Finance and accounts

IB DP Business Management Unit 3 Finance and accounts full package

Finance and accounts

- distinguish capital and **revenue expenditure**, and choose sources of finance;
- classify costs and revenues, and read an **income statement** and a **statement of financial position**;
- calculate and interpret profitability and liquidity ratios;

Finance and accounts (2)

- explain the difference between profit and **cash flow**, and build a cash-flow forecast;
- appraise investments with payback and the **average rate of return**;
- at HL, calculate **efficiency ratios**, gearing, depreciation and net present value, and use budgets and variances.

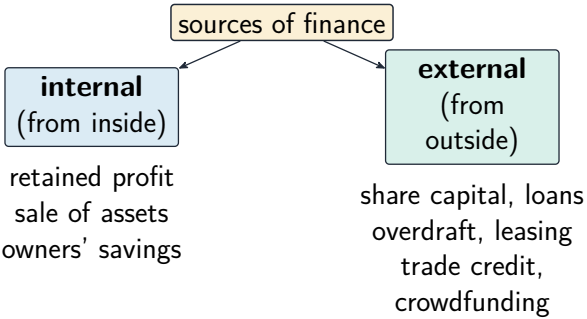
Finance and its sources

- **Capital expenditure** buys **non-current assets**, things the business keeps for more than a year: a workshop, a machine, a van.
- **Revenue expenditure** pays for day-to-day running: wages, parts, rent and electricity.
- **personal funds**: the owner's own savings, the main source for a sole trader;

Finance and its sources (2)

- **retained profit** : profit kept in the business instead of being paid to the owners. It costs no interest, but a new or loss-making business has none;
- the **sale of assets** the business no longer needs, such as an old van.

Figure: Finance and its sources



- A tree splitting sources of finance into internal (**retained profit**, **sale of assets**, owners' savings) and external (**share capital**, loans, overdraft, leasing, trade credit, crowdfunding)
- Match each part of the diagram to the text.

Costs, revenues and final accounts

- A **fixed cost** does not change with output: rent, salaries, insurance.
- A **variable cost** changes with output: car parts, paint, energy for the machines.
- A **semi-variable cost** has a fixed part and a variable part, such as a phone contract with a monthly charge plus a cost per call.

Costs, revenues and final accounts (2)

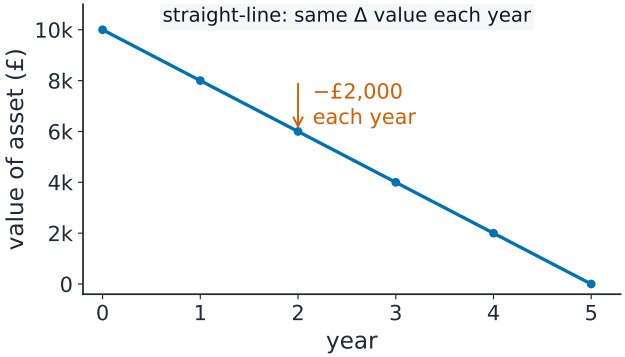
- A **direct cost** belongs to one product or department, such as the parts used in one repair. An **indirect cost**, or **overhead**, is shared, such as the manager's salary.
- **Straight-line method**: $\dfrac{\text{cost} - \text{residual value}}{\text{years of life}} = \dfrac{22{,}000 - 2{,}000}{4} = 5{,}000$ a year, the same every year.
- **Units of production method**: the machine is expected to do 20,000 tests in its life, so each test costs $(22{,}000 - 2{,}000) \div 20{,}000 = 1$. In a year with 6,000 tests, **depreciation** is 6,000. This method fits machines that are used more in some years than in others.

Profitability and liquidity ratios

- **Ratio analysis** compares numbers from the **final accounts** so that a business can be compared with last year and with its rivals.
- **Profitability ratios** measure profit against sales or against the money invested.
- **Capital employed** is non-current **liabilities** plus **equity**: $160{,}000 + 200{,}000 = 360{,}000$.
- The **return on capital employed** (ROCE) of 25% is far above the roughly 6% interest on the bank loan, so borrowing to invest has paid off.

$$\text{gross profit margin} = \frac{\text{gross profit}}{\text{sales revenue}} \times 100 = \frac{240{,}000}{600{,}000} \times 100 = 40\%$$

Figure: Profitability and liquidity ratios



- Straight-line **depreciation** lowers the asset's value by the same amount each year
- Match each part of the diagram to the text.

