CHAPTER 8

VALUATION OF INVENTORIES:
A COST-BASIS APPROACH

Intermediate Accounting
IFRS Edition
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Learning Objectives

1. Identify major classifications of inventory.
2. Distinguish between perpetual and periodic inventory systems.
3. Identify the effects of inventory errors on the financial statements.
4. Understand the items to include as inventory cost.
5. Describe and compare the methods used to price inventories.
Valuation of Inventories: Cost-Basis Approach

Inventory Issues
- Classification
- Cost flow
- Control
- Basic inventory valuation

Physical Goods Included in Inventory
- Goods in transit
- Consigned goods
- Special sales agreements
- Inventory errors

Cost Included in Inventory
- Product costs
- Period costs
- Purchase discounts

Cost Flow Assumptions
- Specific identification
- Average cost
- FIFO
- Summary analysis
Inventory Issues

Classification

Inventories are:
- items held for sale, or
- goods to be used in the production of goods to be sold.

Businesses with Inventory

Merchandiser or Manufacturer

LO 1 Identify major classifications of inventory.
Inventory Issues

Classification

- One inventory account.
- Purchase goods in form ready for sale.

Illustration 8-1

Merchandising Company
Carrefour

Balance Sheet
December 31, 2008

Current assets (in millions)

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inventories</td>
<td>€ 6,891</td>
</tr>
<tr>
<td>Commercial receivables</td>
<td>2,919</td>
</tr>
<tr>
<td>Consumer credit from financial companies—short term</td>
<td>2,708</td>
</tr>
<tr>
<td>Tax receivables</td>
<td>673</td>
</tr>
<tr>
<td>Other assets</td>
<td>1,096</td>
</tr>
<tr>
<td>Cash and cash equivalents</td>
<td>5,317</td>
</tr>
<tr>
<td><strong>Total current assets</strong></td>
<td><strong>€19,604</strong></td>
</tr>
</tbody>
</table>

LO 1 Identify major classifications of inventory.
Inventory Issues

Classification

Three accounts
- Raw materials
- Work in process
- Finished goods

Manufacturing Company
CNH Global

Balance Sheet
December 31, 2008

Current assets (in millions)
Cash and cash equivalents $ 633
Deposits in Fiat affiliates
  cash management pools 2,058
Accounts and notes
  receivable, net 6,647
Inventories
  Raw materials $ 995
  Work in process 323
  Finished goods 3,167
Total inventories 4,485
Deferred income taxes,
  prepayments, and other 766
Total current assets $14,589
Inventory Cost Flow

Illustration 8-2

**LO 1** Identify major classifications of inventory.
Companies use one of two types of systems for maintaining inventory records — **perpetual system** or **periodic system**.

**LO 1** Identify major classifications of inventory.
Inventory Cost Flow

Perpetual System

1. Purchases of merchandise are debited to Inventory.
2. Freight-in is debited to Inventory. Purchase returns and allowances and purchase discounts are credited to Inventory.
3. Cost of goods sold is debited and Inventory is credited for each sale.
4. Subsidiary records show quantity and cost of each type of inventory on hand.

The perpetual inventory system provides a continuous record of Inventory and Cost of Goods Sold.

LO 2 Distinguish between perpetual and periodic inventory systems.
Inventory Cost Flow

Periodic System

1. Purchases of merchandise are debited to Purchases.
2. Ending Inventory determined by physical count.
3. Calculation of Cost of Goods Sold:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginning inventory</td>
<td>$100,000</td>
</tr>
<tr>
<td>Purchases, net</td>
<td>800,000</td>
</tr>
<tr>
<td>Goods available for sale</td>
<td>900,000</td>
</tr>
<tr>
<td>Ending inventory</td>
<td>125,000</td>
</tr>
<tr>
<td>Cost of goods sold</td>
<td>$775,000</td>
</tr>
</tbody>
</table>

LO 2 Distinguish between perpetual and periodic inventory systems.
Inventory Cost Flow

Illustration: Fesmire Company had the following transactions during the current year.

<table>
<thead>
<tr>
<th>Transaction</th>
<th>Quantity</th>
<th>Unit Cost</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginning inventory</td>
<td>100 units</td>
<td>$6</td>
<td>$600</td>
</tr>
<tr>
<td>Purchases</td>
<td>900 units</td>
<td>$6</td>
<td>$5,400</td>
</tr>
<tr>
<td>Sales</td>
<td>600 units</td>
<td>$12</td>
<td>$7,200</td>
</tr>
<tr>
<td>Ending inventory</td>
<td>400 units</td>
<td>$6</td>
<td>$2,400</td>
</tr>
</tbody>
</table>

Record these transactions using the Perpetual and Periodic systems.

LO 2 Distinguish between perpetual and periodic inventory systems.
Specific-goods LIFO - costing goods on a unit basis is expensive and time consuming.

Specific-goods Pooled LIFO approach
- reduces record keeping and clerical costs.
- more difficult to erode the layers.
- using quantities as measurement basis can lead to untimely LIFO liquidations.

Dollar-value LIFO is used by most companies.
Advantages

- Matching
- Tax Benefits/Improved Cash Flow
- Future Earnings Hedge

Disadvantages

- Reduced Earnings
- Inventory Understated
- Physical Flow
- Involuntary Liquidation / Poor Buying Habits
Basis for Selection of Inventory Method

LIFO is generally preferred:

1. if selling prices are increasing faster than costs and
2. if a company has a fairly constant “base stock.”

LIFO is not appropriate:

1. if prices tend to lag behind costs,
2. if specific identification traditionally used, and
3. when unit costs tend to decrease as production increases.