5 Why a business needs finance – Part 2

Name: ______ Class: ______ Date: ______

Vocabulary 词汇

Write each word three times. 把每个单词抄写三遍。

English	中文	Write it 3 times (English)		
fixed costs	固定成本			
variable costs	可变成本			
total cost	总成本			
Contribution	贡献			
Break-even	盈亏平衡			
break-even point	盈亏平衡点			
margin of safety	安全边际			
cash-flow forecast	现金流量预测			
cash inflows	现金流入			
cash outflows	现金流出			
net cash flow	净现金流			

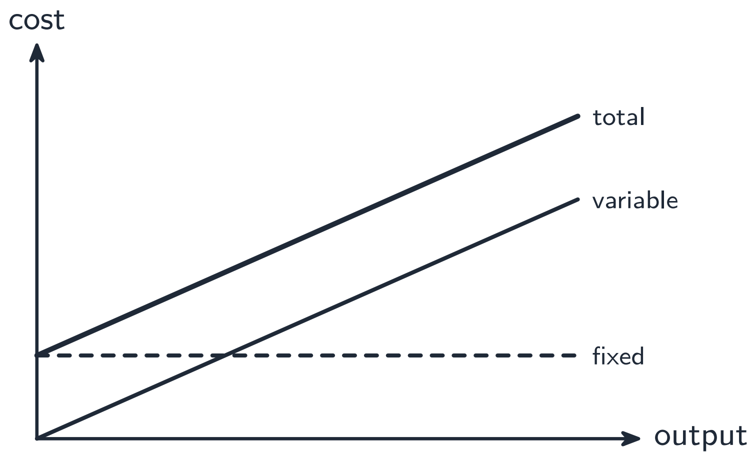
Recall

In **Part 1** you met business finance, capital vs revenue spending, internal vs external sources, and the key idea that **cash is not the same as profit**. Part 2 looks at the types of **cost**, the **break-even** point, and a **cash-flow forecast**.

New ideas

■ 1 Types of cost

- **fixed costs** 固定成本 do **not** change with output — for example, rent;
- **variable costs** 可变成本 rise and fall **with** output — for example, raw materials;
- **total cost** 总成本 = fixed costs + variable costs.



Micro-check. Is the rent on a factory a fixed or a variable cost? [1]

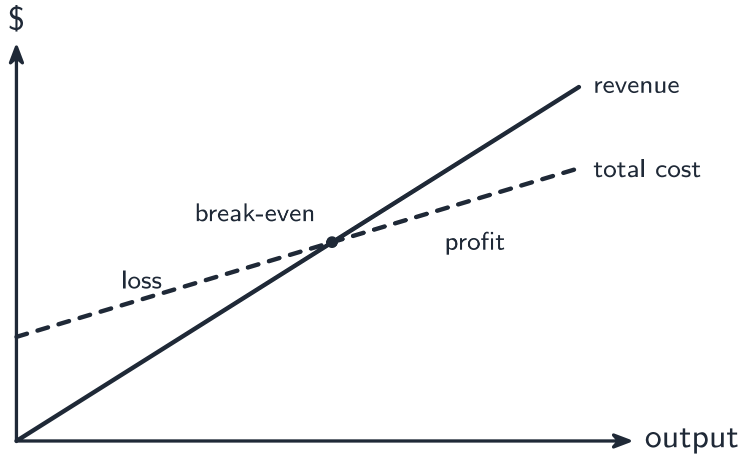
■ 2 Break-even

Contribution 贡献 per unit is how much each sale adds towards the fixed costs:

$$\text{contribution per unit} = \text{selling price} - \text{variable cost per unit}.$$

Break-even 盈亏平衡 is where total revenue equals total cost, so profit is zero. The **break-even point** 盈亏平衡点 in units is:

$$\text{break-even point} = \frac{\text{fixed costs}}{\text{contribution per unit}}.$$



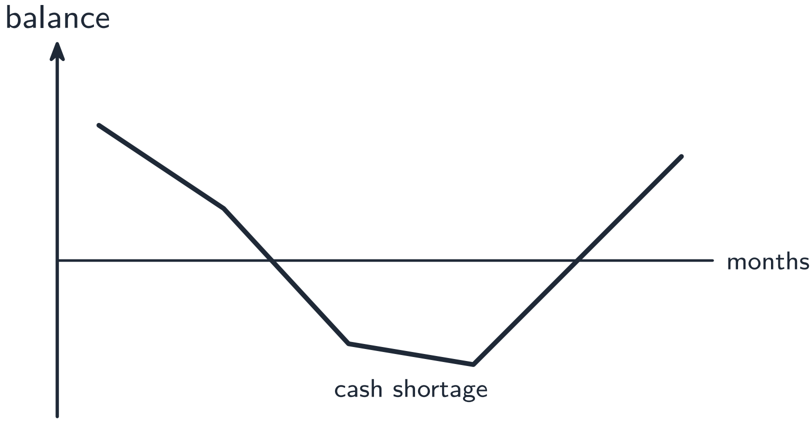
Worked example. A product sells for \$20 with a variable cost of \$12. Contribution $= 20 - 12 = \$8$. If fixed costs are \$40 000, the break-even point $= 40\,000 \div 8 = 5\,000$ units. The **margin of safety** 安全边际 is how far actual sales are above this.

Micro-check. A firm has contribution \$5 per unit and fixed costs \$10 000. Find its break-even point. [1]

■ 3 Cash-flow forecast

A **cash-flow forecast** 现金流量预测 predicts the cash coming in and going out each month, so a firm can spot a shortage early:

- **cash inflows** 现金流入 — money coming in, mostly from sales;
- **cash outflows** 现金流出 — money going out, such as wages and rent;
- **net cash flow** 净现金流 = inflows − outflows.



Micro-check. Inflows are \$8 000 and outflows are \$9 000. Find the net cash flow. [1]

Watch out: contribution per unit = selling price − variable cost; break-even = fixed costs ÷ contribution per unit. Fixed costs do *not* change with output; variable costs do. Margin of safety = actual sales − break-even.

Practice

5.1 State whether each is a **fixed** or **variable** cost: (a) factory rent; (b) raw materials. [2]

5.2 A product sells for \$15 and has a variable cost of \$9. Find the **contribution** per unit. [2]

5.3 Fixed costs are \$24 000 and contribution is \$6 per unit. Find the **break-even point** in units. [2]

5.4 The firm in 5.3 actually sells 5 000 units. Find its **margin of safety**. [1]

5.5 In a month, cash inflows are \$12 000 and cash outflows are \$15 000. Find the **net cash flow**, and say what it warns the firm about. [2]

5.6 Challenge. A product sells for \$25 with a variable cost of \$15, and fixed costs are \$50 000. Find the break-even point, and the margin of safety if the firm sells 6 000 units. [3]