

1 Notes to myself

1. Read whole question first. A lot of info is useless.
2. For multiple part questions, highlight the key point they are asking for.
3. Before calculating, write down all equations being used.

2 Accounting in Business & FS Overview

2.1 International Accounting Standards Board (IASB)

2.1.1 Qualitative Characteristics: Relevance, Faithful Representation, Comparability, Verifiability, Timeliness, Understandability

- IASB -> IFRS -> FRS (Singapore)
- Overall ethical conduct - Independent accountants represent the public interest

2.1.2 Auditors & External Audit

- Independent certified public accountant (CPA) perform external audits.
- Provides public with assurance that FSs are not misleading.

2.2 The Accounting Equation

- Assets = Liabilities + Equity
- = Liabilities + Share Capital + Retained Earnings
- = Liabilities + Share Capital + Revenue - Expenses - Dividends

2.2.1 Asset

- A present resource
- Due to a past event
- That will result in future benefits

2.2.2 Liability

- An obligation
- Due to a past event
- That will result in future outflow of resources upon settlement

Accounts: Unearned Revenue, Accounts Payable

2.2.3 Equity

- Owner's claim on the residual interest after deducting all Liabilities
- net assets (total assets - total liabilities)

2.2.4 Claims

- Share Capital / Capital Stock: contributed by owners
- Retained earnings: equity earned by company

2.3 IASB Definitions

- Income: inflow/enhancement of assets (OR decrease in liabilities -> equity up). During accounting period, not by contributions from owners.
- Expense: outflow/depletions of assets (OR incurrence of liability -> equity down). During accounting period.
- Capital Maintenance Adjustments: Revaluation of assets/liabilities, not included in income statement. Treated as Other Comprehensive Income (OCI)

2.4 The Financial Statements

2.4.1 Statement of Financial Position AKA Balance Sheet (SF-P/BS)

- $A = L + E$
- A snapshot of company's economic resources and obligations
- Limitation: Assets recorded at cost, not market value. Usually book v < market v

2.4.2 Statement of Comprehensive Income (SCI)

- Net Income (NI) = Rev - Exp
- NI + OCI = Comprehensive Income
- Revenues: Operation earnings, Net Income: NI = Rev - Exp, Other Comprehensive Income: investments etc.
- Shows economic performance over time.
- Either Income statement & SCI together or not. OCI can be separate (IAS1)

2.4.3 Statement of Changes in Equity (SCE)

- How the ownership interest in a company has changed over a specific period
- Beginning Equity + Δ Equity = End Equity, where Δ Equity = Δ Capital + Net Income - Dividends + OCI

2.4.4 Statement of Cash Flows (SCF)

- How cash is generated and used by the company
- CFO + CFI + CFF (operating, investing, financing)
- CFO: revenue, etc. CFI: buying equipment, land, etc. CFF: investors investing, paying dividends etc.

2.5 Relationships among the 4 FSs

The diagram illustrates the relationships between four financial statements:

- Income Statement:** NET INCOME
- Statement of Changes in Equity:** Beg Equity + share capital changes + Net Income - Dividends + OCI = Ending Equity
- Statement of Cash Flow (SCF):** Reports changes in cash → CASH (End balance)
- Statement of Financial Position (SFP):** Assets (Cash) Liabilities Shareholders' Equity (ending equity, including RE)

Annotations explain the flow of information:

- NI is a component to determine ending RE
- Ending RE = Beg RE + Net Income - Dividends
- Ending Cash is reported on the SFP's Assets. It provides greater details on how cash changes

2.6 Fundamental Concepts & Assumptions of Accounting

- Separate entity concept: Activity of a biz is separate from its owners
- Time-period assumption: biz's activities can be divided into time periods (monthly, quarterly, etc)
- Assumption of arm's-length transactions
- Cost Principle
- Fair value Principle
- Monetary measurement concept
- Going concern assumption

3 Mechanics of Accounting

3.1 Credit/Debit

- Depends on Type of account.
- Normal Debit/Normal Credit

The diagram shows the mechanics of credit/debit entries for Assets, Liabilities, and Equity:

Assets	=	Liabilities	+	Equity
Debit ↑		Debit ↓	+	Debit ↓
+ Normal Balance		- Normal Balance	+	+ Normal Balance

depends on where the account lies on the AE.

