ACC 300 · LECTURE 19

Inventory measurement and errors

November 5, 2026



What we'll cover

- Inventory write-downs and recoveries
- Effects on financial statements
- Inventory errors and corrections

OPENING

Why reduce inventory before a sale?

Inventory is an asset because the company expects to recover its cost through sales.

When the goods are purchased

- Record their cost as Inventory.
- Keep that cost as an asset while the goods remain unsold.

When expected recovery falls

- Damage or lower selling prices can leave part of that cost unrecoverable.
- Report that loss in the period it occurs.

Carrying amount: amount reported for the asset.

Write-down: reduce that amount and record an expense; goods still on hand.

Source: ASC 330-10-35-1B through 35-2.

OPENING

Inventory measurement versus recording errors

Measurement question

Count and assigned cost: correct.

Can the company recover that cost?

Damage, obsolescence, or lower selling prices → possible write-down.

Error question

Count, cost calculation, or recording: incorrect.

Which accounts and periods are wrong?

Correct each affected account and reporting period.

A later price recovery does not by itself make an earlier supported estimate an error.

Net realizable value



Net realizable value

Net realizable value (NRV) is the expected ordinary-course selling price less remaining completion, disposal, and transportation costs.

Calculate the amount available to recover inventory cost

Expected selling price

– Remaining completion and selling costs

= Net realizable value

- Include required repackaging, repairs, and selling or delivery costs.
- Keep the inventory's acquisition cost out of this calculation. NRV measures the net proceeds expected from the sale.

Source: ASC Master Glossary; IAS 2.6.

Choose the measurement model

Choose by reporting framework and inventory cost method.

Inventory basis	Required comparison
US GAAP: FIFO, weighted-average, and other methods except LIFO and the retail inventory method	Cost versus NRV
US GAAP: last-in, first-out (LIFO) or retail inventory method	Cost versus constrained market
IFRS: ordinary inventories; LIFO prohibited	Cost versus NRV

- **Report the lower amount.** Keep cost when NRV is higher: selling profit is not yet earned.
- **Retail inventory method:** estimates cost from retail selling amounts; not used by every retailer.

Source: ASC 330-10-35-1A through 35-1C; IAS 2.9 and 2.25.

Measure the kits at the lower of cost and NRV

Sound Decision uses FIFO and reports under US GAAP. It owns 45 unsold instrument accessory kits at December 31, 2026. The kits need repackaging before sale.

Per-kit fact	Amount
Assigned cost	$180
Expected selling price	$190
Repackaging still required	$12
Selling and delivery costs still required	$18

Determine the carrying amount and total loss. All amounts are in US dollars; ignore income taxes.

Compare cost with net recovery

Per kit	Amount
Selling price	$190
Less repackaging	($12)
Less selling and delivery	($18)
Net realizable value	**$160**
Assigned cost	$180
Lower of cost and NRV	**$160**

The expected selling price exceeds acquisition cost, but necessary remaining costs reduce net recovery below cost.

Recognize a loss on goods still held

Original cost: 45 kits × $180 = **$8,100**.

Required carrying amount: 45 kits × $160 = **$7,200**.

December 31 entry	Debit	Credit
Inventory Write-down Loss	$900	
Inventory		$900

Loss = $8,100 − $7,200 = $900. No kits sold or physically lost.

Alternative: credit Inventory Valuation Allowance instead of Inventory.

- Reduces reported net inventory
- Preserves original cost in the Inventory account

Net realizable value: Practice

Work on your own or with those around you.

Sound Decision holds 40 unsold music stands. It uses FIFO to assign costs and reports under US GAAP. Amounts are per stand.

Given fact	Amount
Assigned cost	$64
Expected selling price	$71
Repair needed before sale	$5
Remaining selling and delivery costs	$8

1. Calculate NRV and the carrying amount per stand.
2. Calculate the total write-down and prepare the entry.
3. Explain why a selling price above cost does not prevent a loss.

Net realizable value: Solution

Sound Decision uses FIFO under US GAAP. It holds 40 stands with an assigned cost of $64 each.

Calculate NRV per stand

Expected recovery	Amount
Selling price	$71
Less repair	($5)
Less selling costs	($8)
NRV	**$58**

Report **$58 per stand**, the lower of $64 cost and $58 NRV.

Record the total loss

($64 − $58) × 40 stands = **$240**.

Account	Debit	Credit
Inventory Write-down Loss	$240	
Inventory		$240

The company must pay the remaining costs to obtain the sale proceeds. Only $58 per stand remains to recover its recorded cost.

Which goods are compared?

The worked cases apply the comparison **item by item**.

US GAAP

- Compare individual items, categories, or total inventory when appropriate to the inventory and periodic income.
- Apply the selected approach consistently.

IFRS

- Ordinarily compare individual items.
- Some similar or related items may be grouped. A broad label such as all finished goods is insufficient.

Do not offset unrelated losses and gains simply to avoid a write-down.

Source: ASC 330-10-35-8 through 35-11; IAS 2.29.

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A retailer reports under US GAAP and uses weighted-average cost. Which comparison should it apply to its ordinary inventory?