Efficiency ratios and gearing (HL)

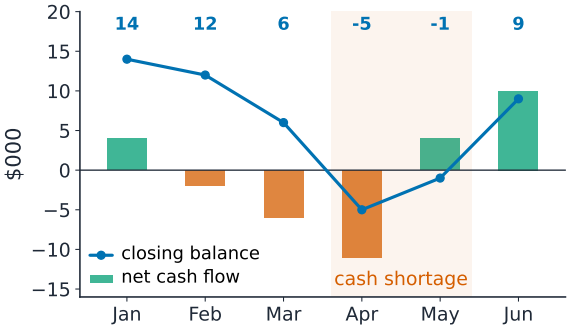
- **Efficiency ratios** show how well the business manages its stock and its credit.
- Average stock is (opening stock + closing stock) ÷ 2
  $= (18{,}000 + 30{,}000) \div 2 = 24{,}000.$
- or, in days, $\dfrac{24{,}000}{360{,}000} \times 365 = 24.3$ days.
- The business sells and replaces its stock of parts about every 24 days.

$$\text{stock turnover} = \frac{\text{cost of sales}}{\text{average stock}} = \frac{360{,}000}{24{,}000} = 15 \text{ times a year}$$

Cash flow

- net **cash flow** = cash in − cash out;
- closing balance = opening balance + net cash flow;
- the closing balance becomes next month's opening balance.

Figure: Cash flow



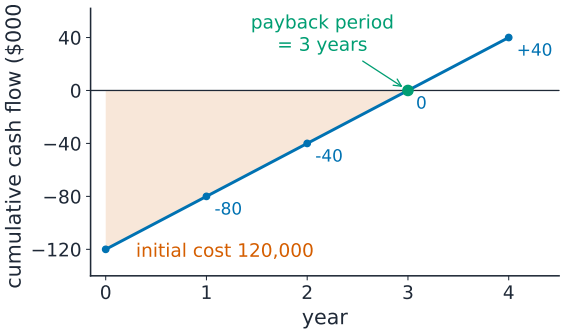
- A six-month cash-flow forecast: bars of net **cash flow** and a line of closing balance that falls below zero in April and May before recovering in June
- Match each part of the diagram to the text.

Investment appraisal

- **Investment appraisal** checks whether a capital project is worth its cost.
- The repair business plans a third workshop.
- It costs 120,000 and should bring in a net **cash flow** of 40,000 a year for four years.
- *The third workshop pays back its 120,000 cost after exactly three years*

$$\text{ARR} = \frac{(\text{total returns} - \text{capital cost}) \div \text{years of use}}{\text{capital cost}} \times 100 = \frac{(160{,}000 - 120{,}000) \div 4}{120{,}000} \times 100 =$$

Figure: Investment appraisal



- Cumulative **cash flow** starting at minus 120,000 and rising by 40,000 a year, reaching zero at the end of year 3
- Match each part of the diagram to the text.

Budgets (HL)

- A **budget** is a financial plan for a future period, such as next year's sales or costs for one workshop.
- A forecast predicts what will happen; a **budget** sets a target for what should happen.
- Budgets help a business plan, share out resources, give managers clear targets, and check results.
- A **cost centre** is a part of the business whose costs are recorded, such as the repair business's IT department.

Sources for this lesson

- International Baccalaureate, *Business Management guide* (first assessment 2024).
- Reports on ofo's growth and collapse in *Caixin* and the *Financial Times* (2017–2019).
- International Accounting Standards Board, IAS 1 *Presentation of Financial Statements* (the names of the **final accounts**).
- P. Atrill and E. McLaney, *Accounting and Finance for Non-Specialists* (12th edition, 2023).

Common errors

- Treating profit and cash as the same thing; a profitable business can run out of cash if customers pay late or it buys too much stock.
- Calling a loan "revenue" or the purchase of a machine "**revenue expenditure**"; a machine is **capital expenditure**.
- Leaving out the unit or the formula in a ratio answer: write the formula, the numbers and the answer (%, times or days).

Common errors (2)

- Calculating a ratio and stopping; say whether it is good or bad, compared with what, and what the business could do.
- Recommending a loan for a short-term cash gap; overdrafts and **trade credit** fit short-term needs, loans and **share capital** fit long-term ones.
- Using payback alone; it ignores what happens after the cost is paid back.

Key terms

- **Capital expenditure**: spending on **non-current assets** that last more than a year, such as machines and buildings.
- **Retained profit**: profit kept in the business after tax and dividends.
- **Gross profit**: sales revenue minus the **cost of sales**.

Key terms (2)

- **Working capital**: **current assets** minus **current liabilities**.
- **Current ratio**: current assets divided by current liabilities.
- **Cash-flow forecast**: a plan of the cash expected to come in and go out each month.
- **Payback period**: the time a project takes to earn back its cost.

Check yourself

- 1.
- Classify each as capital or **revenue expenditure**: a new tyre-fitting machine; this month's electricity bill; parts used in repairs. 2.
- Give one internal and one external source of finance for a second workshop, with one drawback of each. 3.
- **Current assets** are 80,000, stock 30,000 and **current liabilities** 40,000.