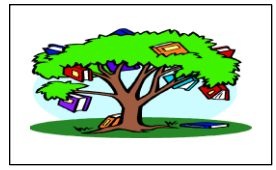
Toward Business Literacy: Accounting Outlines



Inventory

Inventory is what a business purchases or manufactures that is intended for sale.

Classification

- **Merchandise inventory**: in form ready for sale
- **Manufacturing inventory**: three classifications
    - Raw materials: on hand but not placed into production
    - Work in process: materials, labor and a ratable share of overhead
    - Finished goods: completed but unsold units

Control

- Have enough inventory without overstocking; use purchase requisition; purchase order addressed to vendor (with price, terms and shipping date); shipper ships goods and sends an invoice (with quantity and description, price and terms); receiving report with description, quantity and condition goes to accounting department
- **Perpetual:** involves continuous record of changes in the inventory account
    - Purchases, freight-in, returns, allowances, discounts, sales → affect the inventory account directly after every transaction
    - Used for high-value, low volume goods
- **Periodic:** uses a purchases account to account period purchases, added to beginning inventory to get "goods available for sale"
    - A physical count of ending inventory is subtracted from goods available for sale to know cost of goods sold
    - Inventory can either be sold or remain on the shelf
    - Used for low-value, high volume goods

Ownership or Title

Legal title passes to buyer according to the terms of sale

- **FOB shipping point**: goods belong to buyer at time of delivery to carrier
- **FOB destination**: title and risk of loss transfers to buyer when received
- **Consignment**: goods always belong to seller (consignor); consignee has a duty of due care and reasonable protection and is selling agent for a fee.

Costs of Inventory

- **Product costs**: costs that "attach" to inventory
    - All costs necessary to bring goods to buyer in salable condition
    - Includes freight in (freight out is a selling expense)
- **Period costs**: selling, general and administrative, unrelated to product
- **Purchase discounts**: like sales discounts; net method has discount included in purchase; gross method recognizes discounts when taken
    - Example: 2/10, n/30 (2% disc. paid in 10 days, full amount due in 30)

From Intermediate Accounting by Keiso
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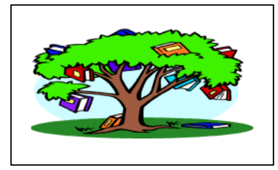

Cost Flow Assumption

Different methods exist to assign costs to Goods Sold and Ending Inventory

- **Specific Identification**: for small quantities of costly, unique items
- **FIFO**: First in, First Out. The first items purchased go to Goods Sold
- **LIFO:** Last in, First Out. The first items purchased remain in inventory
    - The last items go into Cost of Goods Sold in layers
    - Dollar value LIFO uses price indices to increase or decrease layers of inventory purchased and sold in times of inflation/deflation
- **Average Cost**: Total costs/Total units give average applied to CGS and EI

Lower of Cost or Market

- Inventories are recorded at original cost, but if obsolescence, price-level changes, or damage brings the value of the inventory below cost, there is a write down. Historical cost is abandoned when future utility or revenue producing ability of the asset is no longer as great as the original cost. It is better to undervalue assets than overvalue (conservatism).
- The **replacement cost** is the cost to reproduce the goods.
- **Net realizable value** is the estimated selling price less costs for completion and disposal.
- The rule for evaluating inventory at lower of cost or market:
    - *If replacement cost is greater than the NRV, use the replacement cost.
- The market has a **floor**, which is the NRV less a normal profit margin, and a **ceiling** which is the NRV. Anything within this range uses the replacement cost. The historical cost is used if it is below the market floor.

Inventory Cost Flows Illustrated

Data:

1/1	Beginning inventory	200 units at $1.00 per unit	$200
2/10	Purchase	100 units at $1.50 per unit	$150
3/12	Purchase	150 units at $2.00 per unit	$300
4/1	Sale	230 units	
5/3	Purchase	120 units at $3.00 per unit	$360
5/5	Sale	150 units	

<u>FIFO periodic</u> takes the total sales for the period (1/1 to 5/5), and the cost of goods sold associated with the sales comes from the top layers:

Total sales	380 units		
Costs of these sales	200 @	$1.00	$200
	100 @	$1.50	$150
	80 @	$2.00	$<u>160</u>
	Total Cost of Goods Sold		$510

Ending inventory in FIFO comes from the bottom

120 @	$3.00	$360
70 @	$2.00	$<u>140</u>

Total Ending Inventory				$500

<u>LIFO periodic</u> takes the goods last purchased and puts them in cost of goods sold first. Ending inventory comes from the top layers.

Total sales	380 units				
Cost of these sales		120	@	$3.00	$360
		150	@	$2.00	$300
		100	@	$1.50	$150
		10	@	$1.00	$<u>10</u>
	Total Cost of Goods Sold				$820
	Ending Inventory	190	@	$1.00	$190

Average Cost finds an average for goods available → same average applies both goods sold and ending inventory.

Total costs in inventory:	$1010	CGS:	380 x $1.77	$ 672.60
Total units available:	570	EI:	190 x $1.77	$ 336.40
Average ($6460/570)	$1.77			

Notice that CGS + EI are the same for all methods. The sum is goods available, and they can either be sold or remain in inventory.

<u>FIFO Perpetual</u> **(**Using the same data) perpetual record keeping records cost of goods sold after each sale:

	Layers involved				Cost of Goods Sold
4/1 sale of 230 units	200	@	$1.00		$200
	30	@	$1.50	<u>$45</u>	
	Total for 4/1 sale				$245
5/5 sale of 150 units	70	@	$1.50		$105
	80	@	$2.00	$<u>160</u>	
	Total for 5/5 sale				$265

Total CGS under perpetual is the sum of the costs associated with each dated sale. Ending inventory is in the bottom layers

<u>LIFO Perpetual</u>

	Layers involved				Cost of Goods Sold
4/1 sale of 230 units	150	@	$2.00		$300
	80	@	$1.50	$<u>120</u>	
	Total for 4/1 sale				$420
5/5 sale of 150 units	120	@	$3.00		$360
	20	@	$1.50	$30	
	10	@	$1.00	$<u>10</u>	
	Total CGS for 5/5 sale				$500
Ending inventory	90	@	$1.00		$90

Average Cost Perpetual: after every sale, a new average cost is calculated