A Cost versus replacement cost alone

B Cost versus expected selling price

C Cost versus net realizable value

D Cost versus market constrained by a ceiling and floor

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Correct answer: C

A retailer reports under US GAAP and uses weighted-average cost. Which comparison should it apply to its ordinary inventory?

A **Cost versus replacement cost alone**

A company using weighted-average cost under US GAAP compares cost with NRV, not replacement cost alone.

B **Cost versus expected selling price**

Expected selling price omits necessary remaining completion and selling costs.

C **Cost versus net realizable value**

C is correct. Under US GAAP, the company compares cost with NRV because it assigns inventory costs using weighted-average cost.

D **Cost versus market constrained by a ceiling and floor**

The constrained-market model applies to LIFO or the retail inventory method, not every retailer.

Lower of cost or market



Lower of cost or market involves two decisions

Purpose: decide whether recorded inventory cost is recoverable.

US GAAP: LIFO and retail inventory method → compare cost with **market**, based on replacement cost within limits tied to the expected sale.

1. Determine market

- Start with current replacement cost.
- Apply the ceiling and floor based on the expected sale.
- Result: **designated market**.

2. Compare market with recorded cost

- Report the **lower of cost or market**.
- If market is lower: **loss = recorded cost – market**.

Source: ASC 330-10-35-1C through 35-5; ASC Master Glossary, Market.

Start with replacement cost

Replacement cost is what the company would pay today to obtain equivalent goods.

Use the current purchase price for goods with the same usefulness as the inventory already held.

Replacement cost is the **starting amount**. We still need to apply the ceiling and floor to determine market.

Source: ASC 330-10-35-3 through 35-5; ASC Master Glossary, Market.

Determine market, then compare it with recorded cost

Normal profit allowance: expected profit on comparable sales; supplied in these examples.

Ceiling: NRV

Replacement cost above the ceiling → use NRV as market.

NRV = selling price − remaining completion and selling costs.

Why? A higher replacement price cannot increase the amount recovered from selling the goods.

Within the limits **Use replacement cost as market.**

Floor: NRV − Normal profit allowance

Replacement cost below the floor → use the floor as market.

Why? Writing inventory below this amount would leave more than normal profit for the later sale.

Then compare: inventory = lower of recorded cost or market.

Write-down loss: recorded cost − required inventory amount.

Source: ASC 330-10-35-4 through 35-5; ASC Master Glossary, Market.

Determine market for three products

Sound Decision assigns costs using LIFO and reports under US GAAP. Apply the comparison to each product. All amounts below are per unit.

Fact	Ukulele	Flute	Practice amplifier
Assigned cost	$96	$140	$112
Selling price	$105	$158	$125
Completion cost	$4	$6	$5
Selling and delivery	$9	$12	$8
Normal profit allowance	$16	$24	$20
Replacement cost	$101	$129	$86

Calculate the ukulele write-down

Per ukulele	Amount
NRV: selling price less remaining costs	$105 − $4 − $9 = $92
Less normal profit allowance	($16)
Floor	**$76**
Replacement cost	$101
Designated market	**$92**
Assigned cost	$96
Lower of cost or market	**$92**
Loss per unit: cost less carrying amount	$96 − $92 = $4

Replacement cost above the ceiling → use ceiling: $92.

Compare market with $96 cost → **$92 carrying amount; $4 loss per ukulele.**

Record the ukulele write-down

The loss is $4 per ukulele. Sound Decision holds 17 ukuleles.

Total write-down = $4 per ukulele × 17 ukuleles = $68.

Account	Debit	Credit
Inventory Write-down Loss	$68	
Inventory		$68

- **Debit Inventory Write-down Loss** to recognize the expense in the current period.
- **Credit Inventory** to reduce the asset to its required carrying amount.

Goods still on hand; loss recognized now because recorded cost is no longer recoverable.

Calculate the flute write-down

Per flute	Amount
NRV: selling price less remaining costs	$158 − $6 − $12 = $140
Less normal profit allowance	($24)
Floor	**$116**
Replacement cost	$129
Designated market	**$129**
Assigned cost	$140
Lower of cost or market	**$129**
Loss per unit: cost less carrying amount	$140 − $129 = $11

Replacement cost within the limits → use replacement cost: $129.

Compare market with $140 cost → **$129 carrying amount; $11 loss per flute.**

Lower of cost or market: Practice

Work on your own or with those around you.

Sound Decision uses LIFO and reports under US GAAP. It holds 29 practice amplifiers. Apply the comparison to this product separately.

Per-amplifier fact	Amount
Assigned cost	$112
Selling price	$125
Completion costs	$5
Selling and delivery costs	$8
Normal profit allowance	$20
Replacement cost	$86

Calculate the ceiling, floor, designated market, and loss per amplifier. Explain which bound applies.

Lower of cost or market: Solution

Per amplifier	Amount
NRV: selling price less remaining costs	$125 − $5 − $8 = $112
Less normal profit allowance	($20)
Floor	**$92**
Replacement cost	$86
Designated market	**$92**
Assigned cost	$112
Lower of cost or market	**$92**
Loss per unit: cost less carrying amount	$112 − $92 = $20

Replacement cost below the floor → use floor: $92.

