

# Business Economics

## Business Environment

- An environment: defined as everything which surrounds a system
- An organisation: part of a system that transforms input into output
- There are many environmental influences on this process.
- Macro environment:
  - Political environment
  - Economic environment
  - Social & cultural environment
  - Technological environment
  - Ecological environment
  - Demographic environment.Comprises general forces & trends rather than specific organisations
- Micro environment:
  - Customers
  - Intermediaries
  - Suppliers
  - Other stakeholdersComprises all those organisations & individuals who directly affect activ. of a company
- Internal environment: process & structures internal to an organisation that facilitate or impede its response to change in its external environment
  - Marketing
  - Production
- Other environments:
  - information environment
  - Communication environment
  - ethical environment
  - ecological environment
- Value chain: Value = added during transformation processes
  - May be multiple firms in a value chain
  - Who should be in value chain?
  - Value chain for --- air travel?

• Risk & uncertainty:

The future = uncertain

Business organisations must assess the likely risk of their actions

Doing nothing may be a risk

Many of today's successful entrepreneurs read the business environment and took risks.

Many more have failed.

• Power value chain:

All members of a value chain are not equal

Power can shift over time

eg. pressure groups / consumers much more important

• Monitoring & responding to environmental change

Organisations that do adapt may decline and die

To avoid this, organisations must:

understand what is going on in their business environment

respond and adapt to this change

Information about the environment = crucial but won't - in itself - produce decisions

# Market & Structures

## • Law of Demand

Substitution effect

move towards the good that's cheaper  
or away from the good that's more expensive

Real balances effect

when price increases it decreases your buying power causing you to buy less

Law of diminishing marginal utility

the amount of additional happiness that you get from an additional unit falls with each additional unit

## • Law of Supply

Increasing Marginal costs

firms require higher prices to produce more

## • Determinants of ~~Supply~~ Demand

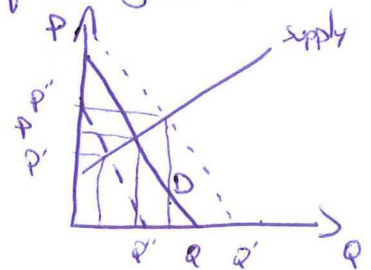
Taste

Income (normal goods, inferior goods)

Price of other goods

Population of potential buyers

Expected price



## • Determinants of supply

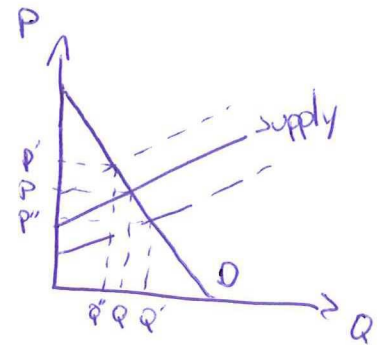
Price of Inputs

Technology

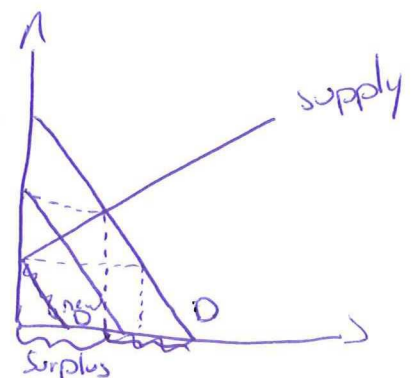
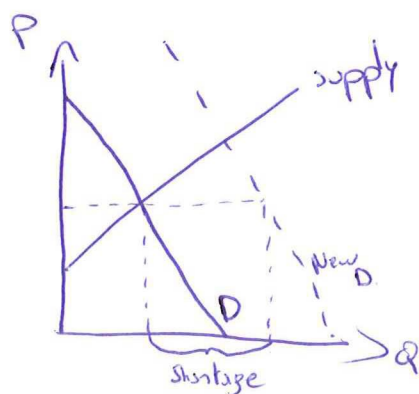
Price of other potential output

