

LIFO and FIFO Inventory Accounting

T began a business of buying and selling shirts at the beginning of **Year 1**. During the year he bought 1,000 shirts at \$10 each and sold 900 shirts for \$15 each.

Note: When T buys these shirts, he is not allowed to claim a deduction, even though he is selling shirts at the same time. Instead their cost is treated as a "cost" and added to the inventory account, which is a type of capital account.

At the end of the year, T counts the shirts on hand. If there has been no pilferage or other loss, he will have 100 shirts on hand. To summarize, his opening inventory (at the beginning of the year) is 0; his purchases are 1,000 shirts at \$10 each, for a total of \$10,000; his closing inventory is 100 shirts at \$10 each, or \$1,000; so his cost of goods sold is \$9,000.

At the beginning of **Year 2**, T's opening inventory is 100 shirts at \$10 each, or \$1,000. Suppose that during the year T buys 1,000 shirts at \$11 each and sells 1,000 shirts at \$16 each. At the end of the year, T counts the shirts on hand. Again, assume no losses, so there are 100 shirts on hand.

Note: If T identifies each shirt on hand and its cost, that cost is used. (Or the lower market price is used if he uses lower of cost or market and the market price has in fact fallen.)

If he cannot identify which shirts were bought when, he may use either LIFO or FIFO to figure out the value of the inventory on hand. The results are set forth below.

Note. If there had been pilferage, the number of shirts on hand would be reduced, so the cost of goods sold figure would increase. The result would be a deduction for the cost of the pilfered shirts in the year stolen.

**Illustration of LIFO and FIFO
Purchase and Sale of Shirts**

Year 1: Shirt business

(1)	Beginning number of shirts	0
(2)	Shirts bought	1,000
(3)	Cost per unit	\$10
(4)	Total cost (line 2 × line 3)	\$10,000
(5)	Number sold	900
(6)	On hand at end of year (by count)	100
(7)	Closing inventory (line 6 × line 3)	\$1,000
(8)	Cost of goods sold (line 4 – line 7)	\$9,000
(9)	Sales (\$15 × line 5)	\$13,500
(10)	Profits (line 9 – line 8)	\$4,500

Note: Under these facts, it does not matter in the first year whether we use LIFO or FIFO because there was only one purchase of shirts — that is, the last purchase and the first purchase are the same.

Year 2: Shirt business

	LIFO	FIFO	
(1)	Beginning number of shirts	100	100
(2)	Cost per unit	\$10	\$10
(3)	Total cost, opening	\$1,000	\$1,000
(4)	Shirts bought (no. of units)	1,000	1,000
(5)	Cost per unit	\$11	\$11
(6)	Total cost of purchases (line 4 × line 5)	\$11,000	\$11,000
(7)	Total cost, beginning and purchased (line 3 + line 6)	\$12,000	\$12,000
(8)	Ending number of shirts	100	100
(9)	Ending cost per unit	\$10	\$11
(10)	Ending total value	\$1,000	\$1,100
(11)	Cost of goods sold (line 7 – line 10)	\$11,000	\$10,900
(12)	Sales	\$16,000	\$16,000
(13)	Profits	\$5,000	\$5,100

Note: The profits under FIFO are higher because FIFO assumes that the higher-priced shirts bought in year 2 remain on hand, whereas LIFO assumes that the lower-priced shirts bought in year 1 remain on hand. Certain expenses may be deductible from profits in calculating taxable income, but these deductions are independent of the choice of FIFO or LIFO.
