Exercise walk-through

2.6
Ratios and their limits

University Business

Double entry and ledgers: debits left, credits right

The week posted: debits left, credits right

Cash

20,000	6,000
15,000	
3,000	
38,000	**6,000**

Equipment

6,000	
6,000	**0**

Inventory

4,000	1,200
4,000	**1,200**

Cost of sales

1,200	
1,200	**0**

Loan

	15,000
0	**15,000**

Payables

	4,000
0	**4,000**

Share capital

	20,000
0	**20,000**

Revenue

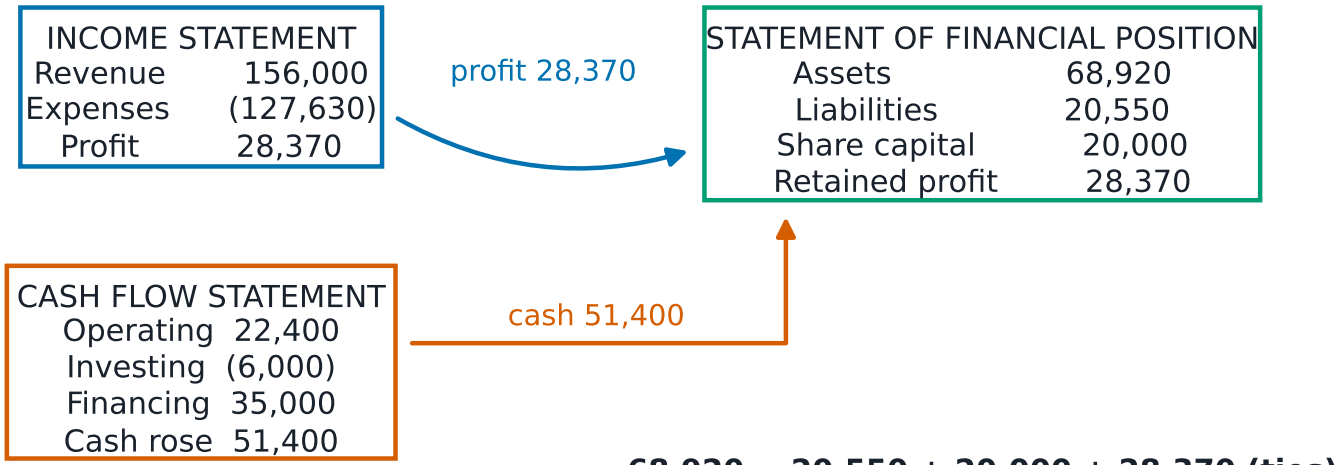
	3,000
0	**3,000**

Trial balance: Dr 32,000 + 6,000 + 2,800 + 1,200 = 42,000
= Cr 15,000 + 4,000 + 20,000 + 3,000 = 42,000

The week posted to six T-accounts; the **trial balance** ties at 42,000.

