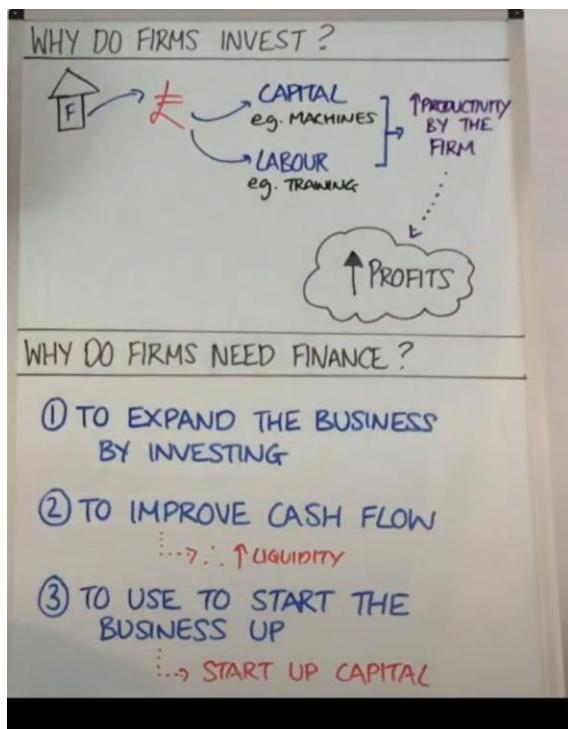


## Investments and finance introduction



### **Firms will invest**

- Capital (machines)
- Get better labour skill force

These things will increase productivity of firm → increase profits

### **Why firms need finance**

- Expand business by investing
- Improve cashflow → stop liquidity
- Use to start business up (start-up capital)

## Debt vs Equity



Important when business wants to invest/expand if there isn't enough from internal finance → external finance needed

## Debt (long term)

- Bank loans
- Mortgages
- **Disadvantages**
  - Interest payments → lower net profits
  - Interest rates change

## Equity (non-debt cash)

- Share capital
- **Disadvantages**
  - Lose control → less decision making
  - Pay dividends → lower retained profits

## Which to use depends on

- Interest rates
- How much debt/equity you already have
- Time till expansion (less time → debt)

## Direct and indirect costs

Direct Costs	Indirect Costs
WHEN A COST CAN BE TRACED DIRECTLY TO THE PRODUCTION OF A GOOD OR SERVICE.	WHEN A COST CANNOT BE TRACED DIRECTLY TO THE PRODUCTION OF A GOOD OR SERVICE.
commonly direct:	commonly indirect:
<ul style="list-style-type: none"><li>* RAW MATERIALS</li><li>* COMPONENTS</li><li>* SALARY/WAGES</li></ul>	<ul style="list-style-type: none"><li>* ADMIN / OFFICE COSTS</li><li>* MARKETING</li><li>* INSURANCE/SECURITY</li></ul>
* PETROL FOR TAXI BIZ NATURE OF THE BUSINESS	* PETROL FOR BARBERS NATURE OF THE BUSINESS
INCOME STATEMENT:	INCOME STATEMENT:
REVENUE - DIRECT COSTS (cost) GROSS PROFIT * - INDIRECT COSTS OPERATING PROFIT * - TAXES/INTEREST NET PROFIT (P&Y) *	REVENUE - DIRECT COSTS GROSS PROFIT * - INDIRECT COSTS (expenses) OPERATING PROFIT * - TAXES/INTEREST NET PROFIT (P&Y) *

Direct costs = Cost can be traced directly to the production of a good/service

## Common direct costs

- Raw materials/components
- Salary/wages

Indirect costs = Cost cannot be traced directly to the production of a good/service

## Common indirect costs

- Admin/office costs
- Marketing
- Insurance/security

## Income statements

**INCOME STATEMENTS - GCSE BUSINESS**

**\* PROFIT AND LOSS ACCOUNT - Why do them?**

- ① Legal reasons → tax - GOVERNMENT
- ② Compare to previous years - MANAGEMENT
- ③ Compare to rivals - MANAGEMENT
- ④ Help current investors - SHAREHOLDERS
- ⑤ Encourage new investors → become - SHAREHOLDERS

