FAR-1 — FINANCIAL ACCOUNTING & REPORTING 1

Topic: INTERPRETATION OF FINANCIAL STATEMENTS

1 TOPIC OVERVIEW

WHAT IS IT?
Analysis simplifies financial data by methodical study of relationships between figures; **interpretation** explains their meaning for profitability, financial position, gearing, liquidity and efficiency.

WHY IMPORTANT?
Helps users judge profitability and efficiency, the relative importance of each component, reasons for changes, and the ability to repay long- and short-term debts.

CORE PRINCIPLE
Three tools — **horizontal**, **vertical** and **ratio** analysis — always compared against prior years, industry/competitors, or forecasts, and always aimed at the needs of the specific user.

2 USERS & THEIR INFORMATION NEEDS [CF 1.5, 1.9 & 10]

User	Main interest / focus
Existing investor	Hold or sell shares → profitability ratios (gross & net margin, ROCE).
Potential investor	Profitability plus efficient management → margins, ROCE, asset turnover, working capital ratios.
Lender (e.g. bank)	Will interest and principal be paid? → cash flows, liquidity ratios (current, acid test), gearing, interest cover.
Creditor	Setting the appropriate credit limit and credit period; will the amount be collected.
Employees	Fair wages, benefits, productivity/profit-linked bonus, career growth.
Management	Forecasting, planning and controlling (budgets); must also understand investors', lenders' and creditors' views.

Exam tip: when asked to interpret for specific users, ask — **What do they need to know? What are they interested in? What decision must they make?**

3 HORIZONTAL (TREND) ANALYSIS [Example 01]

CHANGE %

$$\text{(Current year amount – Base year amount)} \div \text{Base year amount} \times 100$$

Compares line items/ratios over several periods to spot trends and growth patterns; also makes growth rates easier to compare across entities. **Worked check (Adeel Ltd, 2023→2024):** Sales 4,315 vs 3,760 = **+14.8%**; Cost of sales +13.2%; Gross profit +18.7%; Administrative expenses 296 vs 162 = **+82.7%** (big red flag); Interest 13 vs 15 = (13.3%); Profit after tax 166 vs 134 = **+23.9%**; Total assets (1.0%); Long-term loans (16.7%).

4 VERTICAL (COMMON-SIZE) ANALYSIS [Example 02]

HOW
Every P&L line = % of **sales**; every SFP line = % of **total assets**. Best for seeing relative proportions in one period, and trends over time.

WORKED CHECK (2024 vs 2023)
Cost of sales 70.0% vs 71.0%; Gross profit 30.0% vs 29.0%; Admin 6.9% vs 4.3%; PAT 3.8% vs 3.6%; PPE 60% of assets; Equity 80.5% vs 76.3%.

If cost of goods sold has been 70% of sales for many years, a new figure of 77% is a cause for alarm.

5 RATIO ANALYSIS — BENCHMARKS & CATEGORIES

COMPARE AGAINST
- Previous years (trend: improvement or decline)
- Industry averages or specific competitors
- Pre-determined forecasts/targets

Ratios control for differences in **size**, so different-sized businesses can be compared.

FOUR CATEGORIES
- Profitability (incl. investors' profitability)
- Working capital efficiency
- Liquidity
- Debt / solvency

PROFITABILITY & INVESTORS' RATIOS

6 PROFIT / SALES & COST / SALES RATIOS [Examples 03–05]

OPERATING (PBIT) MARGIN	NET PROFIT MARGIN	GROSS PROFIT MARGIN
PBIT ÷ Sales	**PAT ÷ Sales**	**Gross profit ÷ Sales**
214 ÷ 4,315 = 4.96%	166 ÷ 4,315 = 3.85%	1,295 ÷ 4,315 = 30%

COST OF SALES RATIO	ADMIN EXPENSE RATIO	DISTRIBUTION COST RATIO
Cost of sales ÷ Sales	**Admin ÷ Sales**	**Distribution ÷ Sales**
3,020 ÷ 4,315 = 70%	296 ÷ 4,315 = 6.86%	800 ÷ 4,315 = 18.54%

- Be **consistent** in which profit definition is used when comparing years.
- High gross margin + low net margin = **high overheads** (admin, selling & distribution).
- Gross margin suits industry comparison; generally **higher is better**.

- Cost ratios: **lower is better**; used to spot unexpected changes.
- **Variable** cost ratios stay steady as volume changes; **fixed** cost ratios swing significantly with sales volume.

7 ASSET TURNOVER (SALES ÷ CAPITAL EMPLOYED) [Example 06]

SALES / CAPITAL EMPLOYED (TIMES)

Sales ÷ Average capital employed

4,315 ÷ 1,272.5 = 3.39 times

Capital employed = equity + long-term debt (incl. preference shares) = total assets − current liabilities; use the average of opening and closing. 2024: 1,160+125 = 1,285; 2023: 1,110+150 = 1,260; average = **1,272.5**. Older, low-book-value assets give a higher turnover; capital-intensive industries show lower turnover; a persistently falling ratio may signal excess capacity, poor inventory management or sloppy collections.

