Chapter 6

Inventory & Inventory Valuation

AGENDA

- Background Info on Inventory
- Determining Inventory Quantity
- Establishing Ownership
- Inventory Valuation Methods
- COGS & Inventory
- Sales & Sales Returns
- Purchases & Purchase Returns

Background Info

- In the B/S of merchandising and manufacturing companies, inventory is a very significant current asset.
- Inventory are those items that are ready for sale:
  - Raw Materials
  - Work-in-Progress
  - Finished Goods

- In the I/S, inventory is vital in determining the results of operations for a particular period.
- **Gross Profit = Sales – Cost of Goods Sold**
- Important for management, owners, & other users

Background Info

2 methods for inventory recording:

Perpetual

- Updates inventory and COGS after every purchase and sale

Periodic – We only cover this!

- Delays updating of inventory and COGS until the end of period
- Misstates inventory during the period

Determining Inventory Quantities

- **3 Characteristics of Inventory:**
- In order to prepare F/S, it is necessary to determine the **number** of units of inventory, their **ownership** status, and the selected **valuation** method.

- To determine the number of units of inventory, take a physical inventory of goods on hand.

- Taking a physical inventory involves counting, weighing, or measuring each kind of inventory on hand.

Taking Physical Inventory
Internal Control Procedures

1. Employees who normally do not work with inventory should do the counting **(segregation of duties)**.
2. Each counter should establish the authenticity of each inventory item **(establishment of responsibility)**.
3. Another employee should count it again **(independent verification)**.
4. All inventory tags should be pre-numbered and accounted for **(documentation procedures)**.
5. At the end of the count, a designated supervisor should ascertain that all inventory items are tagged and that no items have more than one tag **(independent verification)**.

Establish Ownership

3 terms of sale in order to establish ownership:

1. FOB Shipping Point

   As soon as the products are sold, the buyer has ownership of them.

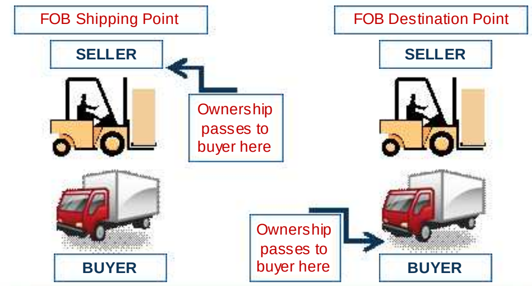
2. FOB Destination Point

   The buyer only has ownership of the products when they arrive at the buyer's place.

3. Consignment Basis

   Ownership rests with the shipper until the product is sold to the customer. This is NOT inventory for the company selling these products at their location.

Establish Ownership
Terms of Sale



Journal Entries

When inventory is purchased:
DR Purchases
CR A/P or Cash
1

When inventory is sold:
DR A/R or Cash
CR Sales
2

At the end of the period, any amount **sold** is:
DR COGS
CR Purchases
3

At the end of the period, any amount **not sold** is:
DR Inventory
CR Purchases
4

Purchases a/c goes down to "0"

The Question is what $$ VALUE is used for COGS & Inventory at the end of the period?

Recording Freight Costs

General Journal				J1
Date	Account Title and Explanation	Ref	Debit	Credit
May 4	Freight In		150	
	Cash			150
	To record payment of freight.			

When the buyer pays for the freight costs separately, the account Freight In is debited and Cash is credited.

Valuation Method - JIT

- The specific identification method tracks the actual physical flow of the goods.
- Each item of inventory is marked, tagged, or coded with its specific unit cost.
- It is most frequently used when the company sells a limited variety of high unit cost items such as cars, land.

Valuation Method - FIFO

- The FIFO method assumes that the earliest goods purchased are the first to be sold.
- Often reflects the actual physical flow of inventory.
- The costs of the earliest goods purchased are the first to be recognized as COGS.
- The costs of the most recent goods purchased are recognized as the ending inventory.