**Reasons, Turnover**  
 $\Sigma (\text{price} \times \text{quantity})$

**COSTS DIRECTLY ATTRIBUTED TO THE PRODUCT** eg. materials

**ONGOING, DAY TO DAY COSTS THAT ARE NOT DIRECTLY ATTRIBUTED TO THE PRODUCT** eg. Marketing, Insurance

FOR 2023 - SEEM MATS		£'000
Sales Revenue		200
Cost of Sales		(50)
GROSS PROFIT		150
OPERATING EXPENSES		(100)
NET PROFIT		50

**ANALYSIS TIPS**

- ① COST OF SALES INCREASING IS NOT ALWAYS BAD ... result of ↑ sales revenue
- ② REDUCING COST OF SALES BY FINDING A CHEAPER SUPPLIER ... worsen quality?  
... worsen reliability?
- ③ INCREASING MARKETING = ↑ OPERATING EXPENSES ... higher sales?
- ④ GROSS PROFIT & NET PROFIT → used for ratio analysis → NPM, GPM.

## Why do income statements

- Legal reasons (tax)
- Compare to previous years
- Compare to rivals
- Help current investors
- Encourage new investors

## Analysis

- Cost of sales → May be result of sales revenue increasing
- Reducing cost of sales by finding cheaper supplier  
→ Worsen quality/reliability?

- Increasing marketing → increase operating expenses → higher sales?
- Gross profit and net profit → used for ratio analysis

## Calculating gross profit and net profit

HOW TO CALCULATE GROSS PROFIT and NET PROFIT									
<p>① USE INCOME STATEMENT</p> <p>② NEEDED TO CALCULATE GPM and NPM FOR 'Ratio Analysis'</p> <p>③ GROSS PROFIT AND GROSS PROFIT MARGIN are different!</p>									
<p>GROSS PROFIT = SALES REVENUE - COST OF SALES</p> <p>£200,000 - £50,000</p> <p>= £150,000</p>	<table border="1"> <thead> <tr> <th>FOR 2023 - SESH HATS extracts of income statement</th><th>£'000</th></tr> </thead> <tbody> <tr> <td>Sales Revenue</td><td>200</td></tr> <tr> <td>Cost of Sales</td><td>50</td></tr> <tr> <td>Operating Expenses</td><td>100</td></tr> </tbody> </table> <p>NET PROFIT = GROSS PROFIT - OPERATING EXPENSES</p> <p>£150,000 - £100,000</p> <p>= £50,000</p>	FOR 2023 - SESH HATS extracts of income statement	£'000	Sales Revenue	200	Cost of Sales	50	Operating Expenses	100
FOR 2023 - SESH HATS extracts of income statement	£'000								
Sales Revenue	200								
Cost of Sales	50								
Operating Expenses	100								

## Ratio analysis

RATIO ANALYSIS - GCSE BUSINESS	
* INCOME STATEMENT: GROSS PROFIT MARGIN (GPM) and NET PROFIT MARGIN (NPM) *	
GROSS PROFIT MARGIN (%)	
$\frac{\text{GROSS PROFIT}}{\text{REVENUE}} \times 100$	
$\frac{150,000}{200,000} \times 100 = 75\%$	
Every £1 of sale $\Rightarrow$ 75p is Gross Profit	
Analysis Points	
① Higher Gross Profit Margin = Better!	
② Only accounts for direct costs $\therefore$ measure of productive efficiency	
③ Helps inform management in decision making (i) previous years (ii) rivals	
④ Always higher than Net Profit Margin	

FOR 2023 - SESH MATS	£'000
Sales Revenue	200
Cost of Sales	(50)
GROSS PROFIT	150
OPERATING EXPENSES	(100)
NET PROFIT	50

## Analysis

- Higher GPM = better
- Only accounts for direct costs  $\rightarrow$  Measure of productive efficiency
- Helps inform management in decision making (previous years/rivals)

## RATIO ANALYSIS - GCSE BUSINESS

\* INCOME STATEMENT: GROSS PROFIT MARGIN (GPM) and NET PROFIT MARGIN (NPM) \*

### NET PROFIT MARGIN (%)

$$\frac{\text{NET PROFIT}}{\text{REVENUE}} \times 100$$

$$\frac{50,000}{200,000} \times 100 = 25\%$$

Every £1 of sale  $\Rightarrow$  25p is Net Profit

### Analysis Points

- ① Higher Net Profit Margin = Better!
- ② Accounts for direct and indirect costs  $\therefore$  reflection of conversion of: sales  $\rightarrow$  profit
- ③ Helps inform management in decision making (i) previous years (ii) rivals
- ④ Always lower than Gross Profit Margin