Compare market with $112 cost → **$92 carrying amount; $20 loss per amplifier.**

Calculate the total inventory loss

Product	Units held	Unit loss	Total loss
Ukuleles	17	$4	$68
Flutes	23	$11	$253
Practice amplifiers	29	$20	$580
Total			**$901**

These write-downs reduce total Inventory and current-period income by $901. The quantities of goods on hand remain unchanged.

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A separate company uses LIFO under US GAAP and holds 14 items. Per item, cost is $83, replacement cost is $55, NRV is $76, and normal profit allowance is $12.

What total write-down is required?

A $392

B $266

C $98

D $19

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Correct answer: B

A separate company uses LIFO under US GAAP and holds 14 items. Per item, cost is $83, replacement cost is $55, NRV is $76, and normal profit allowance is $12.

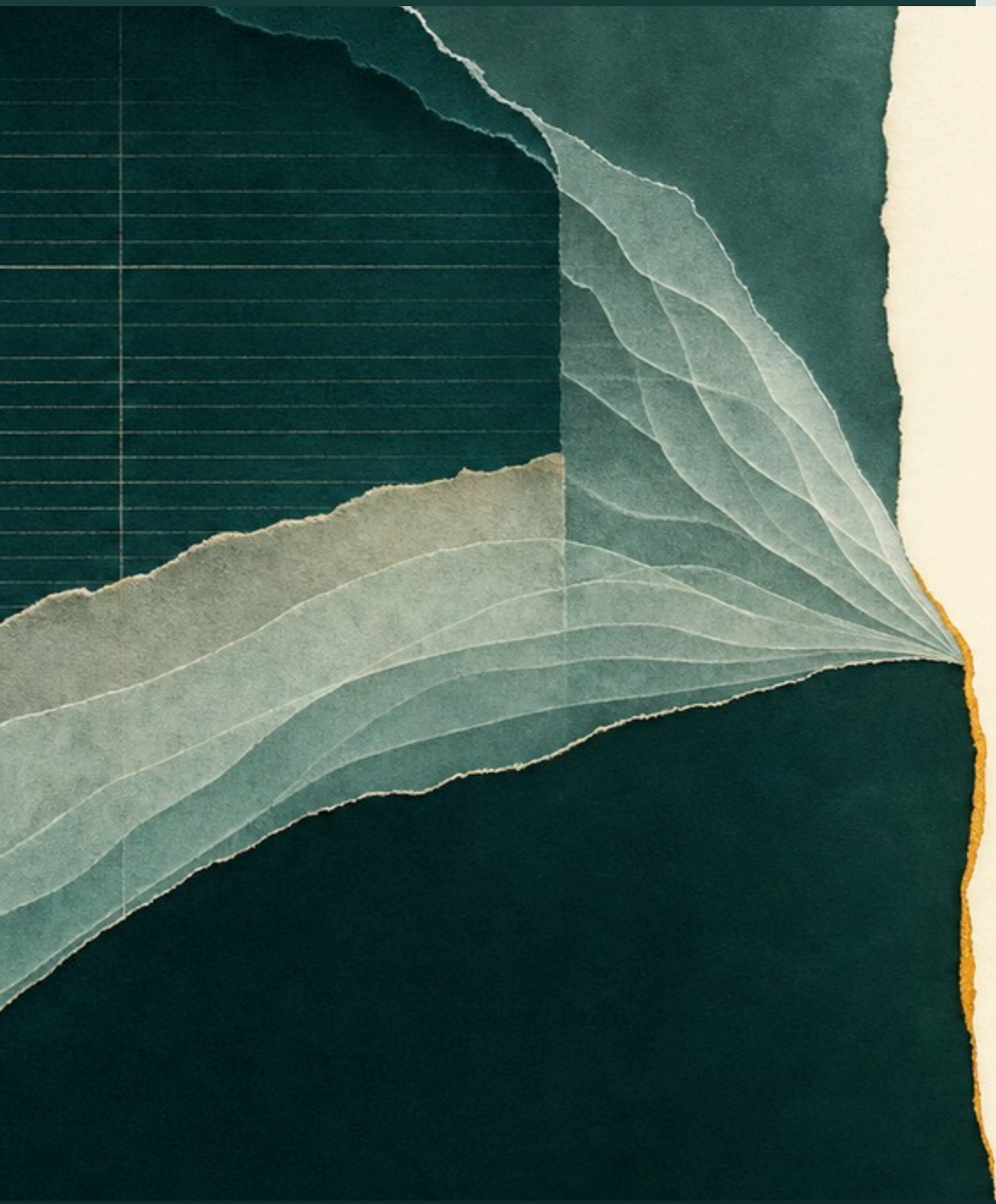
What total write-down is required?

A **$392**
This uses replacement cost without applying the floor.

B **$266**
B is correct. Floor = $76 − $12 = $64; use it as market. Loss = ($83 − $64) × 14 = $266.

C **$98**
This compares cost directly with NRV, omitting the required market constraints.

D **$19**
This is the unit loss, not the total batch loss.



Inventory recoveries

RECOVERY

US recovery uses the new cost basis

- **Annual write-down → new cost basis:** the reduced amount used for later accounting.
- **Later NRV increase → no reversal** under US GAAP.