Number of sellers

Expected future price



## • Shortage & Surplus



• Elasticity

$$\frac{\% \Delta Q}{\% \Delta P} = \frac{\frac{\Delta Q}{Q}}{\frac{\Delta P}{P}}$$

elastic:  $\% \Delta Q > \% \Delta P \Rightarrow$  Perfect elastic:  $\Delta P = 0$

inelastic:  $\% \Delta Q < \% \Delta P \Rightarrow$  Perfect inelastic:  $\Delta Q = 0$

unitary elastic:  $\% \Delta Q = \% \Delta P$

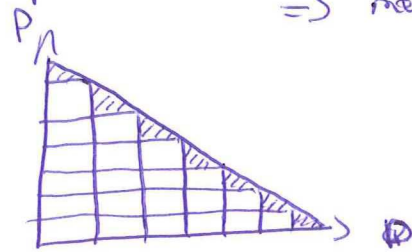
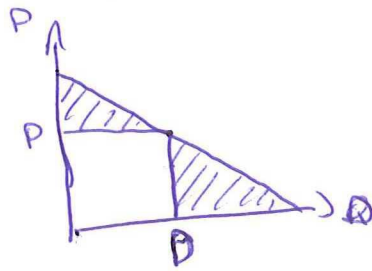
Note: elasticity depends on where you are on demand curve



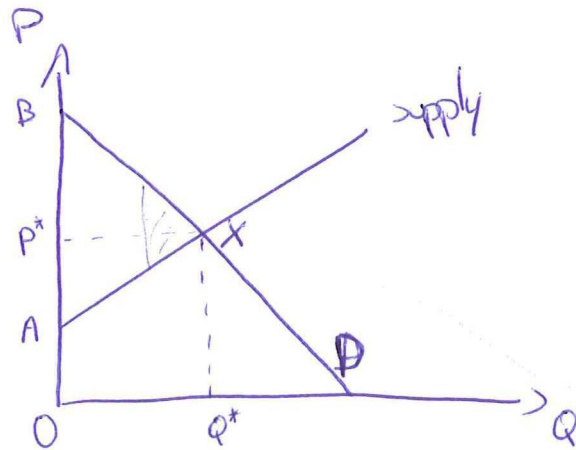
dependent on Det. of demand: family travel vs business travel

• Int. Pricing & Revenue Mgmt

By introducing more prices for different demands  $\Rightarrow$  more profit.



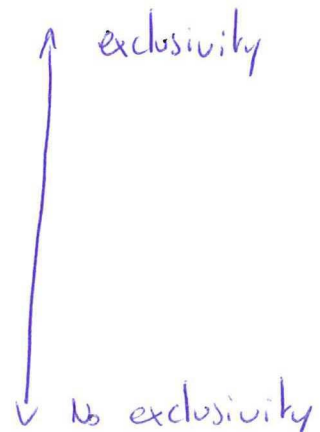
• Consumer & Producer surplus



- $OA \times Q^*$  = variable cost prod
- $AP^* \times Q^*$  = Surplus prod
- $P^* \times B \times Q^*$  = surplus consumer
- $BAX$  = economic value
- $OB \times Q^*$  = value to consumer
- $OP^* \times Q^*$  = price paid to prod
- Dead weight loss

• Market failure

Rivalry	No rivalry
Purely Private goods	Excludable Public good
Congestible Public good	Purely Public good



• Input to production

Variable input / costs

~~Variable input / costs~~

Fuel costs

Variable Flight crew costs

Variable Cabin crew costs

Direct engineering costs

Airport & en-route charges

Passenger service costs.