FOR 2023 - BESH MATS		£'000
Sales Revenue		200
Cost of Sales		(50)
GROSS PROFIT		150
OPERATING EXPENSES		(100)
NET PROFIT		50

## Analysis

- Higher NPM = better
- Accounts for direct and indirect costs
- Helps inform management in decision making (previous years/rivals)

## Average Rate of return (ARR)



CHOC SESH IS CONSIDERING INVESTING IN A MOULDING MACHINE.  
IT IS ESTIMATED TO:

- INCREASE TOTAL PROFIT BY £5000 OVER ITS LIFETIME.
- LAST 4 YEARS
- COST £6250 TO BUY MACHINE

CALCULATE THE AVERAGE RATE OF RETURN (ARR).

---

Step One: write formula  $\frac{\text{AVERAGE ANNUAL PROFIT}}{\text{COST OF INVESTMENT}} \times 100$

Step Two: calculate the 'average annual profit'  $£5000 \div 4 = £1250$

Step Three: put numbers in formula  $\frac{£1250}{£6250} \times 100 = 20\%$  answer:

Step Four: % = decimal places make sure you put %  
↳ and check decimal points.

## Financial formulas

### FINANCIAL FORMULA AND RATIOS

**PROFIT** = REVENUE - COSTS

- $R > C$  = PROFIT
- $R < C$  = LOSS

**NET PROFIT** =  $\left( \text{sales} \times \text{price} \right) - \text{TOTAL COSTS}$   
FOR EACH PRODUCT

**NET PROFIT** = REVENUE -  $\left( \text{FIXED COSTS} + \text{VARIABLE COSTS} \right)$

↓

COSTS THAT DO NOT CHANGE WITH OUTPUT.  
e.g. RENT

↓

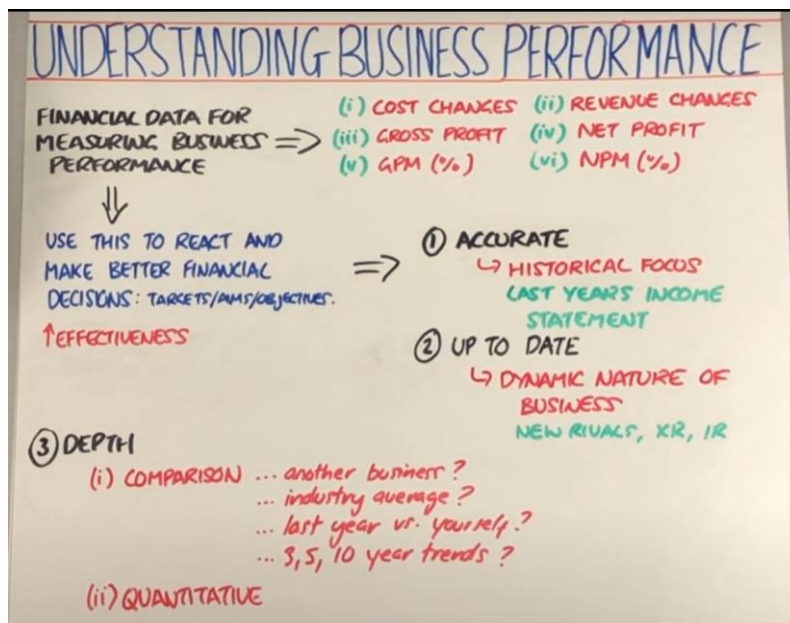
COSTS THAT CHANGE WITH OUTPUT.  
e.g. RAW MATERIALS

**NET PROFIT MARGIN** =  $\frac{\text{NET PROFIT}}{\text{REVENUE}} \times 100 = 20\%$

... conversion of sales → profit  
... every £1 sale → 20pence NET PROFIT.



## Understand business performance



Use financial data to react and make better financial decisions (targets/aims/objectives) → increase effectiveness

- Accurate
  - Last years income statement
- Up to date
  - Dynamic nature of business (things change)
- Depth
  - Comparison (on its own may not be enough)
  - Quantitative

## Types of profit

### Gross profit

- Pricing decisions
- Production efficiency

- Control excess production costs

### **Operating profit**

- Operating expenses
- Operating performance
- Can control excess operating costs

### **Net profit**

- Overall profitability
- Shows you conversion of sales → profit

### **Retained profit**