Sound Decision: 45 kits still unsold at the next year-end; no other transactions or further decline.

Annual measurement	Amount per kit
Original cost	$180
December 31, 2026: after the write-down	$160
December 31, 2027: revised NRV	$175
December 31, 2027: US carrying amount	$160

Keep Inventory at 45 × $160 = $7,200. No recovery entry.

The earlier supported estimate was not an error.

Source: ASC 330-10-35-14.

US interim exceptions apply within the same fiscal year

Interim report: part of a fiscal year, such as a quarter. These US GAAP exceptions apply **within the same fiscal year**.

Before recording a loss

- Temporary decline reasonably expected to reverse by fiscal year-end
- No inventory loss expected for the fiscal year

Write-down not required if both conditions hold. Otherwise, recognize the loss in the interim period of decline.

After recording a loss

- Recovery on the **same inventory**
- Later interim period in the **same fiscal year**

Recognize the recovery, capped at the loss previously recorded on that inventory.

Prior year-end write-downs keep their reduced cost basis. These exceptions do not permit reversal in a later fiscal year.

Source: ASC 270-10-45-6(c).

Inventory recovery under IFRS

IFRS: reassess NRV each reporting period.

NRV rises after a write-down → **increase Inventory to the lower of original cost and revised NRV. Reversal = new carrying amount – amount after the write-down.**

45 kits under IFRS	Amount
Original cost per kit	$180
Carrying amount after the earlier loss: 45 × $160	$7,200
Revised NRV × kits: $175 × 45	$7,875
Reversal	$7,875 − $7,200 = **$675**

Reversal entry	Debit	Credit
Inventory	$675	
Inventory Write-down Loss		$675

The credit reduces the earlier type of expense. No sale occurred, so it is not sales revenue.

Source: IAS 2.33 through 2.34.

RECOVERY

An IFRS reversal cannot raise inventory above original cost

Alternative case · 45 kits

After write-down: $160 per kit. Revised NRV: $188 per kit.

Compare amounts per kit	Amount
Original cost	$180
Revised NRV	$188
Required carrying amount: lower of original cost and revised NRV	**$180**

- **Inventory after reversal:** 45 × $180 original cost = **$8,100**
- **Earlier carrying amount:** 45 × $160 = **$7,200**
- **Reversal:** $8,100 − $7,200 = **$900**

Reversal entry	Debit	Credit
Inventory	$900	
Inventory Write-down Loss		$900

Source: IAS 2.33.

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A company reports under IFRS. An unsold item originally cost $54. A prior write-down reduced its carrying amount to $47. Its revised NRV is $60.

What reversal per item is permitted under IFRS?

A $13

B $6

C $47

D $7

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Correct answer: D

A company reports under IFRS. An unsold item originally cost $54. A prior write-down reduced its carrying amount to $47. Its revised NRV is $60.

What reversal per item is permitted under IFRS?

A **$13**
This raises inventory to revised NRV even above original cost.

B **$6**
This measures the excess of NRV above original cost, which cannot be recognized as inventory gain.

C **$47**
This is the old carrying amount, not the reversal.

D **$7**
D is correct. Increase Inventory to its original $54 cost. The reversal per item is **$54 − $47 = $7**.

A purchase obligation can also create a loss

Firm purchase commitment: a binding agreement to buy goods. Here: no cancellation right or hedge to offset the loss.

Goods already owned

- Inventory asset already recorded
- Unrecoverable recorded cost → write down Inventory

Goods still to be received

- Unavoidable obligation to buy
- Unrecoverable purchase cost → recognize a commitment loss before receiving Inventory

Check for protection first: a firm sales contract may secure enough revenue to recover the purchase cost. An ordinary purchase order alone creates neither inventory nor a loss.

Source: ASC 330-10-35-17 through 35-18. Settlement and hedge accounting are outside this lecture.

Reporting effects



Record an inventory write-down in one of two ways

Recognize the loss in one of two ways. Both entries reduce Inventory and total income by the same amount.

Include the loss in Cost of Goods Sold

Account	Debit	Credit
Cost of Goods Sold	Loss amount	
Inventory		Loss amount

Record a separate inventory loss

Account	Debit	Credit
Inventory Write-down Loss	Loss amount	
Inventory		Loss amount

Account used ≠ income-statement line

- Present the loss within COGS or identify it separately on the income statement.
- **A separate loss account can still be included in reported COGS.** Check this before calculating turnover.
- Disclose substantial and unusual inventory losses under US GAAP; this does not prescribe a statement line.

Source: ASC 330-10-50-2.

A write-down can raise turnover without faster sales

Loss included in reported COGS: both parts of turnover change.

$$\text{Inventory turnover} = \frac{\text{Cost of Goods Sold} \uparrow}{\text{Average Inventory} \downarrow}$$

The numerator increases

Write-down expense increases COGS.

No additional goods sold.

The denominator decreases

Ending Inventory falls; beginning Inventory is unchanged.

Average Inventory falls.

Higher COGS and lower average Inventory → higher turnover, without faster sales.

Record the loss included in Cost of Goods Sold

Bean There · stale Common Grounds coffee

- Still on hand; sale possible only at a discount
- Required write-down: **$2,500**
- COGS before adjustment: **$90,000**

Recording: separate Inventory Write-down Loss account. **Reporting:** include that expense in COGS.

