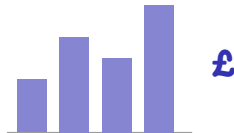


# Finance & Accounting

## A-Level Business ■ Topic 5

### A-Level Business



# What we will cover

- 1 Why finance & cash vs profit
- 2 Sources of finance
- 3 Cash-flow forecasts
- 4 Costs
- 5 Break-even & budgets
- 6 Recap



1

# Finance basics

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## Spending and working capital

**Capital** spending buys assets that last (a van, a machine). **Revenue** spending is day-to-day (wages, stock). **Working capital** 营运资本 = current assets – current liabilities – the cash to keep trading.

# Cash is not the same as profit

Profit is revenue minus costs in a period. Cash is money in the bank. A profitable firm can still run out of cash if customers pay late or it buys a machine.

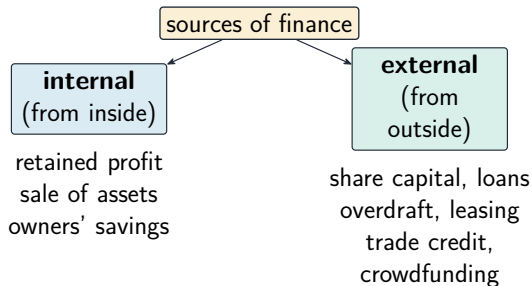
Cash flow keeps the business alive this month. Profit is why it is worth running.

# 2

## Sources and cash flow

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## Sources of finance



**Internal** 内部来源 (**retained profit** 留存利润, asset sales) vs **external** 外部来源 (**share capital** 股本, **loan** 贷款, **overdraft** 透支, **leasing** 租赁).

Choose by amount, purpose, cost, structure & **collateral** 抵押品.

# Where the money comes from

## Why it is needed

**Business finance** 企业融资 is the money a firm needs to start, run and grow – **premises** 经营场所 and equipment to begin with, projects to grow, and day-to-day bills always.

## Internal sources

**Internal sources** 内部融资: retained profit, and the **sale of assets** 资产出售 the firm no longer needs. No interest, no lost control.

## External, short

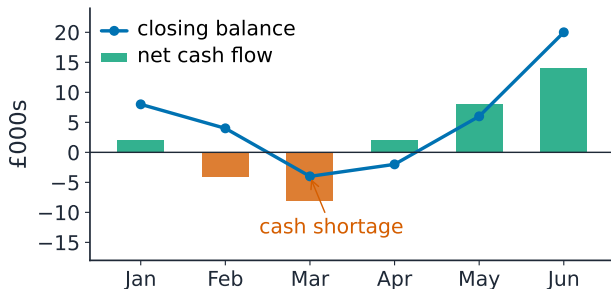
**External sources** 外部融资: an overdraft, or **trade credit** 商业信用 – paying a supplier after 30 days.

## External, long

A bank loan, share capital, or **venture capital** 风险投资: money from investors into risky young firms, usually for a share of the business.

Match the term of the finance to the life of the asset: a 30-day credit for stock, a ten-year loan for a building.

## Cash-flow forecasts



closing = opening + net · negative = cash shortage

**Net cash flow** 净现金流 =  
inflows – outflows; add to the  
**opening balance** 期初余额 for  
the closing balance. Fix  
shortages: collect sooner, delay  
payments, arrange an overdraft,  
hold less stock.

## Cash in, cash out – and what a forecast is for

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### Cash inflows

**Cash inflows** 现金流入: money coming in, mostly from sales.

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### Cash outflows

**Cash outflows** 现金流出: money going out – wages, rent, suppliers, tax.

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### The net position

Inflows minus outflows gives the net cash flow; add the opening balance for the closing balance.

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### What it shows

*When* the firm will run short – months before it happens, while an overdraft can still be arranged.

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A profitable business can still fail: profit is a measure over a year, cash is a balance on a Tuesday.

