# 15.511 Corporate Accounting Recitation 4

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# Accounting for Inventory – Cost flow assumption

- $Inv_{EB} = Inv_{BB} + Purchase/Production - COGS$
- Cost Flow Assumptions
  - Specific Identification: used when specific products can be tracked (e.g. cars)
  - FIFO (First In, First Out): COGS are assumed to be equal to the costs of the oldest available units in the financial records.
  - LIFO (Last In, First Out): COGS are assumed to be equal to the costs of the most recently purchased units in the financial records.
  - Averaging: COGS are assumed to be equal to a per-unit weighted average cost at the end of the period

# Accounting for Inventory – a comparison of LIFO and FIFO

|  | Income Statement | Balance Sheet |
|---|---|---|
| LIFO | New costs (if LIFO liquidation, then new costs and old costs) | Old costs |
| FIFO | Old costs | New costs |

# Accounting for inventory – tax consideration

- ☐ LIFO conformity rule: if a firm uses LIFO for tax purpose, it must also use LIFO for financial reporting purpose.
- ☐ Given the tax effects, what types of firms would you expect to choose each inventory method?
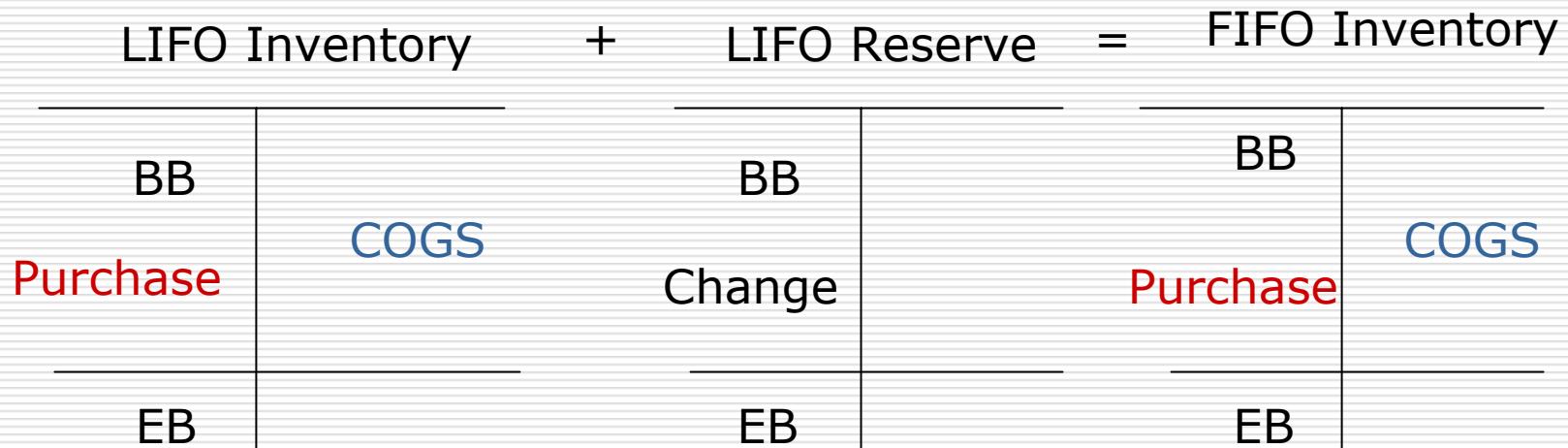
# Accounting for inventory – LIFO Reserve

- ☐ LIFO Reserve = Ending Inv (FIFO) – Ending Inv (LIFO) = cumulative difference in FIFO – LIFO inventory

- ☐ Change in LIFO Reserve = COGS (LIFO) – COGS (FIFO)

- ☐ Cumulative tax savings by using LIFO = LIFO Reserve * tax rate

- ☐ Tax savings for a particular year by using LIFO = change in LIFO Reserve * tax rate

# Accounting for inventory – LIFO Reserve

| LIFO Inventory | | + | LIFO Reserve | | = | FIFO Inventory | |
|---|---|---|---|---|---|---|---|
| BB | COGS | | BB | | | BB | COGS |
| Purchase | | | Change | | | Purchase | |
| EB | | | EB | | | EB | |

# Summary of accounting for inventory

- ☐ Matching principle requires a cost flow assumption, leading to different accounting methods (LIFO vs. FIFO).
- ☐ Computation is trivial, but implications not: LIFO and FIFO produces temporary difference in accounting numbers.
- ☐ No accounting method is innately superior: choice depends upon business environment, incentives of users, possibility of manipulation, etc.
- ☐ Disclosure available to make numbers comparable across firms.