Year-end adjustment	Debit	Credit
Inventory Write-down Loss	$2,500	
Inventory		$2,500

Reported Cost of Goods Sold = $90,000 + $2,500 write-down = $92,500.

Sales and quantities unchanged. Including the loss in reported COGS affects gross profit and turnover.

Apply Bean There's write-down to the reported balances

Bean There includes the **$2,500 write-down in reported Cost of Goods Sold**. Sales revenue remains $150,000.

Reported amount	Before write-down	Adjustment	After write-down
Ending Inventory	$17,500	−$2,500	**$15,000**
Cost of Goods Sold	$90,000	+$2,500	**$92,500**

Gross profit before

$150,000 sales − $90,000 COGS = **$60,000**.

Gross profit after

$150,000 sales − $92,500 COGS = **$57,500**.

The write-down reduces Inventory and gross profit by $2,500. The quantities sold and held remain unchanged.

Calculate turnover using the adjusted balances

Use the same annual balances to calculate average Inventory, then inventory turnover.

Before the write-down

Beginning Inventory	$12,500
Ending Inventory	$17,500
Cost of Goods Sold	$90,000

Average Inventory

$$\frac{\$12{,}500 + \$17{,}500}{2} = \textbf{\$15,000}.$$

Inventory turnover

$$\frac{\$90{,}000}{\$15{,}000} = \textbf{6.00 times}.$$

After the write-down

Beginning Inventory	$12,500
Ending Inventory	$15,000
Cost of Goods Sold	$92,500

Average Inventory

$$\frac{\$12{,}500 + \$15{,}000}{2} = \textbf{\$13,750}.$$

Inventory turnover

$$\frac{\$92{,}500}{\$13{,}750} = \textbf{6.73 times}.$$

Turnover rises from 6.00 to 6.73 times without additional coffee sales.

Higher turnover produces fewer days in inventory

$$\text{Days in inventory} = \frac{365}{\text{Annual inventory turnover}}.$$

Before the write-down

Turnover: 6.00 times.

$$\frac{365}{6.00} \approx \textbf{60.83 days}.$$

After the write-down

Turnover: 6.73 times.

$$\frac{365}{6.73} \approx \textbf{54.26 days}.$$

Days are calculated using unrounded turnover; displayed turnover is rounded.

The write-down reduces reported days in inventory even though the bags remain on hand. The lower ratio does not establish faster sales.

Expense the reduced inventory amount when the goods sell

Bean There: $17,500 original cost − $2,500 write-down = **$15,000 Inventory**.

Assume all those goods sell next period; no further write-down or reversal.

When the write-down is recorded

- **Expense: $2,500**
- **Inventory remaining: $15,000**
- Goods still on hand

When those goods are sold

- **COGS at sale: $15,000**
- Transfer the remaining cost out of Inventory
- Earlier $2,500 loss already expensed

Total expense across both periods = $2,500 + $15,000 = $17,500 original cost.

Explain inventory policies and write-downs in the notes

Disclose the cost method and measurement basis: readers need to know how the company measured Inventory.

US GAAP

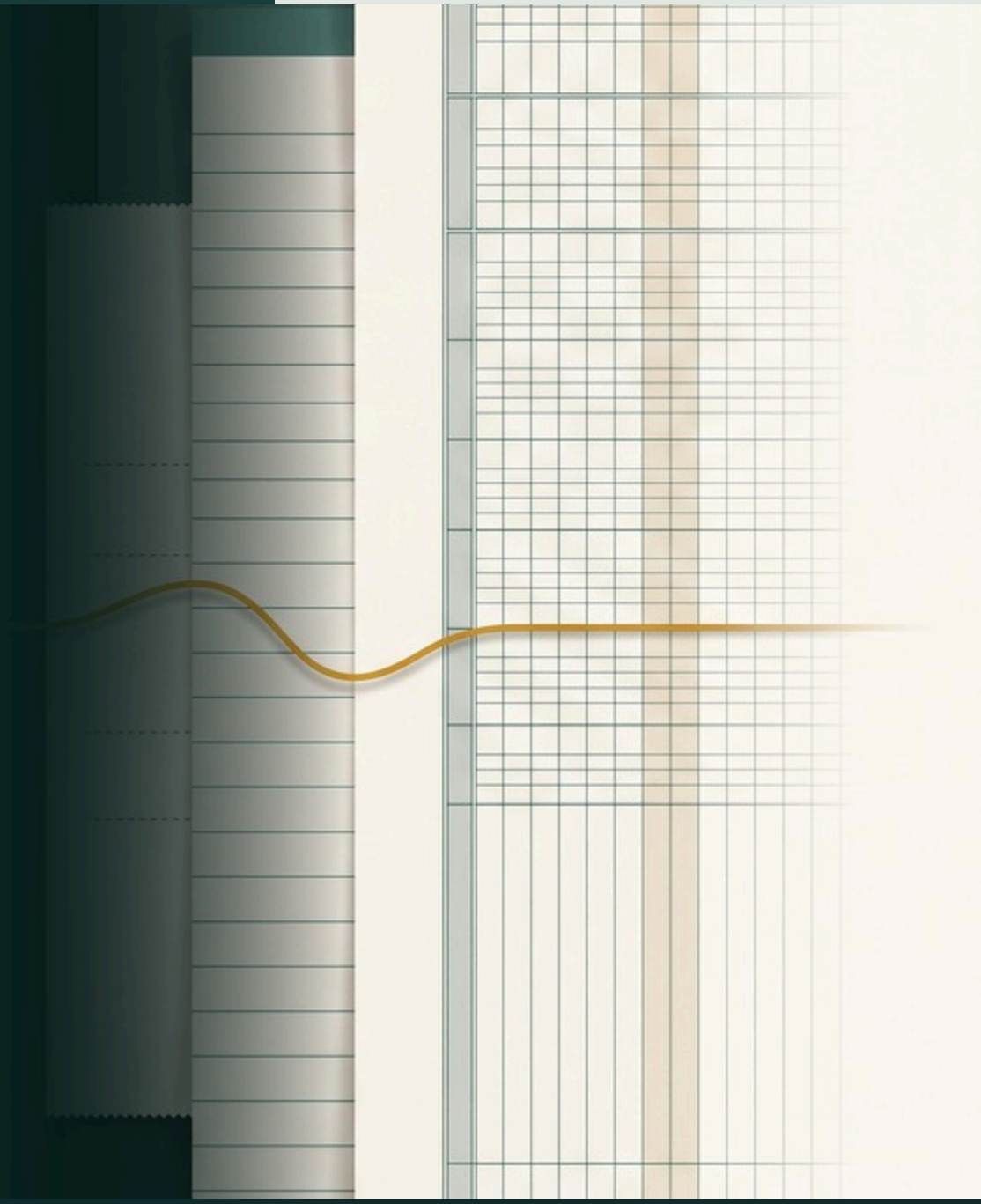
- Substantial and unusual inventory write-down losses
- Significant change in accounting basis: nature of the change and income effect, if material

