FreeFellow

FORMULA SHEET

CPA FAR

Financial Accounting & Reporting

28
FORMULAS

3
TOPICS

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FINANCIAL REPORTING

14 items

Basic EPS

$$\text{Basic EPS} = \frac{\text{Net Income} - \text{Preferred Dividends}}{\text{Weighted Avg Common Shares Outstanding}}$$

Stock dividends and splits applied retroactively to all prior periods.

Diluted EPS: numerator and denominator

$$\text{Diluted EPS} = \frac{NI - \text{Pref Div} + \text{Int Savings (net tax)}}{\text{WA Shares} + \text{Dilutive Shares}}$$

Numerator adds back after-tax interest on convertibles. Denominator adds options, convertibles, contingent shares.

Treasury stock method (diluted EPS options)

$$\text{Incremental Shares} = \text{Options Outstanding} - \frac{\text{Options} \times \text{Exercise Price}}{\text{Average Market Price}}$$

Only dilutive if exercise price < average market price. Assumes proceeds from exercise are used to buy back shares at average market price.

Anti-dilution rule (diluted EPS)

Include a potential share in diluted EPS ONLY if it decreases EPS. Test each security separately, most dilutive first; exclude anti-dilutive. In a net loss year, all potential shares are anti-dilutive, so diluted EPS = basic EPS.

Net periodic pension cost (NPPC)

$$\text{NPPC} = \text{Service Cost} + \text{Interest Cost} - \text{Expected Return on Plan Assets} + \text{Amortization of Prior Service Cost} \pm \text{Amortization of Net Gain/Loss}$$

ASC 715; only service cost is presented in operating income; other components in non-operating.

Indirect method: operating cash flows

Start: Net Income

+ Depreciation and amortization

+ Loss/(Gain) on asset disposal

+ Decrease/(Increase) in current assets

+ Increase/(Decrease) in current liabilities

= Cash from Operations

Deferred tax asset / liability recognition

$$\text{DTA} = \text{Deductible Temporary Difference} \times \text{Tax Rate}$$

$$\text{DTL} = \text{Taxable Temporary Difference} \times \text{Tax Rate}$$

DTA: future deductible → tax benefit. DTL: future taxable → tax obligation. Measure at enacted future rate.

Revenue recognition 5-step model (ASC 606)

Step 1: Identify the contract.

Step 2: Identify performance obligations.

Step 3: Determine transaction price.

Step 4: Allocate transaction price (relative standalone selling price).

Step 5: Recognize revenue when/as each performance obligation is satisfied.

Fair value hierarchy (ASC 820)

Level 1: Quoted prices in active markets for identical assets/liabilities.

Level 2: Observable inputs other than Level 1 (comparable assets, yield curves).

Level 3: Unobservable inputs (management assumptions, DCF models).

Use highest level available.

Current ratio and quick ratio

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

$$\text{Quick Ratio} = \frac{\text{Cash} + \text{Marketable Securities} + \text{Net A/R}}{\text{Current Liabilities}}$$

Quick ratio excludes inventory and prepaid expenses.

Comprehensive income and OCI mnemonic (PUFE)

$$\text{Comprehensive Income} = NI + OCI$$

OCI items (PUFE):

P: Pension adjustments

U: Unrealized G/L on AFS debt

F: FX translation

E: Effective portion of CF hedge

Cash flow hedge: effective vs. ineffective portion

Effective portion → OCI until forecast transaction hits earnings (then reclass).

Ineffective portion → immediately to NI.

ASU 2017-12: highly effective hedge defers entire FV change in OCI; no separate ineffectiveness measurement.

Debt-to-equity and times interest earned

$$\text{D/E} = \frac{\text{Total Liabilities}}{\text{Total Stockholders' Equity}}$$

$$\text{TIE} = \frac{\text{EBIT}}{\text{Interest Expense}}$$

Higher TIE → greater ability to service debt.

Retained earnings rollforward

$$\text{Ending RE} = \text{Beginning RE} + \text{Net Income} - \text{Dividends Declared} \pm \text{Prior Period Adjustments}$$

Prior period error corrections go directly to beginning RE (net of tax), not through income statement.

