## Inventory

**Finance** 



Week Three Exercise Assignment Inventory Inventory. Inventory valuation methods: Basic computations. The January beginning inventory of the White Company consisted of 300 units costing \$40 each. During the first quarter, the company purchased two batches of goods: 700 units at \$44 on February 21 and 800 units at \$50 on March 28. Sales during the first quarter were 1, 400 units at \$75 per unit. The White Company uses a periodic inventory system.

Using the White Company data, fill in the chart that follows to compare the results obtained under the FIFO, LIFO, and weighted-average inventory methods.

FIFO Method: Units\$\$

Jan 1300@\$4012000

Feb 21700@4430800

March 28800@5040000

Goods available for sale180082800

Less cost of sales: 300@4012000

700@4430800

400@5020000(62800)

Ending inventory400@50 20000

LIFO Method:

Goods available for sale82800

Less cost of sales: 800@5040000

600@4426400(66400)

Ending inventory16400

Ending inventory made up of:

100@444400

300@4012000 16400 Weighted average Method: Goods available for sales1800@4682800 Less cost of sales1400@46(64400) Ending inventory18400 **FIFO LIFO** Weighted average Goods available for sale \$ \$ \$ Ending inventory, March 31 20000 16400 18400 Cost of goods sold 62800 66400 64400 2. Analysis of LIFO versus FIFO. Indicate whether LIFO or FIFO best describes each of the following:

- a. Gives highest profits when prices fall-FIFO
- b. Yields lowest income taxes when prices rise-LIFO.

- c. Generates an ending inventory valuation that somewhat approximates replacement cost-FIFO.
- d. Matches recent costs against current selling prices on the income statement-LIFO.
- e. Comes closest to approximating the physical flow of goods of a fruit and vegetable dealer-FIFO.
- f. Results in lowest cost of goods sold in inflationary periods-FIFO.
- 3. Inventory Errors. The income statements of Diamond Company for the years ended December 31, 19X1, and 19X2 follow.

19X1

19X2

Net sales

Cost of goods sold

Beginning inventory

Add: Net purchases

\$ 95, 000 380, 000

\$440,000

\$109, 000 404, 000

\$483,000

Goods available for

sale

Less: Ending inventory

\$475, 000 109, 000

\$513, 000 127, 000

Cost of goods sold

366,000

386, 000

Gross profit

Operating expenses

\$ 74, 000 58, 000

\$ 97, 000 67, 000

Net income

\$ 16,000

\$ 30,000

Diamond uses a periodic inventory system. A detailed review of the accounting records disclosed the following:

- a. A review of 19X1 purchase invoices revealed that a clerk had incorrectly recorded a \$12, 600 purchase as \$1, 260.
- b. A \$4, 800 purchase was made on December 30, 19X2, terms F. O. B. shipping point. The invoice was not recorded in 19X2 nor were the goods included in the 19X2 ending physical inventory count. Both the goods and invoice were received in early 19X3, with the invoice being recorded at that time.
- c. Goods costing \$3, 000 were accidentally excluded from the 19X1 ending physical inventory count. These goods were sold during 19X2, and all aspects of the sale were properly recorded.

Instructions:

- (a) Prepare corrected income statements for 19X1 and 19X2.
- (b) Determine the impact of the preceding errors on the December 31, 19X2, owners equity balance.
- (a) Corrected Income Statement:

Net purchases 19X1= 380000+ 12600-1260= 391340

Purchases 19X2= 404000+ 4800= 408800

Closing inventory 19X2= 127000+ 4800= 131800

Closing inventory 19X1= 109000+ 3000= 112000

Opening inventory 19X2= 109000+ 3000= 112000

19X1

19X2

Net sales

Cost of goods sold

Beginning inventory

Add: Net purchases

\$ 95,000

391340

\$440,000

\$112,000 408,800

\$483,000

Goods available for

sale

Less: Ending inventory

\$486, 340 112, 000

\$520, 800 131, 800

Cost of goods sold

374, 340

389,000

Gross profit

Operating expenses

\$ 65, 660 58, 000

\$ 94, 000 67, 000

Net income

\$ 7,660

\$ 27,000

(b) The above errors had an overall effect of overstating the balance of owner's equity as at December 31, 19X2. In the first error, it is assumed that only the purchases journal was wrongly entered. The effect of understating cost is to an understatement of cost of goods sold, hence overstating the net income, which is part of owner's equity.

The ownership of goods purchased on F. O. B terms revert to the buyer immediately the seller delivers them to the port of delivery. It is therefore assumed that the goods were already on transit by the end of business on December 31, 19X2. Therefore the exclusion of this transaction had no effect on the cost of goods sold since it was neither included as purchases nor closing inventory. It will only affect the value of inventory in the balance sheet with no effect and accounts payable or cash. There is no effect on owner's equity.

Excluding \$3, 000 from the closing inventory in 19X1 means that the cost of goods sold was understated with the ending result being an overstatement of net income, hence owner's equity. Since the amount was not included in 19X2, it means that sales revenue was recognized on these goods with no corresponding cost.

4. Inventory valuation methods. Computations and concepts. Wave Riders
Surf Board Company began business on January 1 of the current year.
Purchases of surf boards were as follows:

Jan.

3

100 boards