IFRS

- Write-downs recognized as expense during the period: amount
- Reversals: amount and circumstances or events that caused them

Source: ASC 330-10-50-1 through 50-2; IAS 2.36(a), (e)-(g).

Inventory errors



Inventory count and recording errors

An **inventory error** occurs when the company counts goods, calculates their cost, or records inventory transactions incorrectly.

- **Count:** goods missed or counted more than once
- **Cost calculation:** incorrect unit cost or arithmetic mistake
- **Recording:** omitted transaction, incorrect amount, or wrong period

These errors can misstate Inventory and Cost of Goods Sold. The company must identify the cause and correct each affected account.

Ending inventory and cost of goods sold

The T-account summarizes inventory cost flow after the periodic adjustment.

Inventory

DEBIT	CREDIT
Beginning inventory	
Purchases	COGS
Ending balance	

Ending inventory too high

Too much cost remains an asset. Cost of goods sold is too low, and income is too high.

Ending inventory too low

Too little cost remains an asset. Cost of goods sold is too high, and income is too low.

Assume correct beginning Inventory, purchases, sales, and expenses other than COGS. An omitted purchase can affect both purchases and ending Inventory.

Sound Decision understates its 2026 ending inventory

Sound Decision uses periodic accounting. An arithmetic error understates 2026 ending inventory by $900, which overstates COGS by $900. Other expenses exclude COGS. Ignore taxes and dividends.

Beginning inventory: $12,800 · **Purchases:** $77,600 · **Sales:** $129,000 · **Other expenses:** $24,500

2026 amount	Correct calculation	Effect of error	Reported
Ending inventory	Given: **$16,400**	– $900 →	**$15,500**
COGS	$12,800 + $77,600 − $16,400 = **$74,000**	+ $900 →	**$74,900**
Income	$129,000 − $74,000 − $24,500 = **$30,500**	– $900 →	**$29,600**

Second-year error effects: Practice

Work on your own or with those around you.

Sound Decision makes no correction during 2027. Its ending count and other transactions are correct.

2027 amount	Correct fact
Purchases	$83,900
Ending inventory	$18,700
Sales	$142,000
Expenses other than COGS	$26,700

The opening inventory should be $16,400, but the records carry $15,500. Ignore taxes and dividends.

Calculate correct and reported cost of goods sold and income. Explain why the income error changes direction.

Second-year error effects: Solution

Sound Decision's 2027 purchases and ending inventory are correct. The uncorrected $900 understatement remains in beginning inventory. Ignore taxes and dividends.

Purchases: $83,900 · **Ending inventory:** $18,700 · **Sales:** $142,000 · **Expenses other than COGS:** $26,700

2027 amount	Correct calculation	Effect of error	Reported
Beginning inventory	Given: **$16,400**	– $900 →	**$15,500**
COGS	$16,400 + $83,900 − $18,700 = **$81,600**	– $900 →	**$80,700**
Income	$142,000 − $81,600 − $26,700 = **$33,700**	+ $900 →	**$34,600**

The company expensed $900 too early in 2026. That cost is missing from 2027 beginning inventory, leaving 2027 COGS too low and income too high.

