

Chapter 18: Reporting Inventory

- **Inventory** describes assets that are
 - Ready for sale
 - Being produced for sale
 - Ready to use in the production process
- Retail companies have merchandise inventories
 - Purchase inventory for resale from wholesalers or manufacturers
- Manufacturers
 - Raw materials inventory
 - Goods in process inventory
 - Finished goods inventory
- **Perpetual inventory system**
 - Keeps a continuous record of the cost of inventory on hand and the cost of inventory sold
- **Periodic inventory system**
 - When it does not need to keep a continuous record of the inventory on hand and sold
 - Determines inventory on hand by a physical count at the end of the accounting period
- **Specific identification method**
 - A company assigns a specific cost (what it paid for that specific unit) to each unit of inventory it sells and to each unit that it holds in its ending inventory
- Reporting Inventory on the Balance Sheet
 - A company using GAAP is required to base its inventory reporting on two accounting concepts:
 - **Historical cost concept**
 - A company records its transactions on the basis of dollars exchanged (aka the cost) in the transaction
 - Once the company records a transaction, it usually retains the cost involved in the transaction in its accounting records
 - Critics question the relevance of historical cost because manufacturing a product adds more value
 - Supporters
 - say that until the company has a transaction with a buyer at an agreed price, there is insufficient evidence to support any other value than the cost
 - “companies earn a profit by selling, not by manufacturing items or putting them on the shelves.”
 - Reliability of historical costs and GAAP’s emphasis on conservatism outweigh any potential increase in relevance that would be gained from using any other measure of value, such as selling price
 - **Matching concept**
 - To determine its net income for an accounting period, a company computes the total expenses involved in earning the revenues of the period and deducts them from the revenues earned in that period
 - Company reports the inventory expense, known as **costs of goods sold** or **cost of sales**, in the period in which it sells the item and reports the revenue from the sale
 - Historical cost and matching concepts provide the basis for how a company accounts for inventory and reports it in the company’s financial statements.
 - Five important issues in this chapter:
 - Computing the historical cost and the amount of inventory
 - Using alternative inventory cost flow assumptions
 - Using a company’s inventory and cost of goods sold disclosures for evaluation

- Using the lower of cost or market rule
 - Estimating the cost of inventory and the cost of goods sold
- Computing the Historical Cost and the Amount of Inventory
 - Cost of each inventory-all costs incurred to bring the item to its existing condition and location
 - Purchase price less any discounts
 - Sales tax
 - Applicable transportation costs
 - Insurance
 - Customs duties
 - Other similar costs
 - When a company takes inventory, counts everything it physically has
 - A company could own inventory **in transit**
 - **In transit:** that a freight company is in the process of delivery the inventory from the selling company to the buying company
 - the company that has economic control over the items in transit includes them in its inventory
 - economic control transfers the same time legal ownership transfers
 - **FOB (free on board) shipping point** means that the selling company transfers ownership to the buyer at the place of sale; before the inventory is in transit
 - Selling company excludes these items in transit from its inventory
 - Buying company includes these items in transit in its inventory
 - Buying company is responsible for any transportation costs incurred to deliver the items, and includes those costs as a cost of its inventory
 - **FOB (free on board) destination** means that the selling company transfers ownership to the buyer at the place of delivery (after transit is completed)
 - Selling company includes these items in transit in its inventory until delivery takes place
 - Buyer excludes them from inventory
 - Selling company is responsible for any transportation costs incurred to deliver the items and includes those costs in its selling expenses
- Using Alternative Inventory Cost Flow Assumptions
 - After a company has determined the number of units in ending inventory, must allocate the total cost of these units (costs of goods available for sale) between the ending inventory (balance sheet) and the costs of goods sold (income statement)

Costs of Beginning Inventory	=	Cost of Goods Available for Sale	=	Cost of Ending Inventory	→	Balance Sheet
+				+		
Cots of Purchases				Cost of Goods Sold	→	Income statement

- GAAP allows a company to choose one of four alternative cost flow assumptions to allocate its cost of goods available for sale between ending inventory and costs of goods sold:
 - Specific identification
 - First in, first out (FIFO)
 - Average cost
 - Last in, first out (LIFO)
- Company must disclose which method it uses, and it must use that method consistently every year

- When the costs to acquire the inventory have changed during the period, each of the inventory cost flow assumptions produces different amounts for the costs of goods sold and the ending inventory balance.
- These cost flow assumptions may not be related to the actual physical flow of the goods in inventory
- A company will typically use FIFO physical flow of inventory to reduce the risk of obsolescence, but may still use any of the cost flow assumptions to allocate its cost of goods available for sale between ending inventory and cost of goods sold
- First In, First Out
 - **First in, first out (FIFO)** cost flow assumption, it includes the earliest (first) costs it incurred in the costs of goods sold as it sells its products, leaving the latest costs in ending inventory
 - Company assumes that it sells the inventory in the same order that they purchased it
- Average cost
 - Must compute an average cost per unit after each purchase and then assign this new average cost to items sold until the next purchase (when it computes another new average cost)
 - **Moving average** cost flow assumption
 - because this method involves tedious calculations, no further discussion
- Last in, First Out
 - **Last in, first out** cost flow assumption, it includes the latest costs it incurred before a sale in its cost of goods sold and the earliest costs in ending inventory
 - it assumes that the order in which the inventory sells is the reverse of the order in which the company purchased them
- Effects of the Two Alternatives
 - FIFO and LIFO affect a company's financial statements differently
 - Effects on the Financial Statements
 - Income statement and balance sheet
 - If costs are rising,
 - costs of goods sold is lower under FIFO because the first costs moved into cost of goods sold are the earlier (lower) costs
 - Because cost of goods sold is lower, gross profit (sales-cost of goods sold) is higher and net income is higher
 - LIFO, the most recent (higher) costs are moved into cost of goods sold first, making it higher than the costs of goods sold under FIFO
 - Gross profit and net income are lower than under FIFO
 - If costs are falling, the relationships between FIFO and LIFO are reversed
 - The **replacement cost** is the cost (including any transportation costs ordinarily incurred) that a company would have to pay at the balance sheet date to purchase (replace) an item of inventory (based on purchasing inventories in normal quantities from the usual suppliers)
 - FIFO reports ending inventory at close to replacement cost, it understates cost of goods sold when costs are rising because of goods sold is not close to the amount the company paid for its most recent purchases
 - LIFO includes most recent costs in costs of goods sold first, it takes an income statement approach by matching most recent costs against revenues. However, LIFO understates ending inventory because the cost of ending inventory is not close to the amount the company paid for its most recent purchases