Fixed costs

Aircraft standing charges

Annual Flight crew costs

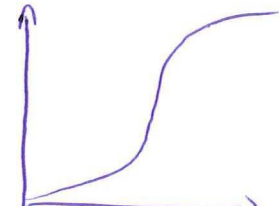
Annual Cabin crew costs

Engineering overheads

• Production Function

Production Function

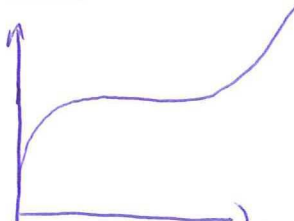
output ↑



workers →

Total cost Function

Total cost ↑

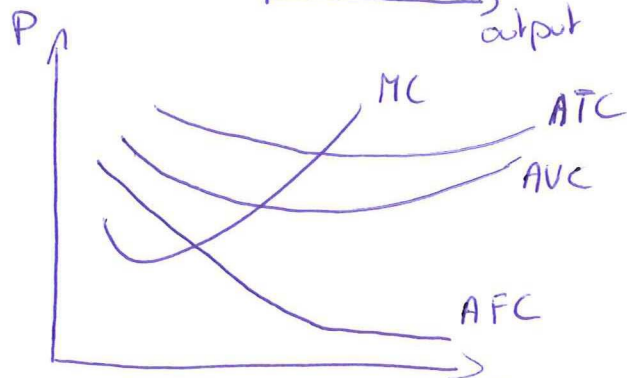


output →

$MC = MR$

unless :  $P < AVC$

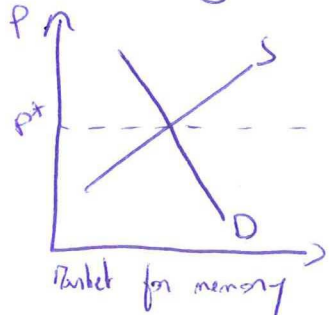
P ↑



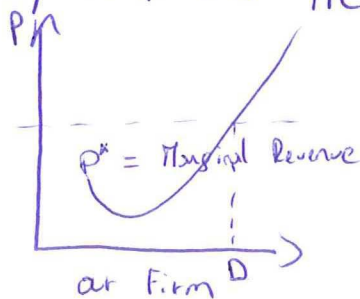
AFC →

Setting P many competitors

MC

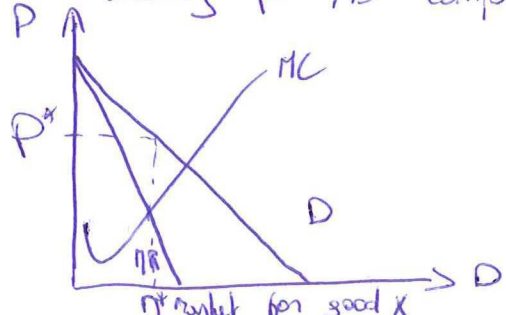


market for memory



at Firm D

Setting P no competitors



D\* market for good X

• Distinguishing between market forms

Characteristic	Perfect Competition	Monopolistic Comp.	Oligopoly	Duopoly	Monopoly
# firms	Many	Several	Few	Two	One
Barriers to entry	None	Few	Substantial	Prohib. insurmountable	unsurm.
Control over price	None	Very little	Good	Good	Very Good
Product Similarity	Identical	Similar but not identical	Similar or Identical	Similar or identical	—

• Profit

Normal profit

the level of profit that business owners could get in their next best alternative investment

Economic profit

Any profit above normal profit

# Business Organisation & Strategy

## • Business organisations

Differences in buss. organ. affect their behavior as  
customers  
suppliers  
employers

## • Bases for classifying organ

Size (Turnover, assets, employees, geogr. coverage, ...)  
Ownership (eg. public, private, co-operative)  
Legal form (eg. sole trader, limited comp.)  
Industry sector

## • Classifying organisations

### Sole trader

Easy to set up

Minimum of formality

Business & owner are legally indistinguishable

Owner liable for debts

The most numerous form of organisation

Tend to be small business

### Partnership

Based on agreement between partners

Unlimited liability of each partner for debts of partnership

Mainly found among professionals

### Limited company

Separate legal identity from owners

Shareholders own the company

Directors have legal responsibilities

Must produce annual accounts

Receivership if cannot pay debts.

### Public limited company

Similar basic principles

Minimum share capital = 45,000 €

Easier to raise fresh capital

Plc subject to much greater scrutiny

## Public sector

Providing goods & services that can not be provided by market forces

## Regulation vs competition

Airlines were regarded as 'quasi-public utilities' gives benefits (price jobs, trade foreign, tourism, emergency) important shield nascent industry from competition safety through regulation oligopolistic nature needs regulation

⇒ 1978: Airline Regulation Act.  
US airlines

## Privatisation

Sale of shares to the Public

Trade sale

Management/employee buy-out

Public private partnerships.