## Cash-flow trouble: causes and cures

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### causes

too many sales on credit, too much stock, too many assets bought at once, or overtrading

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### bring cash in

ask customers to pay faster, or discount for quick payment

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### push cash out later

negotiate longer credit from suppliers; lease rather than buy

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### the balance

**working capital management** keeps enough cash to be safe without leaving money idle

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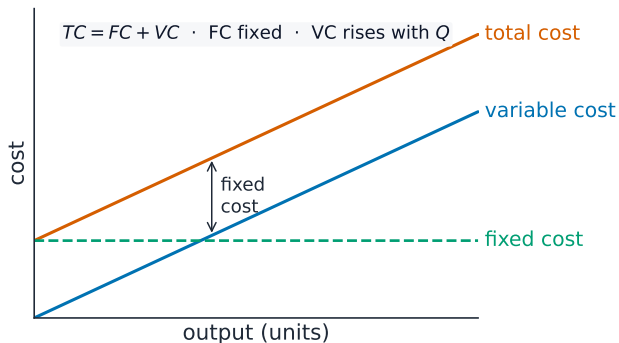
A **cash-flow forecast** 现金流量预测 is worth making because it shows the shortage BEFORE it arrives.

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## Costs and break-even

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# Costs



total cost = fixed + variable.

- **fixed** 固定成本 (rent) vs **variable** 可变成本 (materials)
- **direct** 直接成本 vs **indirect** 间接成本 (overheads)

# How costs are classified, and why

|                            |                                                                                              |
|----------------------------|----------------------------------------------------------------------------------------------|
| <b>a cost</b> 成本           | money the business spends to make its product                                                |
| <b>fixed and variable</b>  | fixed do not change with output; variable rise with each unit made                           |
| <b>direct costs</b> 直接成本   | traceable to one product – the materials in it, the labour on it                             |
| <b>indirect costs</b> 间接成本 | overheads not linked to one product – manager salaries, rent, insurance                      |
| <b>average cost</b> 平均成本   | total cost divided by output – the figure that falls with economies of scale                 |
| <b>why classify at all</b> | cost information helps managers <b>set prices, choose what to make, and control spending</b> |

The same cost can be fixed *and* indirect, or variable *and* direct. The two classifications answer different questions and are not alternatives.

## Break-even analysis

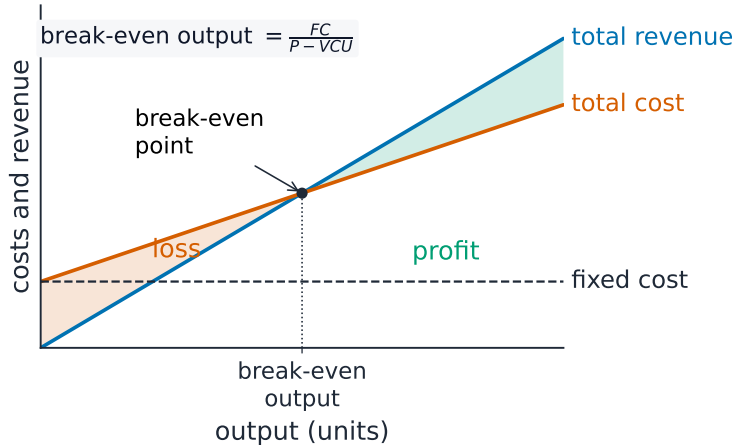
**Contribution** 贡献 = price – variable cost.

$$\text{BEP} = \frac{\text{fixed costs}}{\text{contribution}}.$$

**Price £20, VC £12, FC £40,000**

contribution £8  $\Rightarrow$  BEP = 5000 units

# Break-even analysis, in detail



The break-even point is where total revenue equals total cost – left of it is loss, right of it is profit

## Costs, and what break-even cannot tell you

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### Variable costs

**Variable costs** 变动成本 rise and fall with output – raw materials, piece-rate wages.

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### Marginal cost

**Marginal cost** 边际成本: the cost of making *one more* unit, which is what a pricing decision at the margin turns on.

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### Favourable variance

A **favourable variance** 有利差异 is better for profit – costs lower, or revenue higher, than the budget planned.

