

Financial Reporting Midterm Review Pack

Income Statement, EPS, Cash Flows, FCFF/FCFE, Inventory, Long-Term Assets

1. Income Statement

- Gross Profit = Revenue - COGS
- Operating Profit = Gross Profit - operating expenses (SG&A, operating depreciation, impairment, etc.)
- EBIT is usually the same as operating profit, but check classification of unusual items.
- EBT = EBIT + non-operating income - non-operating expenses - interest
- Net Income = EBT - tax

Key margins: Gross margin = Gross profit / Revenue; Operating margin = Operating profit / Revenue; Net margin = Net income / Revenue.

2. Cost Classification

Use 4 buckets: COGS, SG&A, Non-operating, Capitalize.

COGS

- Directly related to producing or purchasing goods sold: raw materials, factory labor, factory utilities, factory depreciation.

SG&A

- Selling costs: advertising, sales salaries, delivery to customers.
- General and administrative: office rent, CEO salary, HR, office depreciation.

Non-operating

- Financing and investing related items: interest expense/income, gains/losses on investments, some FX gains/losses.

Capitalize

- Multi-year benefits are recorded as assets first: machinery, installation, major upgrades, purchased patents.

Quick rule: If a cost creates future benefit for several years, capitalize it. If not, expense it and classify the expense.

3. EPS and Diluted EPS

Basic EPS

Basic EPS = (Net income - Preferred dividends) / Weighted average common shares

Convertible preferred (if-converted method)

- Add back preferred dividends to the numerator.
- Add conversion shares to the denominator.

Convertible bonds (if-converted method)

After-tax interest add-back = Interest x (1 - tax rate)

- Add after-tax interest to numerator and conversion shares to denominator.

Stock options (treasury stock method)

- $\text{Proceeds} = \text{Options} \times \text{Exercise price}$
- $\text{Shares repurchased} = \text{Proceeds} / \text{Average market price}$
- $\text{Incremental shares} = \text{Options} - \text{Shares repurchased}$

Diluted EPS uses incremental shares only for options. If the result increases EPS, the security is anti-dilutive and should not be included.

4. Statement of Cash Flows

Sections

- CFO (Operating): core business cash flows
- CFI (Investing): purchases/sales of PP&E, intangibles, long-term investments
- CFF (Financing): debt, equity, dividends paid

CFO - Direct method

- List actual cash received and cash paid (customers, suppliers, employees, taxes, etc.).

CFO - Indirect method

- Start from Net income
- Add back non-cash items (depreciation, amortization)
- Remove non-operating gains/losses (subtract gains, add losses)
- Adjust for working capital changes

Working capital signs: Increase in AR or Inventory = subtract. Increase in AP = add. Decreases reverse the signs.

5. IFRS vs US GAAP - Interest and Dividends in Cash Flows

Item	US GAAP	IFRS (common options)
Interest paid	CFO	CFO or CFF
Interest received	CFO	CFO or CFI
Dividends received	CFO	CFO or CFI
Dividends paid	CFF	Usually CFF (policy choice can vary)

IFRS presentation choices can shift reported CFO without changing total cash flow.

6. FCFF and FCFE

From CFO

$$\text{FCFF} = \text{CFO} + \text{Interest} \times (1 - T) - \text{CapEx}$$

$$\text{FCFE} = \text{CFO} - \text{CapEx} + \text{Net Borrowing}$$

$$\text{Net Borrowing} = \text{Debt issued} - \text{Debt repaid}$$

From Net Income

$$\text{FCFF} = \text{NI} + \text{Interest} \times (1 - T) + \text{D\&A} - \text{CapEx} - \text{Delta WC}$$

$$\text{FCFE} = \text{NI} + \text{D\&A} - \text{CapEx} - \text{Delta WC} + \text{Net Borrowing}$$

Interpretation: FCFF is cash available to debt and equity. FCFE is cash available only to equity holders.

7. Inventory - Initial Cost and Ratios

Initial cost of inventory (capitalize)

- Purchase price net of discounts
- Non-refundable duties and taxes
- Transport, handling, freight-in, transit insurance
- Costs to bring inventory to present location and condition

Do not capitalize (usually)

- Refundable VAT
- Abnormal waste
- Storage after inventory is ready for sale (normal storage)
- Selling and administrative costs
- Interest on loans for ordinary inventory

Inventory-related ratios

$$\text{Inventory turnover} = \text{COGS} / \text{Average inventory}$$

$$\text{Current ratio} = \text{Current assets} / \text{Current liabilities}$$

$$\text{Quick ratio} = (\text{Cash} + \text{AR} + \text{short-term investments}) / \text{Current liabilities}$$

$$\text{Debt-to-equity} = \text{Total liabilities} / \text{Total equity}$$

$$\text{ROA} = \text{Net income} / \text{Average total assets}$$

$$\text{ROE} = \text{Net income} / \text{Average equity}$$

8. Inventory Valuation - Periodic FIFO and LIFO

- Periodic FIFO: oldest costs go to COGS, newest costs remain in ending inventory.
- Periodic LIFO: newest costs go to COGS, oldest costs remain in ending inventory.

