INVENTORY COSTING: FIFO vs. LIFO vs. WEIGHTED AVERAGE

CPA & University Study Guide on Cost Flow Assumptions & Financial Statement Impact • ***EverythingAboutAccounting.info***

1. The Three Cost Flow Assumptions Defined

Method	Cost Flow Mechanism	Ending Inventory Valuation	IFRS vs GAAP Status
FIFO (First-In, First-Out)	Assumes earliest purchased inventory is sold first. Cost of Goods Sold (COGS) reflects older unit costs.	Ending inventory reflects the **most recent purchase costs** (close to current market replacement value).	**Permitted** under both US GAAP and IFRS.
LIFO (Last-In, First-Out)	Assumes most recently purchased units are sold first. COGS matches current costs against current revenues.	Ending inventory reflects **oldest historical costs**, which may be severely outdated on Balance Sheet.	**Permitted under US GAAP**; **Strictly Forbidden** under IFRS.
Weighted Average Cost	Smooths price fluctuations by calculating a weighted average unit cost across all available merchandise.	Unit Cost = Cost of Goods Available ÷ Total Units Available. Applied evenly across COGS and ending stock.	**Permitted** under both US GAAP and IFRS.

2. Financial Statement Comparison During Periods of RISING Prices (Inflation)

Financial Metric	FIFO (First-In, First-Out)	LIFO (Last-In, First-Out)	Weighted Average	Why It Happens
Cost of Goods Sold (COGS)	**LOWEST**	**HIGHEST**	In Between	FIFO uses older, cheaper prices in COGS
Gross Profit & Net Income	**HIGHEST** (Higher report profit)	**LOWEST** (Conservative profit)	In Between	Lower COGS produces higher accounting profit
Ending Inventory (Balance Sheet)	**HIGHEST** (Near current market)	**LOWEST** (Outdated older costs)	In Between	FIFO keeps latest high-priced units on balance sheet
Income Tax Expense	**HIGHEST** (More tax to pay)	**LOWEST** (Tax shelter benefit)	In Between	Lower taxable profit under LIFO reduces tax obligation
Net Cash Flow (After Tax)	**LOWER**	**HIGHER** (Cash saved on tax)	In Between	LIFO Conformity Rule: LIFO for tax requires LIFO for books

3. Solved Multi-Step Numerical Comparison (100 Units Sold @ $50/unit)

Given: Beg. Inv: 40 units @ $20 = $800 | Purchase 1: 50 units @ $24 = $1,200 | Purchase 2: 30 units @ $28 = $840. Total Available: 120 units ($2,840).
Units Sold: 100; **Ending Inventory: 20 units**.

Calculation Step	FIFO Method	LIFO Method	Weighted Average Method
Cost of Goods Sold (100 units)	40 @ $20 + 50 @ $24 + 10 @ $28 = $800 + $1,200 + $280 = **$2,280**	30 @ $28 + 50 @ $24 + 20 @ $20 = $840 + $1,200 + $400 = **$2,440**	Avg Cost = $2,840 / 120 = $23.67 100 units × $23.67 = **$2,367**
Ending Inventory (20 units)	20 units @ $28 = **$560**	20 units @ $20 = **$400**	20 units × $23.67 = **$473**
Sales Revenue (100 @ $50)	$5,000	$5,000	$5,000
Gross Profit (Sales – COGS)	**$2,720 (Highest)**	**$2,560 (Lowest)**	**$2,633 (Middle)**
Income Tax @ 25%	$680 (Highest tax)	**$640 ($40 tax saved)**	$658