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### Limitations

Break-even's **limitations** 局限性: it assumes the selling price and the costs stay the same, and that everything made is sold.

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It is a planning tool, not a forecast. Its answer is exactly as good as the two straight lines it draws.

# Budgets and variances

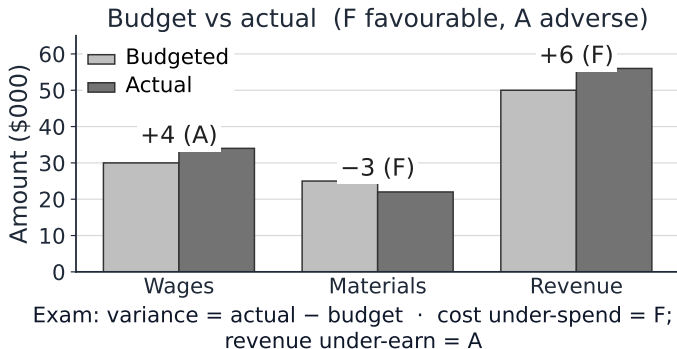
A **budget** 预算 is a financial plan. A **variance** 差异 = actual – budgeted.

- **favourable** 有利差异 – better for profit
- **adverse** 不利差异 – worse for profit

## Wages

budget £30k, actual £34k  
variance = £4k **adverse**

$$\text{Variance} = \text{actual} - \text{budget}$$



Variance = actual – budget: cost overspend is adverse; revenue over-earn is favourable

## Profitable on paper, short of cash

a firm can be profitable but still run out of cash

**profit** (on paper)  
revenue — costs  
= positive

**cash** (in the bank)  
low — customers  
haven't paid yet

Profit and cash are different: a firm can look profitable on paper yet have no cash to pay its bills – which is why many fail

## Capital and revenue expenditure

### **capital expenditure**

fixed assets that last  
(machines, vehicles,  
buildings)

### **revenue expenditure**

day-to-day running  
(wages, rent,  
materials)

Capital spending buys fixed assets; revenue spending covers running costs

## Two kinds of spending, and the working-capital test

|                                 |                                                                                                             |
|---------------------------------|-------------------------------------------------------------------------------------------------------------|
| <b>capital expenditure</b> 资本支出 | buying <b>long-lived assets</b> – machinery, vehicles, buildings. Appears on the <b>balance sheet</b> 资产负债表 |
| <b>revenue expenditure</b> 收益支出 | day-to-day running costs – wages, rent, materials. Charged against this year's profit                       |
| <b>working capital</b> 营运资本     | current assets minus current liabilities                                                                    |
| <b>current assets</b> 流动资产      | things that become cash within a year – cash, inventory, money owed by customers                            |
| <b>current liabilities</b> 流动负债 | debts due within a year – suppliers, overdraft, tax due                                                     |
| <b>why it matters</b>           | a profitable firm with no working capital <b>still cannot pay its bills</b>                                 |

Cash is not profit. A firm fails when it runs out of **cash**, whatever the profit statement says.

# Choosing a source of finance

match the finance to the purpose

**short-term  
need**  
stock, a cash gap



**short-term  
finance**  
overdraft,  
trade credit

also weigh the  
**cost**, the amount,  
the legal structure  
and any **collateral**

**long-term  
asset**  
machinery,  
premises



**long-term  
finance**  
a long loan, shares

don't pay for a long-lived asset with short-term borrowing

Match the finance to the purpose: short-term needs use short-term finance, long-term assets use long-term finance