## Co-operative

Airline alliances

EADS

Astrium

SSF



# Organisational objectives growth & scale

## • Organisational goals

make profit for their owners  
maximise benefits for society  
maximise benefits for members

## • Objectives of buss. org.

Profit maximisation  
Market share maximisation  
Corporate growth  
Satisficing  
Survival  
Personal objectives  
Social objectives

## • Reasons for org. growth

org. market ↗

Critical mass may be necessary

Growth may stimulate staff morale

Growth can bring greater status & promotion to managers

Growth by acquisition may limit the amount of competition

## • Organisational scale

Economies of scale

Decline unit costs as volume increases

Size may be crucial in some industry sectors

Economies of scale affect product., promot., dist.,

Economies of scope

A Big company can undertake activities which would be difficult for a smaller one

## • Growth & organ. life cycles

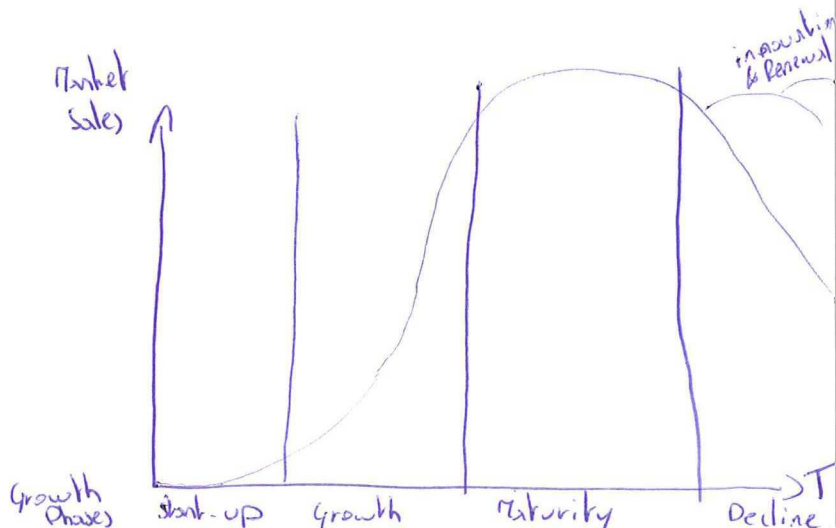
Entrepreneurial stage

Multisite nationalisation

Growth

Maturity

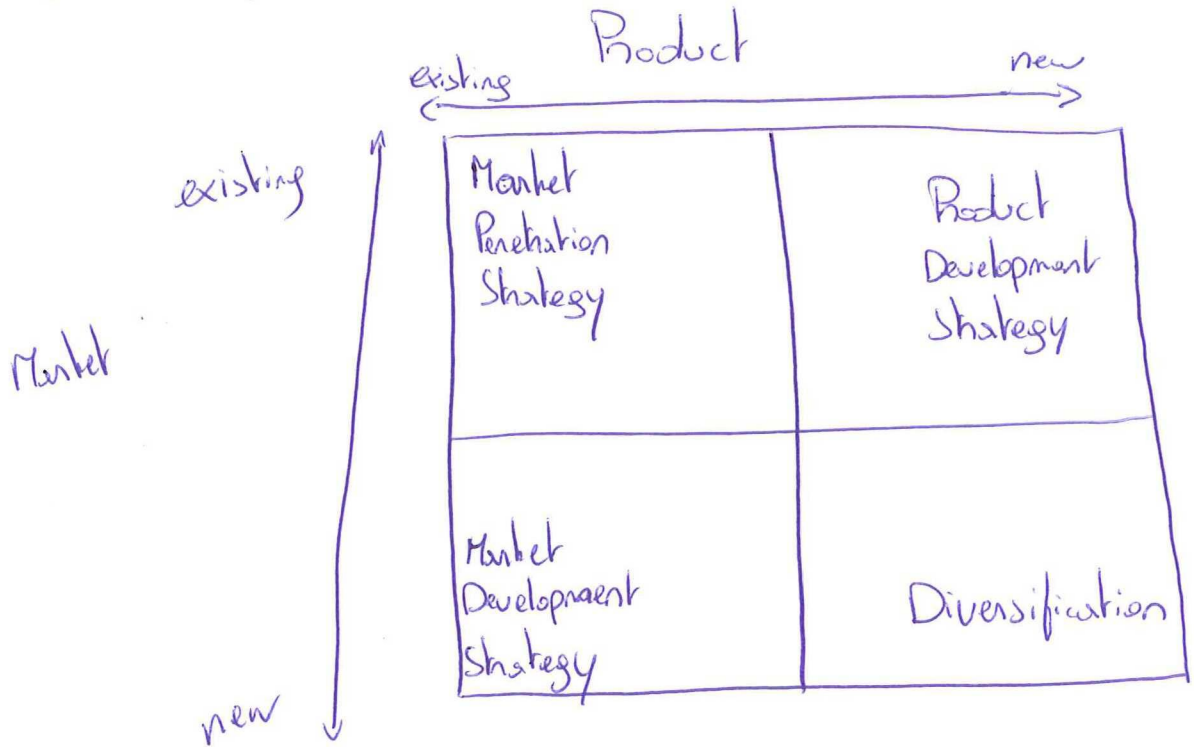
Decline/regeneration



• Types of growth