Financial statements: one profit, one cash

One profit, one cash: the statements close against each other

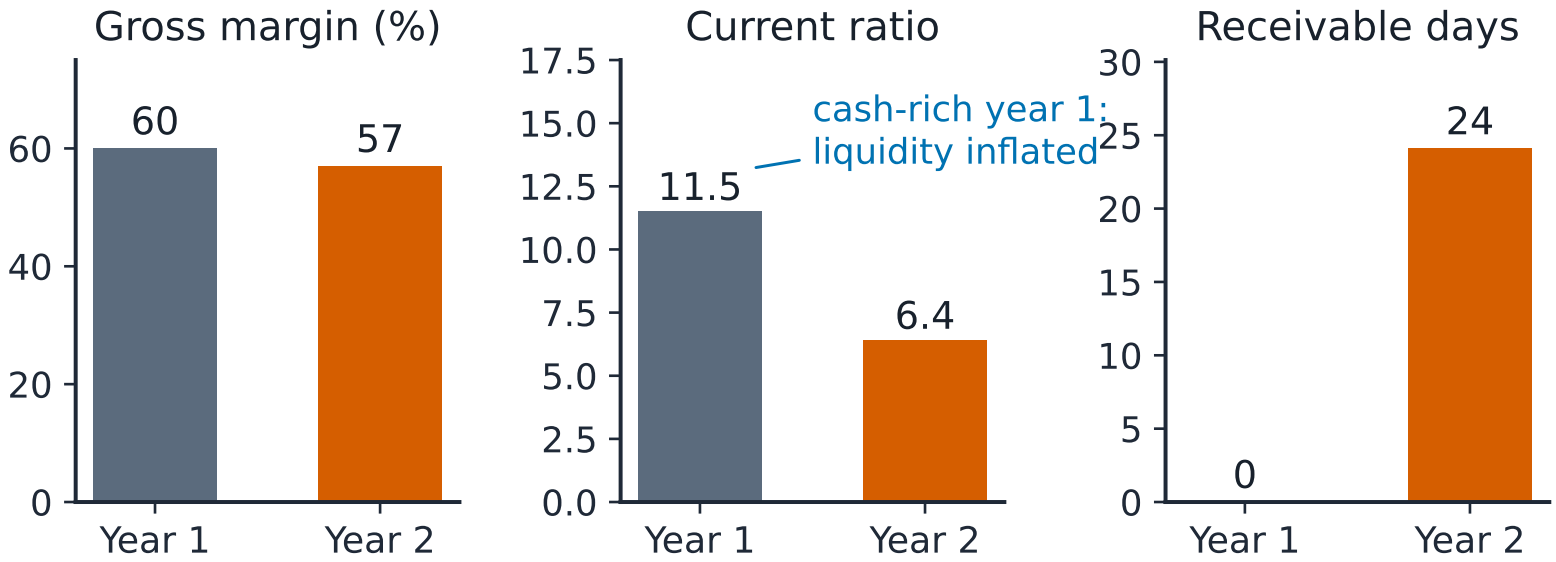


68,920 = 20,550 + 20,000 + 28,370 (ties)

Profit flows to equity; closing cash lands on the balance sheet.

Ratios and their limits: windows that frame

Every ratio is a window - and windows frame what they show



Margin 60% to 57%, **current ratio** 11.5 to 6.4: year 1 is distorted.

Exercises 2.1·2.2

2.1 Nimbus year 2: revenue 182,000, cost of sales 78,300, profit 30,100, equity 58,470, loan 10,000. Compute gross margin, operating margin and gearing. [4]

2.2 Year 2 receivables are 12,000 and inventory 4,400. Compute receivable days and inventory days, and read them against the 24-day credit term. [3]

Exercises 2.1·2.2

2.1 Nimbus year 2: revenue 182,000, cost of sales 78,300, profit 30,100, equity 58,470, loan 10,000. Compute gross margin, operating margin and gearing. [4]

2.1

- Gross margin = (182,000 − 78,300)/182,000 = 103,700/182,000 = 57.0%.
- Operating margin = 30,100/182,000 = 16.5%.
- Gearing = 10,000/(10,000 + 58,470) = 14.6%.

2.2 Year 2 receivables are 12,000 and inventory 4,400. Compute receivable days and inventory days, and read them against the 24-day credit term. [3]

2.2

- Receivable days = 12,000/182,000 × 365 = 24.1 days.
- Inventory days = 4,400/78,300 × 365 = 20.5 days.
- 24.1 against a 24-day term: collection is on target – the ratio checked against its own definition answers its question.

Exercise 2.3

2.3 A rival bakery posts a 68% gross margin. State the three questions you ask before calling it better than Nimbus's 57%. [3]

Exercise 2.3

2.3 A rival bakery posts a 68% gross margin. State the three questions you ask before calling it better than Nimbus's 57%. [3]

2.3

- Product mix and definition: is that margin on the same cost contents?
- Peers and price position: premium retail vs wholesale changes what margin means.
- Time: one year or five? A trend beats a level.

Exercise 3.1

3.1 A second café chain, one store, five years old: revenue 124,000, cost of sales 52,080, profit 21,440, equity 48,000 (all earned, no new capital), loan 0, receivables 8,200, inventory 3,100, cash 20,000, payables 5,200. Compute gross margin, operating margin, current ratio, receivable days, inventory days and ROE; then say which ONE ratio is most distorted by being a single year and why. [8]

Exercise 3.1

3.1 A second café chain, one store, five years old: revenue 124,000, cost of sales 52,080, profit 21,440, equity 48,000 (all earned, no new capital), loan 0, receivables 8,200, inventory 3,100, cash 20,000, payables 5,200. Compute gross margin, operating margin, current ratio, receivable days, inventory days and ROE; then say which ONE ratio is most distorted by being a single year and why. [8]

3.1

- Gross margin = $(124{,}000 - 52{,}080)/124{,}000 = 58.0\%$.
- Operating margin = $21{,}440/124{,}000 = 17.3\%$.
- Current ratio = $(20{,}000 + 8{,}200 + 3{,}100)/5{,}200 = 6.0$.
- Receivable days = $8{,}200/124{,}000 \times 365 = 24.1$ days.
- Inventory days = $3{,}100/52{,}080 \times 365 = 21.7$ days.
- ROE = $21{,}440/48{,}000 = 44.7\%$.
- Most distorted by a single year: ROE – profit is one year, equity is five years of retained earnings; average equity or a multi-year return is the honest read.

Exercise 3.2

3.2 ”Nimbus’s current ratio fell from 11.5 to 6.4 – liquidity is deteriorating.” Give the reading that the numbers actually support. [3]

Exercise 3.2

3.2 ”Nimbus’s current ratio fell from 11.5 to 6.4 – liquidity is deteriorating.” Give the reading that the numbers actually support. [3]

3.2

- Year 1’s 11.5 was not strength: £64,000 of current assets against £5,550 of bills meant raised-but-idle cash.
- The fall to 6.4 reflects cash being USED (dividend 20,000, loan repaid 5,000) while receivables rose – the balance moved toward working assets.
- Supported reading: liquidity normalised from abnormal; watch receivable days (24.1, on term) as the real credit signal.