Last year's ending inventory becomes this year's beginning inventory

Sound Decision reports $15,500 of inventory at the end of 2026 instead of $16,400. That incorrect balance carries into 2027.

In 2026: too much cost becomes expense

- $900 should remain in Inventory
- Company charges it to COGS too early
- **COGS $900 too high; income $900 too low**

In 2027: too little cost is available

- Beginning Inventory missing that $900
- Purchases and ending Inventory correct
- **COGS $900 too low; income $900 too high**

$900 of expense shifted from 2027 into 2026. Each year is wrong; combined income is correct.

Combined income can conceal annual errors

Income	Correct	Reported without correction
2026	$30,500	$29,600
2027	$33,700	$34,600
Combined	**$64,200**	**$64,200**

Ending 2027 Retained Earnings: $36,000 balance before 2026 + $64,200 two-year income = **$100,200**. No dividends or other equity changes.

- **Counterbalancing:** opposite income errors offset across the two years.
- Each annual income statement remains wrong.
- Repeated error or incorrect second ending count → offset may fail.

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A company overstates ending inventory. Beginning inventory, purchases, sales, and expenses other than COGS are correct. Ignore income taxes. How does the error affect Inventory, COGS, and income in the year of the error?

A Inventory overstated; cost of goods sold understated; income overstated

B Inventory overstated; cost of goods sold overstated; income understated

C Inventory understated; cost of goods sold overstated; income understated

D Inventory overstated; cost of goods sold and income unchanged

iClicker | Answer 4 of 5

Correct answer: A

A company overstates ending inventory. Beginning inventory, purchases, sales, and expenses other than COGS are correct. Ignore income taxes. How does the error affect Inventory, COGS, and income in the year of the error?

A **Inventory overstated; cost of goods sold understated; income overstated**

A is correct. Too much cost remains in Inventory, so COGS is too low and income is too high.

B **Inventory overstated; cost of goods sold overstated; income understated**

This reverses the expense and income effects of the overstated ending asset.

C **Inventory understated; cost of goods sold overstated; income understated**

This describes an ending-inventory understatement, not the supplied error.

D **Inventory overstated; cost of goods sold and income unchanged**

A count-only ending error changes expense even though no cash transaction occurs.

An inventory error distorts profitability and turnover

Sound Decision understates ending inventory in 2026. Beginning inventory, purchases, and sales are correct.

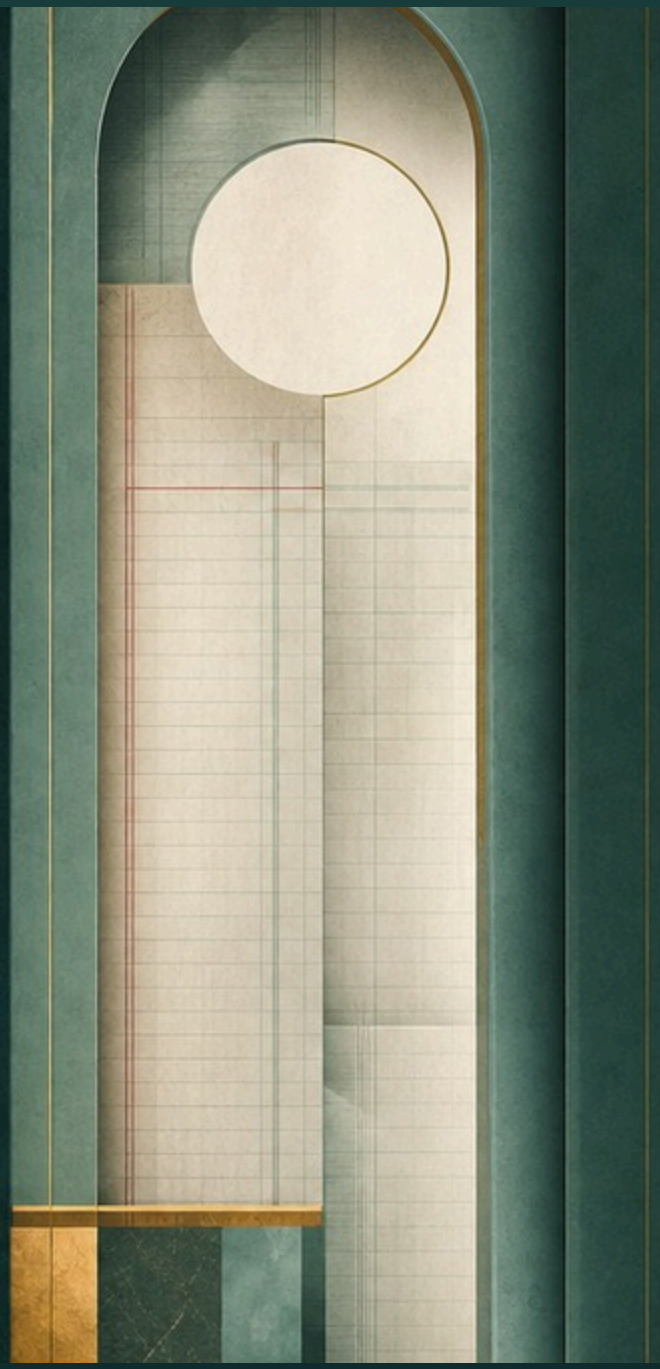
Ending inventory too low → COGS too high → Gross profit too low

With sales unchanged, the gross profit rate is also too low.