8 INVESTORS' PROFITABILITY — ROCE, ROE, ROA [Examples 07–11]

ROCE	ROE (ROSC / ROI)	ROA
PBIT ÷ Avg capital employed	**(PAT − pref. dividend) ÷ Avg equity**	**PBIT ÷ Total assets**
214 ÷ 1,272.5 = 16.8%	166 ÷ 1,135 = 14.6%*	214 ÷ 1,441 = 14.85% (non-current assets only: 21.63%)

ROCE BREAKDOWN [EXAMPLE 08]

ROCE = Profit/sales ratio × Asset turnover

4.96% × 3.39 = 16.8%

INTERPRETATION

- ROCE should exceed the company's **cost of capital** — borrowing at 20% and earning 16.8% means losing money.
- Investors prefer **stable, rising** ROCE over volatile ROCE.
- ROA varies widely by industry — compare with own history or similar businesses.

WORKED CHECK [Example 09]

Company A: 539,900 ÷ 3,659,000 = **14.8%**. Company B: 2,616,100 ÷ 12,193,400 = **21.5%**. B uses capital better — but a single year is not enough; check the **trend** (B's ROCE may be declining, signalling lost competitive advantage).

*The study text prints 14.2% for ROE in Example 10; recalculating 166 ÷ 1,135 gives 14.6%.

9 CALCULATION ROADMAP — RATIO QUESTIONS

1. Identify the user & their decision
2. Pick the right ratio category
3. Use averages where data allows
4. Calculate (same definition both years)
5. Compare: trend / industry / target
6. Comment & conclude

WORKING CAPITAL EFFICIENCY, LIQUIDITY & SOLVENCY

10 WORKING CAPITAL EFFICIENCY RATIOS [Examples 12–16]

RECEIVABLE DAYS
Avg receivables ÷ Sales × 365
171 ÷ 4,315 × 365 ≈ 14.5 days†
Turnover: 4,315 ÷ 171 = 25.2 times

INVENTORY DAYS
Avg inventory ÷ Cost of sales × 365
276 ÷ 3,020 × 365 = 33.4 days
Turnover: 3,020 ÷ 276 = 10.9 times

PAYABLE DAYS
Avg payables ÷ Purchases × 365
158 ÷ 3,012 × 365 = 19.1 days
Turnover: 3,012 ÷ 158 = 19.1 times

- **Purchases** = Cost of sales − Opening inventory + Closing inventory (3,020 − 280 + 272 = 3,012). If purchases are unavailable, use cost of sales.
- Use **credit sales** only if split is given; use averages when data allows, else year-end.
- Manufacturers: compute raw material, WIP and finished goods holding periods separately (cost of material consumed / cost of goods manufactured / cost of goods sold).

READING THE RESULT

- **Too much** working capital (long, lengthening cycle) → ROCE and ROE fall.
- **Too little** → possible liquidity trouble (current assets over-financed by payables/overdraft).
- Long collection period = inefficient collection; long inventory period = inefficient production.

CASH CYCLE (OPERATING / WORKING CAPITAL CYCLE)
Inventory days + Receivable days − Payable days
Broom Ltd [Ex.15–16]: 66.9 + 52.9 − 32.4 = 87.4 days of working capital financing needed

Broom Ltd averages: receivables (400k+470k)/2 = 435k → 52.9 days; inventory (300k+360k)/2 = 330k → 66.9 days; payables (150k+180k)/2 = 165k → 32.4 days. Fix: revise credit policy, tighten collection, negotiate longer supplier credit. A shorter cycle frees cash — the cheapest way to grow. †Source prints 14.4 days (uses 170.5); with the stated average of 171 the answer is 14.5.

11 LIQUIDITY RATIOS [Example 17]

CURRENT RATIO (SAFE MARGIN OF SOLVENCY)
Current assets ÷ Current liabilities
452 ÷ 156 = 2.9 : 1

QUICK / ACID-TEST RATIO
(Current assets − Inventory − Prepayments) ÷ Current liabilities
(452 − 272) ÷ 156 = 1.15 : 1

'Ideal' 2:1 current and 1:1 quick are only guides — much lower current ratios are normal in some industries. Assess **trend, other companies and industry average**. A high current ratio may just hide obsolete/slow-moving inventory; below 1 on quick ratio suggests struggling sales, slow settlement of creditors or slow collection.

12 SOLVENCY RATIOS — GEARING & INTEREST COVER [Example 18]

GEARING (TO EQUITY)
Long-term debt ÷ Equity
125 ÷ 1,160 = 10.8%

GEARING (TO CAPITAL EMPLOYED)
Long-term debt ÷ (Equity + LT debt)
125 ÷ 1,285 = 9.7%

INTEREST COVER (TIMES)
PBIT ÷ Interest expense
214 ÷ 13 = 16.5 times

HIGH-GEARED WHEN
Debt exceeds equity: gearing to **capital employed > 50%**, or gearing to **equity > 100%**. Risks: hard to borrow more; may be unable to meet lenders' payments when due.