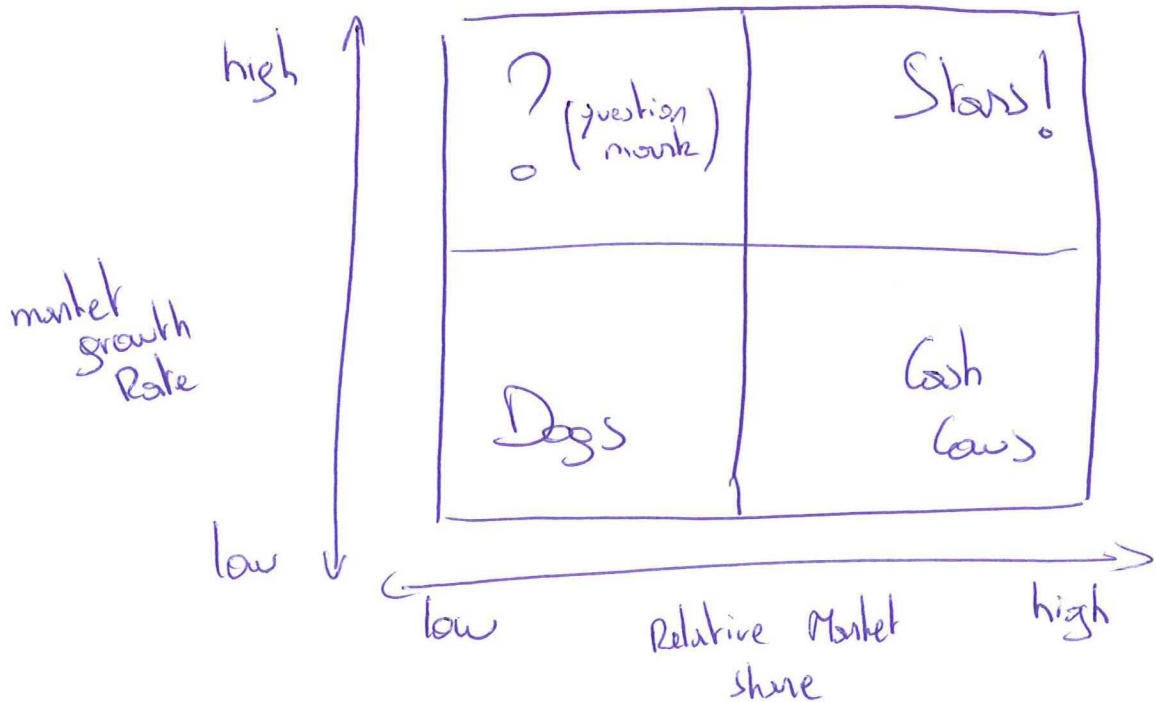
Analysing growth in terms of  
 object of growth (product/market)  
 organisational issues on how growth  
 is achieved

• Product/market expansion



⇒ Bowling Alley strategy

• Portfolio Planning



## • Growth:

organic growth

less risky

More sustainable

Successful growth provides basis future growth

May be too slow in fast changing markets

Growth by acquisition

More rapid

Allows fast exploitation of economies of scale

More risky

## • Consolidation

Mergers

Take-overs

Acquisitions

## • Integration

Horizontal

Take over companies that do the same as yours

backwards

Take over companies that provide you inputs (like cow farm for mac-donalds)

forward

Take over companies where you deliver your goods

# Financial Reporting : Balance sheet

• Same words

Equity = net assets = net worth = capital = funds

Income statement = profit & loss account

Revenue = turnover = sales

• Balance sheet

statement that shows

resources the buss. controls that it can use to create wealth (assets)

where these resources are derived from  
owners (equity)  
lenders (liabilities)