4 The Accounting Equation

4.1 Main equation

- Assets = Liabilities + Equity
- = Liabilities + Share Capital + Retained Earnings
- = Liabilities + Share Capital + Revenue - Expenses - Dividends

4.2 Assets

- Current and Non-current
- Current: Cash & Cash eq, Accounts Receivable, Inventory, Prepaid expenses
- Non-current: PPE, Intangible assets: trademarks, copyrights, goodwill, Long-term investments: Bonds

5 AJE (Adjusting Entries) & effect on Accounting Equation

5.1 Cash vs Accrual

- Cash: add up cash inflows and outflows. Revenue recorded as soon as cash comes in, expense recorded as soon as cash goes out. None of: AR, AP, UR, Prepaid Expenses, Accumulated Depreciation
- Accrual: Recognizes event when main economic impact occurs. Revenues recorded when earned, expenses recorded when incurred.

5.2 Calculating Effects on AE

- Supplies worth \$500 was purchased but was not included in assets because it got debited to Supplies Expense even though they were not consumed during the year.

Original | Corrected | effect on accounts | effect on AE

Dr SE FW 01 Jan 500 : SET FP 700 11: fto 6, 11: 1000 1000 1000 1000
in recording a credit Sales of €15 700 NachoCheese incarnt

5.3 Fast way to calculate effect on AE

- If need fast: (1) Focus on variable (A/L/E or others) (2) Correcting Change to Accounts (3) effect on variable (A/L/E or NI, Cur Asset or others.)

5.4 Careful of Contra Accounts

- be careful of contra accounts: category[Contra account(account)]
- xAssets[Accumulated Depreciation (PPE), Loss Allowance(AR), Discount on NR(NR)]
- xRevenues[Sales returns, Sales Discounts(Sales Revenue)]
- xEquity[Treasury Stock(Shareholders' Equity), Owner's Draws(Owner's Capital)]
- xLiability[Discount on bonds payable(bonds payable)]

6 Notes Receivables

A promissory note to pay a specified amount of money, usually with interest, either on demand or at a definite future date. e.g. 800k, 4%, 9 month note on July 1st 2023.

7 Estimated Credit Loss (ECL) & Loss Allowance (LA)

- $ECL = LA_{target} - LA_{current}$ where LA_{target} depends on analysis
- Individual Assessment:** n% chance that \$x owed by Company A will be uncollectible: $n\% \times \$x = ECL$ (for that company)
- Group Assessment:** Usually aging analysis: $SUM(\$Amt \times Est.\%Uncollectible)$,
- where each class(current, 1-30 days past due, etc) has some $\$Amt$ collectible and some $Est.\%Uncollectible$.

8 Uncategorized

8.1 Retained Earnings

$RE = Rev - Exp - Div + Previous RE$

8.2 Normal Debit or credit?

Equity = Rev - Exp - Div. Revenue is normal credit, Expenses are normal debit, Dividends are normal debit.

8.3 COGS - Cost of Goods Sold

There's no such thing as inventory expense. [asset(cash or credit) and +asset(inventory)]. You only record it as an expense when you sell the inventory (COGS).

8.4 Expenses

Operating expenses: Rent, Utilities, Salaries, Advertising exp, Fees, ECL| Non-operating expenses: Interest expense on loans, Taxes expense.| COGS (direct cost of producing/obtaining goods sold)

8.5 Revenue

Operating revenue: Service/Sales revenue, Rental income (real estate company), Recurring revenue (SaaS company)
Non-operating revenue: Dividend revenue, Gain on sale of assets, ROyalty income, Forex gains, etc.

8.6 ΔNI (Net Income) = Revenues (all) - Expenses (all)

Remember to sum startNI and ΔNI for endingNI.

8.7 AR(Accounts Receivable) = Cash Collected - Credit Sales

8.8 Current Assets

(1) Current Assets - Loss Allowance (Contra-asset account) (2) For all entries, calculate change to Asset. Note that Liabilities are not assets, so if you take on liabilities for assets your assets still go up.

8.9 Cash Collected from customers

(finalAR-totalAR) + (final Unearned Revenue - startingUR)

8.10 Journal Entries for Recovering write-offs:

If we recovered \$828 from previously written off accounts, its: [Dr AR Cr LA], THEN [Cr AR Dr Cash]. 2 steps, same with:

8.11 Journal Entries for Selling Goods

[Dr Cash Cr Revenue] then [Dr COGS Cr Inventory]

8.12 $\Delta Equity = \Delta Share Capital + Net Income - Dividends$

(Inferred from SCE) = $\Delta Assets - \Delta Liability$ Depending on the question, this must be shifted around.