CONCLUSION (Adeel Ltd)
Very low gearing + strong interest cover → can easily obtain more long-term financing if needed.

TRANSACTION IMPACT, LIMITATIONS, WINDOW DRESSING & RECAP

13 IMPACT OF SPECIFIC TRANSACTIONS ON RATIOS [Example 19]

Rules: ↑ numerator → ratio ↑; ↓ numerator → ratio ↓. ↑ denominator → ratio ↓; ↓ denominator → ratio ↑. Equal increase (or decrease) in both → the **lower (denominator) side** changes more proportionately.

Ratio	(i) Pay supplier from overdraft, 5% discount	(ii) Sell slow stock at cost	(iii) Recover debtors, 10% cash discount	(iv) 90-day credit, ↑ sales at same margin	(v) Dispose NCA at gain
Gross profit %	Increase*	Decrease	Decrease*	No effect	No effect
Net profit %	Increase	Decrease	Decrease	Increase	Increase
Current ratio	Increase	No effect	Decrease	Increase	Increase
Stock turnover	Decrease*	Increase	No effect	Increase	No effect
Return on non-current assets	Increase	No effect	Decrease	Increase	Increase
Quick ratio	Increase	Increase	Decrease	Increase	Increase

*The settlement discount is deducted from revenue or from cost of purchases.

14 LIMITATIONS OF RATIO ANALYSIS [Example 20]

Limitation	Meaning
1. Historical	Based on past results; the future may differ (pro-forma data can be compared to history).
2. Historical vs current cost	P&L is near current cost while many SFP items are at historical cost — unusual ratios.
3. Inflationary effect	Changing inflation makes periods non-comparable (e.g. 100% inflation makes sales look doubled).
4. Aggregation	Line items may have been grouped differently in past years.
5. Policies & estimates	Companies differ (e.g. reducing balance vs straight-line) — "apples and oranges".
6. Business conditions	60 receivable days can be poor in a boom but excellent in a contraction.
7. Interpretation	Reasons are hard to find — an acid test of 2:1 may follow a one-off large stock sale.
8. Company strategy	Low-cost/low-margin vs high-service/high-margin strategies are hard to compare.

Also: unavailability of non-financial information, ignoring price-level changes, effects of changes in policies/estimates.

15 WINDOW DRESSING

Adapting rules/practices so the business looks **better than it is** — manipulates information and misleads users. Examples: delaying supplier payments so period-end cash looks higher; using a lower allowance for doubtful debts; capitalising small expenditure that should be expensed; early-shipment discounts that pull future revenue into this period; lower depreciation via higher useful lives or residual values.

! ⚠ EXAM TRAPS — COMMON MISTAKES

- Using **different profit definitions** (PBIT vs PAT vs gross) in different years or companies — compare like with like.
- Using **closing** instead of **average** capital employed/equity/receivables/inventory/payables when opening data is available.
- Using **sales** for inventory days — inventory days use **cost of sales**; payable days use **purchases** (or cost of sales if unavailable).
- Forgetting to **deduct payable days** in the cash cycle (inventory + receivable − payable).
- Putting **prepayments or inventory** in the quick ratio numerator — both are excluded.
- Adding PAT instead of **PBIT** for ROCE/ROA, or forgetting to deduct **preference dividend** in ROE.
- Calling a company high-geared without checking the **benchmark** (>50% of capital employed or >100% of equity).
- Treating a high current ratio as automatically good — it may hide slow-moving inventory.
- Quoting a ratio without **commenting** against trend/industry and for the **specific user**.
- Missing that ROCE = **profit/sales × asset turnover**, so a change needs both drivers examined.

16 QUICK DECISION TREE — ANSWERING ANY INTERPRETATION QUESTION

1. Question given → 2. Who is the user & what decision? → 3. Choose analysis / ratio category → 4. Calculate (averages, consistent basis) → 5. Compare & comment with reasons → ✔ Conclusion for the user

INTERPRETATION OF FINANCIAL STATEMENTS IN 60 SECONDS

3 tools: horizontal (% change), vertical (% of sales / total assets), ratio analysis.

Profitability: GP, PBIT & net margin; ROCE = PBIT ÷ avg capital employed = margin × asset turnover; ROE = (PAT − pref. div) ÷ avg equity; ROA = PBIT ÷ total assets.

Days: receivables (÷ sales), inventory (÷ cost of sales), payables (÷ purchases) × 365.

Cash cycle = inventory days + receivable days − payable days.

Liquidity: current = CA ÷ CL; quick = (CA − inventory − prepayments) ÷ CL.

Solvency: gearing (debt ÷ equity >100% or debt ÷ capital employed >50% = high); interest cover = PBIT ÷ interest.

Always compare to prior years, industry or targets — and tie comments to the user.

Limitations: historical, cost vs current, inflation, aggregation, policies, conditions, interpretation, strategy.

Window dressing = presenting a better picture than reality — watch for it.