SELECT BALANCE SHEET ACCOUNTS

3 items

FIFO vs. weighted average inventory cost

$$\text{FIFO COGS} = \text{oldest costs used first}$$

$$\text{WA Cost per Unit} = \frac{\text{Total Cost of Goods Available}}{\text{Total Units Available}}$$

$$\text{WA COGS} = \text{WA Cost per Unit} \times \text{Units Sold}$$

LIFO reserve and LIFO effect

$$\text{LIFO Reserve} = \text{FIFO Inventory} - \text{LIFO Inventory}$$

$$\text{LIFO Effect} = \Delta\text{LIFO Reserve}$$ (change during period = extra COGS under LIFO vs. FIFO)

Convert LIFO to FIFO: add LIFO reserve to inventory; reduce COGS by LIFO effect.

Bad debt expense (allowance method)

$$\text{Bad Debt Expense} = \text{Estimated Uncollectible} - \text{Existing Credit Balance in Allowance}$$

Alternatively: % of sales method sets allowance credit directly equal to % × credit sales (no adjustment for existing balance).

SELECT TRANSACTIONS

11 items

Straight-line depreciation

$$\text{SL Depreciation} = \frac{\text{Cost} - \text{Salvage}}{\text{Useful Life}}$$

Constant expense each period; most common method.

Double-declining balance depreciation

$$\text{DDB Rate} = \frac{2}{\text{Useful Life}}$$

$$\text{DDB Expense} = \text{DDB Rate} \times \text{Book Value (beginning of period)}$$

No salvage value in calculation; switch to SL when SL gives higher expense.

Sum-of-years'-digits (SYD) depreciation

$$\text{SYD} = \frac{n(n+1)}{2}$$

$$\text{SYD Expense}_t = \frac{n-t+1}{\text{SYD}} \times (\text{Cost} - \text{Salvage})$$

n = useful life, t = year number.

Finance lease criteria mnemonic (ASC 842 OWNES)

Finance if ANY ONE met (OWNES):

O: Ownership transfer

W: Written purchase option (reasonably certain)

N: Net term $\geq 75\%$ economic life

E: Economic PV $\geq 90\%$ FV

S: Specialized (no alt use)

Finance vs. operating lease: 75% and 90% bright lines

Under ASC 842, the 75% economic-life and 90% FV tests are NOT strict bright lines (they were under ASC 840). Both are "one reasonable approach"; evaluate substance near thresholds, not mechanical cutoff.

Lessee ROU asset (finance/operating)

$$\text{ROU Asset} = \text{Lease Liability} + \text{Initial Direct Costs} + \text{Prepaid Lease Payments} - \text{Lease Incentives Received}$$

Lease liability = PV of future lease payments (using implicit or incremental borrowing rate).

Bond effective interest method

$$\text{Interest Expense} = \text{Carrying Value} \times \text{Market Rate at Issuance}$$

$$\text{Amortization} = \text{Interest Expense} - \text{Coupon Payment}$$

Carrying value adjusts each period; ensures effective yield remains constant.

Goodwill impairment test

Step 1 (optional qualitative): is FV < CV more likely than not?

Step 2: $\text{Loss} = CV_{RU} - FV_{RU}$

Loss capped at goodwill CV; write down goodwill only.

Percentage-of-completion method

$$\text{Revenue Recognized} = \frac{\text{Costs Incurred to Date}}{\text{Total Estimated Costs}} \times \text{Contract Price}$$

If estimated total costs exceed contract price, recognize entire expected loss immediately.

Installment sale gross profit percentage

$$\text{GP\%} = \frac{\text{Gross Profit}}{\text{Selling Price}}$$

$$\text{Recognized GP} = \text{Cash Collected} \times \text{GP\%}$$

Deferred gross profit on balance sheet = remaining uncollected balance × GP%.

Equity method: carrying value

$$\text{Carrying Value} = \text{Acquisition Cost} + \text{Share of Investee Net Income} - \text{Share of Investee Dividends} \pm \text{Share of OCI}$$

Used when investor has significant influence (generally 20–50% ownership).