Fixed Assets (FA)	€600	Equity	€450
		Long-Term Liabilities (LTL)	€250
Current Assets (CA)	€400	Current Liabilities (CL)	€300
	€1000		€1000

Fixed Assets (Long-Term / non-current)

tangible assets (property, plant, equipment)

intangible assets (goodwill, Patent, Licences)

financial/investment asset (shares associated comp, investments, others)

Short term / Current Assets

inventories (raw mat., work-in-progress, finished goods, spares)

trade receivables (or debtors)

investments

prepayments

cash

Equity / net worth

share capital

share premium

retained profits

other reserves (such as revaluation reserve)

## Long-Term liabilities (Non-current)

mortgages

debentures/bonds

## Current Liabilities (Paid within 1 year)

trade payables

corporation tax payables

accrued charges

bank overdrafts

## • Depreciation

Depreciation ↓ balance sheet values  
cost of an asset



cumulative depreciation



net book value

## Methods of Depreciation

Straight line (fixed amount per year)

Declining balance (fixed percentage per year)

Activity (based on flight hours for ex)

Sum of years digit method

( $5+4+3+2+1=15 \rightarrow \frac{5}{15}, \frac{4}{15}, \frac{3}{15}, \dots$ )

Unit of production depreciation

(more deprec. in later years, more # prod)

⇒ Successful Buss. increases equity / net worth every year

## • Profit vs. equity increase

increase in equity ≠ profit

shareholders might have put additional capital  
revaluation of assets

profit ≠ increase in equity

profit might not stay in business (dividend)

Profit = inc. equity - add. shares + dividend distn.

- result revaluation assets

# Financial Reporting: income statement

## Income Statement

Emphasises what profit has been earned for shareholders

## Reasons for measuring Profit

A measure of profit

A guide to dividend policy

A measure of efficiency of the company

A measure of effectiveness of the company

A guide to financial strength

A basis for taxation

A guide to pricing decisions

Continuity of the company

## Profit in 4 main stages

### Gross Profit

sale figure - cost of sales (the cost of the goods that have been sold)

### Operating Profit

deducting the main categories of expenses (distribution costs and administrative expenses)

### Profit before taxation

deducting finance costs (interest receivable - interest payable)

### Profit after taxation

deducting tax on profit

• Appropriation of profits.

Earnings before interest, tax, depreciation, amortisation & Rents EBITDAR

Rents - - - -> Rents made in the period.

Earnings before interest, tax, depreciation & amortisation EBITDA

Depreciation & amortisation - - - -> from material

Earnings before interest & tax EBIT

Interest - - - -> to lenders

Earnings before tax EBT

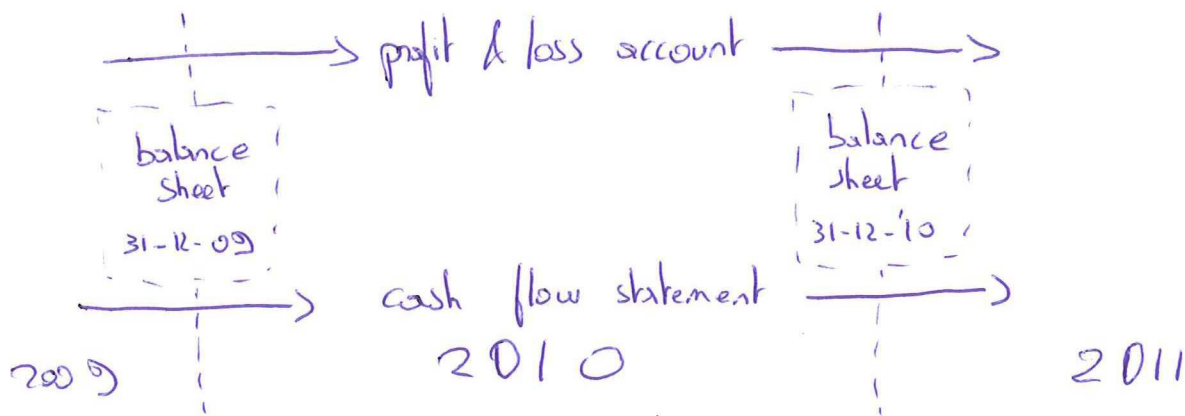
TAX - - - -> to government

Earnings after tax EAT

DIVIDEND - - - -> to shareholders

Retained earnings RE

• Three basic finance statements.