Inventory turnover is overstated

$$\frac{\text{COGS too high}}{\text{Average inventory too low}} \rightarrow \textbf{Turnover too high}$$

The ending-inventory error lowers average inventory. Higher COGS divided by lower average inventory inflates turnover, even though the company sold no additional goods.



Correcting inventory errors

Correct the asset and liability even when income is right

After closing 2026, Sound Decision discovers an omitted credit purchase of $1,560. It owned the unsold goods at year-end but omitted them from both purchases and ending inventory.

Inventory and Accounts Payable are each understated by $1,560. Both balances need correction.

Correcting entry after closing	Debit	Credit
Inventory	$1,560	
Accounts Payable		$1,560

Why is there no COGS correction?

- Omitted purchase → 2026 COGS $1,560 too low
- Omitted ending inventory → 2026 COGS $1,560 too high

Same-year offset: 2026 COGS and income are correct. Inventory and Accounts Payable still need correction.

Correct the count error through expense before closing

Return to the isolated 2026 count understatement of $900. The company discovers it before closing the affected expense accounts.

Correction	Debit	Credit
Inventory	$900	
Cost of Goods Sold		$900

The correction increases the understated asset and removes the excess expense.

After closing, trace the income effect into retained earnings

Alternate scenario: Sound Decision discovers the $900 understatement of 2026 ending inventory and income only after closing. No correction was recorded before closing, and no 2027 transactions have occurred.

Opening-balance correction	Debit	Credit
Inventory	$900	
Retained Earnings		$900

- **Why Retained Earnings?** The income effect has already closed into that account.
- **Entry:** correct the opening asset and equity balances.
- **Material error in issued 2026 statements:** restate the affected prior-period statements; disclose the error and its effects.

iClicker | Question 5 of 5

A company discovers that it overstated ending inventory immediately after closing the year's accounts, before any transactions in the new year. Purchases were recorded correctly. Ignore taxes.

Which entry corrects the opening balances?

A Debit COGS; credit Inventory

B Debit Inventory; credit Retained Earnings

C Debit Retained Earnings; credit Inventory

D Debit Inventory; credit COGS

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Correct answer: C

A company discovers that it overstated ending inventory immediately after closing the year's accounts, before any transactions in the new year. Purchases were recorded correctly. Ignore taxes.

Which entry corrects the opening balances?

A **Debit COGS; credit Inventory**
COGS would be corrected before closing. After closing, correct opening Retained Earnings.

B **Debit Inventory; credit Retained Earnings**
This increases the two balances that are already too high.

C **Debit Retained Earnings; credit Inventory**
C is correct. Inventory is too high, and the overstated income has already closed into Retained Earnings. Debit Retained Earnings and credit Inventory to reduce both balances.

D **Debit Inventory; credit COGS**
This increases Inventory and reduces COGS, reversing the required correction.

ERROR CORRECTION

Correct the period that was wrong

A material error in statements already issued or available to be issued requires **restatement: presenting corrected amounts for the affected prior periods.**

Effects before the earliest year presented

Correct opening balances.

Adjust opening assets, liabilities, and equity for the cumulative effects of the error before that year.

Effects within the years presented

Correct each affected year's statements.

Restate the affected amounts in each comparative period presented.

Both may apply to one error.

Why restate? Users need accurate results for each year. A discovery-year expense would put the loss in the wrong period.

Source: ASC 250-10-45-23 through 45-24.

Correct each affected reporting period

Sound Decision: material $900 understatement of 2026 ending Inventory; discovered after closing 2027. No earlier correction; 2027 ending Inventory is correct.

Statement correction	2026	2027
Cost of goods sold	Decrease $900	Increase $900
Income	Increase $900	Decrease $900
Inventory	Increase ending balance $900	Increase beginning balance $900
Retained earnings	Increase ending balance $900	Increase beginning balance $900

- **Ending 2027 Inventory and Retained Earnings: already correct.** No further increase to those ending balances.
- **Reporting correction:** restate affected periods; disclose the error and its effects.

Source: ASC 250-10-45-23 through 45-24; ASC 250-10-50-7.

Inventory error correction: Practice

Work on your own or with those around you.

A separate company overstated ending inventory. Purchases and all other transactions were correct.

- If discovered before the first year's closing, which accounts need correction?
- If discovered immediately after closing, which opening accounts need correction?
- If the material error affected issued statements, what reporting work remains?

Write the direction of each entry. No amount is needed to determine the account relationship.

Inventory error correction: Solution

The company overstated ending inventory; purchases and all other transactions were correct. The error understated COGS and overstated income.

Discovery case	Debit	Credit
Before closing	Cost of Goods Sold	Inventory
After year-end closing, before any new-year transactions	Opening Retained Earnings	Inventory

- **Before closing:** record the omitted expense in COGS.
- **After closing:** reduce the overstated income already closed into Retained Earnings.
- **Material error in issued statements:** restate affected prior periods and disclose the error and its effects.

NEXT MEETING

Next class: Inventory estimation and the operating cycle

Tuesday, November 10, 2026