In rising prices: FIFO usually gives lower COGS, higher inventory, and higher profit. LIFO usually gives higher COGS, lower inventory, and lower profit.

LIFO reserve

$$\text{LIFO reserve} = \text{FIFO inventory} - \text{LIFO inventory}$$

$$\text{FIFO COGS} = \text{LIFO COGS} - \text{Change in LIFO reserve}$$

9. Inventory Impairment and Reversal (IFRS)

NRV = Estimated selling price - Costs to complete/sell

Inventory is measured at the lower of cost and NRV.

- If $NRV < \text{cost}$: write down inventory and recognize an impairment loss.
- IFRS allows reversal if NRV later recovers, but carrying amount cannot exceed original cost.
- US GAAP generally does not allow reversal of inventory write-downs.

10. Long-Term Assets - Depreciation

Straight-line

Annual depreciation = (Cost - Residual value) / Useful life

Declining balance (example: double-declining)

- Straight-line rate = $1 / \text{useful life}$
- DDB rate = $2 \times \text{straight-line rate}$
- Apply rate to beginning carrying amount each year, but do not depreciate below residual value.

Carrying amount = Cost - accumulated depreciation - impairment.

11. Long-Term Asset Impairment (IFRS, cost model)

Impairment means the asset is recorded above the amount the company can recover from using or selling it.

Key values

- Carrying amount: current book value
- Value in use (VIU): present value of expected future cash flows from use
- Fair value less costs to sell (FV-CTS): net amount from sale

Recoverable amount (IFRS) = higher of VIU and FV-CTS

Impairment loss = Carrying amount - Recoverable amount (if carrying is higher)

- New carrying amount = Recoverable amount after impairment

Reversal under IFRS

- Allowed for PP&E and most intangibles if recoverable amount increases later (not goodwill).
- Reversal is capped: carrying amount after reversal cannot exceed the amount that would have existed without prior impairment.

12. Intangible Assets - IFRS vs US GAAP

Acquired intangibles

- Usually capitalize (patents, customer lists, purchased trademarks).
- Finite-life intangibles: amortize and test for impairment when indicators exist.
- Indefinite-life intangibles: no amortization, test for impairment.

Internally developed items

- Internally developed brands and advertising are usually expensed under both IFRS and US GAAP.
- Research costs are expensed under both frameworks.
- Development costs may be capitalized under IFRS only if strict criteria are met.
- US GAAP is more restrictive, but some software/internal-use software costs can be capitalized.

Goodwill

- Recorded only in business combinations.
- Not amortized; tested for impairment.

13. Common Exam Traps

- IFRS long-term asset impairment uses the HIGHER of VIU and FV-CTS (recoverable amount).
- Basic EPS subtracts preferred dividends; diluted EPS for convertibles uses if-converted method.
- Convertible bond dilution adds back AFTER-TAX interest, not full interest.
- Options use treasury stock method: only incremental shares are added.
- Indirect CFO: subtract gains and add losses; watch working capital signs carefully.
- FCFF includes after-tax interest add-back; FCFE includes net borrowing.
- Refundable VAT and abnormal waste are not inventory cost.
- FIFO vs LIFO effect in rising prices: FIFO higher profit/inventory; LIFO lower profit/inventory.
- Inventory write-down reversal is allowed under IFRS (cap at original cost), generally not under US GAAP.
- Accelerated depreciation lowers early-year profit and profitability ratios.

14. Last-Minute Formula Sheet

Topic	Formula
Gross Profit	Revenue - COGS
Operating Margin	Operating profit / Revenue
Basic EPS	(NI - Preferred dividends) / Weighted avg common shares
FCFF (from CFO)	CFO + Interest x (1 - T) - CapEx
FCFE (from CFO)	CFO - CapEx + Net Borrowing
Inventory turnover	COGS / Average inventory
LIFO reserve	FIFO inventory - LIFO inventory
NRV	Selling price - Costs to complete/sell
Straight-line depreciation	(Cost - Residual) / Useful life
Recoverable amount (IFRS)	Higher of VIU and FV-CTS

Study tip: Practice classification questions first (COGS vs SG&A, CFO vs CFI vs CFF), then move to calculations. Most exam mistakes come from misclassification, not arithmetic.