8.13 Collect on account:

no longer AR means collected in cash or equivalents.

9 Accounting Equations

9.1 Return on Assets (ROA)

Returns on assets is in ratio form as income divided by assets invested (income/assets invested)

$$ROA = \frac{\text{Net Profit}}{\text{Average total assets}}$$

Where Average total assets = $(\text{Start Assets} + \text{End Assets}) / 2$

Note: Net profit = net income

9.2 Debt Ratio

Evaluate debt risk. Ability to pay its liabilities using debt ratio (liabilities/assets), lower = less risk.

$$\text{Debt Ratio} = \frac{\text{Total Liabilities}}{\text{Total Assets}}$$

9.3 Profit Margin

Profit Margin = $\frac{\text{Net Profit}}{\text{Net Sales}}$

Note: Net Sales = Sales Revenue
A high profit margin is an indicator of future growth.

9.4 Current Ratio

The current ratio of a company gives us a good indication of the company's ability to pay its debts when they fall due. The current ratio is calculated by dividing current assets by current liabilities.

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

10 PPE & Intangibles

10.1 Depreciation Methods

Pressure to lower taxable income v.s. Pressure to inflate reported profitability Remember to calculate partial year if needed.

10.1.1 Straight-line

- Equal depreciation each year
- $DE = \frac{\text{Cost}-\text{RV}}{\text{Useful years}}$

10.1.2 Units-of-production

- Varying amounts of depreciation depending on production that year
- $DE = \frac{\text{Cost}-\text{RV}}{\text{Life in units of production}} \times \text{Actual units produced that year}$

10.1.3 Declining-balance/Accelerated Depreciation

- More depreciation in earlier stage (2x, 1.5x)
- (1) Useful life is 4 years -> straight line rate = $\frac{100\%}{4} = 25\%$
- (2) Assume double declining -> DDB rate = $2 \times 25\% = 50\%$
- (3) Residual value is ignored.
- Once asset is depreciated below RV: Depreciation Expense = $NBV_{previous} - RV$

10.2 Capitalize v.s. Expense

R&D: Expensed. Dev cost after tech feasibility established can be capitalized. (IFRS) (GAAP: all r&d are expensed in the period incurred).

10.2.1 Repairs:

- Expense: Maintenance, Does not increase productivity, does not extend life beyond original estimate, Recurring in nature.
- Capitalize: Overhauls or partial replacements, not frequent, increases efficiency, Extends useful life beyond estimate, Involves a lot of money

10.3 Disposal of PPE

- Go through slides again (Slide 47 + post lecture stuff)

10.4 Intangible Assets

- Definite vs indefinite life
- Amortisation expense
- Accumulated Amortization (new xAsset)
- Market Cap - Net Book value = Goodwill (2638B - 51B for apple lol)

10.5 new formulas

- Fixed Assets Turnover = $\frac{\text{Net Sales}}{\text{Avg Fixed Assets}}$
- TA Turnover = $\frac{\text{Net Sales}}{\text{Avg Total Assets}}$

10.6 slide 62 for summary

11 Days' Sales Uncollected

how much time is likely to pass before we receive cash receipts from credit sales.

$$\text{Days' Sales Uncollected} = \frac{\text{Accounts Receivable}}{\text{Net Sales}} \times 365$$

12 Accounts Receivable Turnover Ratio

Measures how often are receivables collected - how many times a year the company converts its average accounts receivables into cash.

$$\text{Receivable Turnover Ratio} = \frac{\text{Average Net Receivables}}{\text{Net Sales Revenue}}$$

high ratio = faster collection of receivables -> shorter operating cycle

> more cash available for running business. Low RTR could indicate that company is allowing too much time for customers to pay. When calculating a ratio and have income statement item in the numerator and a balance sheet item in denominator, must calculate the avg balance sheet amount. The quickest way is to take (beginning + ending balance)/2.

If a company offers terms of net 30 on its sales, we should expect turnover of 12. This is because over the entire year, the average accounts receivable should be equivalent to roughly 30 days of sales. Hence, Total sales/Avg AR should be 12. >12 -> collect >12x its Avg AR per year -> they collect fast -> more cash for running business.

13 Avg Collection Period

Measures how many days on average it takes the company to collect its accounts receivables.

$$\text{Avg Collection Period} = \frac{365}{\text{Accounts Receivable Turnover}}$$

Should be as close to or lower than its offer terms. i.e. net 30 then try to be <=30