## FINANCE AT A GLANCE

## Computing Cost of goods sold (3)

Let us pick up the preceding lesson's discussion from the point where our sample trading company has records showing that it sold 100 chairs in Month 1, and the 10 chairs left in stock remain in top saleable quality.

As previously shown, we calculate the cost of goods sold for Month 1 as follows:

|  | Beginning stock $\times$ Cost per unit | 0 | 0 |
| :--- | :--- | ---: | ---: |
| plus | Purchases $\times$ Cost per unit | $110 \times 50$ | 5,500 |
| less | Ending stock $\times$ Cost per unit | $10 \times 50$ | 500 |
|  | $--------------------------------------10 ~$ |  | $\$ 5,000$ |

Month 2 begins and the company acquires 200 units at $\$ 50$ per unit. By the end of the month, records show that 20 units remain in stock in top quality. We compute the cost of goods sold in Month 2 as follows:

|  | Beginning stock X Cost per unit | $10 \times 50$ | 500 |
| :---: | :---: | :---: | :---: |
| plus | Purchases $X$ Cost per unit | $200 \times 50$ | 10,000 |
| less | Ending stock X Cost per unit | $20 \times 50$ | 1,000 |
| equals | Cost of goods sold |  | \$9,500 |

If records show that 190 units were in fact sold in Month 2, then the cost of goods sold amounting to $\$ 9,500$ represented only units sold and no units lost due to theft, disposal or any other reason (10 units to begin with plus 200 units acquired less 20 units remaining equals 190 units sold.)

Now, look at the last computation above, and see what happens if the purchases in Month 2 did not cost $\$ 50$ per unit, rather, $\$ 55$ per unit. We know the value of the beginning stock to be $\$ 50$ per unit, and of the acquired stock to be $\$ 55$. But what about the remaining stock? If we follow the physical movement of the stock, we can say that the 190 units sold were made up of the old 10 units and new 180 units. Therefore, the remaining 20 came from the new stock worth $\$ 55$ per unit. Thus, we compute as follows:

|  | Beginning stock X Cost per unit | $10 \times 50$ | 500 |
| :---: | :---: | :---: | :---: |
| plus | Purchases X Cost per unit | $200 \times 55$ | 11,000 |
| less | Ending stock X Cost per unit | $20 \times 55$ | 1,100 |
| equals | Cost of goods sold |  | \$10,400 |

The preceding computation is called first-in first-out (FIFO) method of stock valuation, which follows what ought to be the physical movement of the inventory (i.e., selling the older ones first).

Another valuation method is called last-in first-out (LIFO), where the stock is assumed to move in reverse of FIFO. Using LIFO, the 190 units sold are assumed to all come from the new purchase, and that the 20 units in the ending inventory are made up of the old 10 units at $\$ 50$, and 10 units from the recent purchase of 200 units at $\$ 55$. Using the LIFO method, we calculate the cost of goods sold as follows:

|  | Beginning stock X Cost per unit | $10 \times 50$ | 500 |
| :---: | :---: | :---: | :---: |
| plus | Purchases X Cost per unit | $200 \times 55$ | 11,000 |
| less | Ending stock X Cost per unit | $10 \times 50+10 \times 55$ | 1,050 |
| equals | Cost of goods sold |  | \$10,450 |

Sensible inventory management ensures that older units are sold first. However, for the sake of computing cost of goods sold, LIFO is used to ensure conservatism in calculation of the profit when prices are rising. We see from a comparison of the two methods in the scenario wherein the acquisition cost rose from $\$ 50$ to $\$ 55$, the LIFO method yielded a higher cost of goods sold, and thus lower profitability.

There are other allowable inventory valuation methods, which we will look into in future lessons, as well as the implications of each of those methods.

At this point, let the preceding scenarios show the complexities involved in calculating cost of goods sold.

In the next lesson, we shall look into the cost of goods sold of a manufacturing business.

Until then,

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