issued at discount, firms can report bonds issued at premium either explicitly or implicitly
- When doing it explicitly, an *adjunct liability account* credited
- $Interest\ Expense\ =\ Payable\ Book\ Value\ *\ Interest\ rate\ on\ issuance\ date$
- The basic difference with bonds issued at discount is that the amortization of a bonds issued at premium decreases the book value of the liability
        - ➔ This is because the coupon payment in greater than the interest expense, so the amortization liability will be a negative value

Zero-Coupon-Bonds

- It simply is a deeply discounted bond that will sell for substantially less than its face value
- The accounting method is the same as in bonds issued at a discount, but the amount of the discount will be much larger

Accounting for Issuance Costs

- When company issue bonds, they almost always hire an underwriter to help them with the offering
- The underwriters charge a fee, which is deducted from the proceedings of the bond issuance:
    - Fee increases the bond discount if the bond was issued at a discount
    - Fee reduces the bond premium if the bond was issued at a premium

Reporting Interest Expense using Straight-Line Amortization

- GAAP allows to amortize bonds discounts or bond premiums using straight-line amortization if the results do not materially differ from results computed using the *effective-interest method*
- Journal entries using straight-line amortization or effective-interest amortization are the same:
    - What varies is the amount between the two

Early Retirement of Bonds

- Some bonds have a **call feature** that allows the issuing company to retire the bonds early
  - Often, this feature requires the issuing company to pay investors an amount greater than the bond's face value to retire the bonds before maturity
  - The amount is usually stated as a percentage of the bond's face value, and it is described in the bond indenture or bond prospectus

- Sometimes, a company may decide to retire bonds early by purchasing them on the open market:
  - This approach is necessary when the bonds do not have a call feature
  - When interest rates increase, the value of the issued bonds falls, so firms may decide to retire them by purchasing them in the open market

- If Book Value > Cash Paid for retirement ➔ Gain on the retirement on Bonds
- If Book Value < Cash Paid for retirement ➔ Loss on the retirement on Bonds