# What decides which source to use

|                |                                                                                                       |
|----------------|-------------------------------------------------------------------------------------------------------|
| the purpose    | a long-lived asset needs long-term finance; a cash-flow gap needs an overdraft                        |
| the amount     | a small sum from retained profit, a large one from shares or a bank                                   |
| the cost       | interest and fees differ sharply between sources                                                      |
| existing debt  | how much the firm already owes – its <b>gearing</b> 负债比率                                              |
| collateral 抵押品 | an asset the lender can take if the loan is not repaid – without one, borrowing is dear or impossible |
| control        | issuing shares raises money and <b>dilutes ownership</b>                                              |

There is no single best source. Every answer must name the firm's **situation** – purpose, size, gearing, ownership – before it names a source.

## Share capital: raising finance on a stock exchange



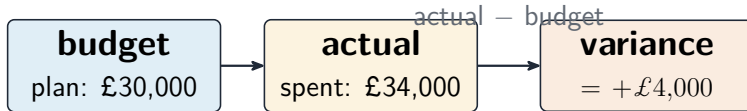
A stock exchange: public limited companies raise finance by selling shares

# More sources of finance

|                           |                                                                           |
|---------------------------|---------------------------------------------------------------------------|
| <b>hire purchase</b> 分期付款 | external – buying an asset by paying in instalments, owning it at the end |
| <b>leasing</b>            | external – renting the asset; never owned, but no large payment up front  |
| <b>crowdfunding</b> 众筹    | external – small amounts raised from many people online                   |
| <b>microfinance</b> 小额信贷  | external – small loans for people with little access to banks             |
| <b>debentures</b> 债券      | external – long-term loans that pay fixed interest, repaid at a set date  |
| <b>retained profit</b>    | internal – the cheapest source there is, and the one with no strings      |

Sort every source into **internal or external** and **short or long term** first. Those two axes answer most of the question before you consider cost.

## Favourable and adverse variances



**favourable:** helps profit

**adverse:** hurts profit

(spend less, or earn more than planned) (spend more - as in this wages example)

a **budget** is a financial plan; the **variance** shows how far the actual result missed it

A variance is actual minus budget; favourable helps profit, adverse hurts it

# Two ways to build a budget

**incremental budget** 增量预算

last year's figures changed by a small amount – quick, and it *carries forward* old waste

**zero-based budget** 零基预算

every cost must be *justified from zero* each year – thorough, and slow

**a variance** 差异

actual minus budget

**favourable** 有利差异

revenue above budget, or costs below it

**adverse** 不利差异

revenue below budget, or costs above it

**why analyse them**

a variance shows managers *where the plan went wrong*, so they can act

An adverse variance is not automatically bad management: a cost overrun caused by *higher than budgeted sales* is good news. Say what caused it.

# Working capital



Cash is working capital: firms need enough liquid assets to pay day-to-day bills

## Exam tips

- Show that **cash is not profit** – a profitable firm can still fail from a cash-flow shortage.
- For **break-even**:  $\text{contribution per unit} = \text{price} - \text{variable cost}$ ;  $\text{break-even} = \text{fixed costs} \div \text{contribution}$ ;  $\text{margin of safety} = \text{actual} - \text{break-even output}$ .
- Match a **source of finance** to the need (short-term for cash flow, long-term or equity for assets) and to the type of business.
- Calculate a **variance** and label it **favourable or adverse** (actual against budget).

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Recap

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## Topic 5 – key takeaways

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### Cash vs profit

a profitable firm can still run out of cash

2

### Sources

internal vs external; short vs long

3

### Break-even

$\text{BEP} = \text{fixed costs} / \text{contribution}$

4

### Budgets

$\text{variance} = \text{actual} - \text{budgeted}$

## Check yourself

- 1 Can a profitable firm run out of cash?
- 2 Retained profit: internal or external finance?
- 3 Contribution if price £15, variable cost £9?
- 4 Higher-than-planned costs: favourable or adverse?



**Answers** 1. yes 2. internal 3. £6 4. adverse