Valuation Method - AC

- The AC method assumes that the goods available for sale are homogeneous (the same).
- A weighted average of all purchase costs is calculated to determine the AC per unit.
- The weighted average unit cost is then applied to the units sold to determine the COGS.
- The weighted average unit cost is also applied to the units on hand to determine the ending inventory.

Valuation Method - LIFO

- The LIFO method assumes that the latest goods purchased are the first to be sold and that the earliest goods purchased remain in ending inventory.
- Rarely coincides with the actual physical flow of inventory.
- As goods are purchased, they are assumed to be for sale first, regardless of the date of purchase.
- Not used in Canada.

Effects of Valuation Methods on F/S

Income Statement Effects	Balance Sheet Effects
•In periods of inflation, FIFO reports the highest NI, LIFO the lowest, and AC falls in the middle. •In periods of deflation, LIFO reports the highest NI, FIFO the lowest, and AC falls in the middle. •When prices are constant, all methods will provide the same results.	•FIFO produces the best B/S value since the inventory costs are closer to their current or replacement costs.

COGS & Inventory

- COGS is an I/S account
- Sales – COGS = Gross Profit
- Gross Profit – Expenses = Net Income
- COGS = BI + Purchases – EI
- EI is the inventory asset account in B/S

Additional Notes

Beginning Inventory | Purchases | Ending Inventory | COGS

- Both BI & EI appear on the I/S. Only EI appears on the B/S.
- The EI of one period automatically becomes the BI of the next.
- Inventory errors affect the determination of COGS, NI, current assets, & OE.
- A company must use its chosen valuation/costing/cost-flow method consistently from one accounting period to the next.
- When a company changes its valuation/costing/cost-flow method, the change & its effects on NI should be disclosed in the notes to the F/S.

Recording Sales and Sales Returns

Current GAAP

You sell $3,000 of goods to a customer on cash

DR Cash 3,000
CR Revenue 3,000

The customer returns $300 of goods

DR Sales Returns 300
CR Cash 300

Proposed GAAP

You sell $3,000 of goods to a customer on cash

DR Cash 3,000
CR Revenue 2,700
CR Unearned Rev 300

At the end of the YEAR:

1. Customer returns $300 of goods
2. Customer returns $200 of goods
3. Customer returns $400 of goods

Proposed GAAP

Customer returns $300 of goods

DR Unearned Rev 300
CR Cash 300

Customer returns $400 of goods

DR Unearned Rev 300
DR Revenue 100
CR Cash 400

Customer returns $200 of goods

DR Unearned Rev 300
CR Cash 200
CR Revenue 100

- **Only 1 of these 3 journal entries is to be recorded at the end of the year.**
- **This is an ADJUSTING ENTRY involving unearned revenue.**

Recording Purchases & Purchase Returns

Current GAAP

You buy $3,000 of goods from a supplier on cash

DR Purchases 3,000
CR Cash 3,000

You return $300 of goods

DR Cash 300
CR Purchase Returns 300

Proposed GAAP

You buy $3,000 of goods from a supplier on cash

DR Purchases 2,700
DR Deferred P 300
CR Cash 3,000

At the end of the YEAR:

1. You return $300 of goods
2. You return $200 of goods
3. You return $400 of goods

Proposed GAAP

You return $300 of goods

DR Cash 300
CR Deferred P 300

You return $400 of goods

DR Cash 400
CR Deferred P 300
CR Purchases 100

You return $200 of goods

DR Cash 200
DR Purchases 100
CR Deferred P 300

- **Only 1 of these 3 journal entries is to be recorded at the end of the year.**
- **This is an ADJUSTING ENTRY involving deferred purchases (a type of prepaids).**

Proposed GAAP

These entries are to be performed DURING the year.

Customer returns $100 of goods

DR Unearned Rev 100
CR Cash 100

You return $100 of goods

DR Cash 100
CR Deferred P 100