• Statement of changes in equity for the year.

Balance at 31-12-09  
 Add: profit for the year  
 deduct: Dividend for the year  
 Balance at 31-12-10

• Included as Revenue

All sales made in period  
(even if money not received till later)

Profit on sales of non-current items

investment income

interest receivable

various "exceptional items"

any share of profits from associated companies

• Included as expenses

Amount of costs incurred in earning the revenue  
that is recognized during the period

accruals concept

matching

cost of sales

Depreciation

Impairment of goodwill (amortisation)

• Cost of Sales

Includes only the cost of buying, or  
producing goods & services

Shown at cost price

Excluded: Cost of Administration  
Distribution costs.

• Gross Margin/  
Gross Profit Ratio

$$\frac{\text{Gross profit}}{\text{Sales}} \%$$

$$\frac{\text{mark-up}}{(1 + \text{mark-up})}$$

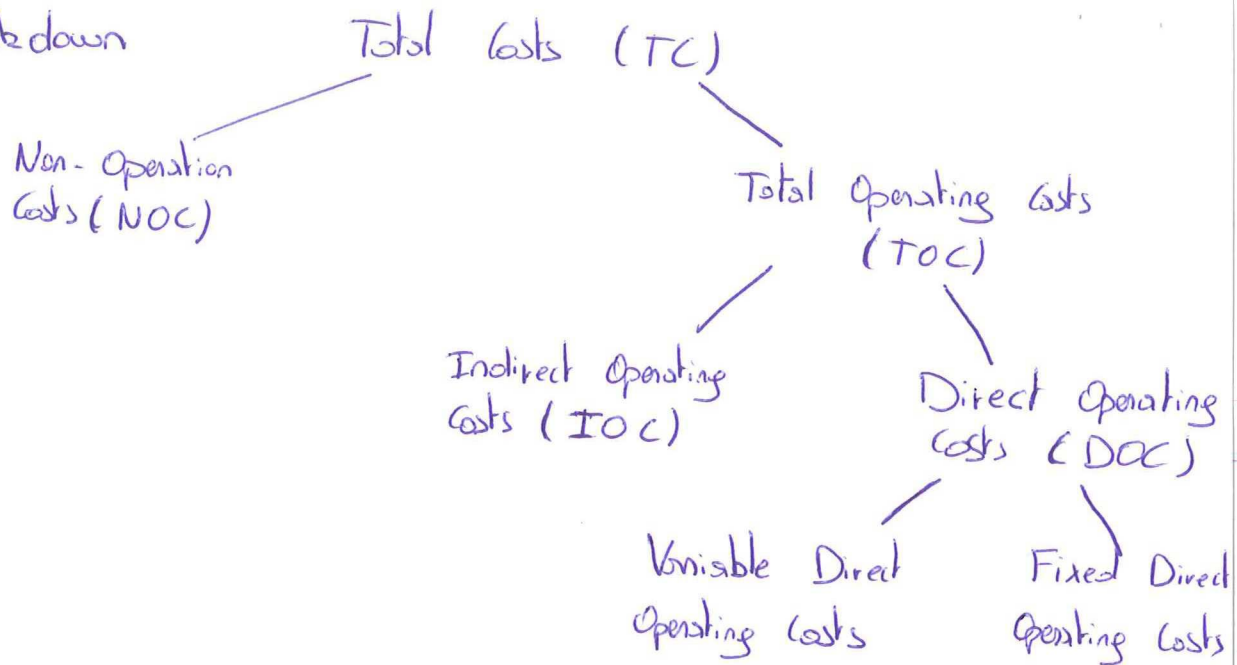
• Mark-up

$$\frac{\text{Gross profit}}{\text{cost of sales}} \%$$

$$\frac{\text{gross margin}}{(1 - \text{gross margin})}$$



## Cost Breakdown



### Direct Operation costs - Flight Ops.

Flight crew salaries & expenses

Fuel & oil

Airport & en-route charges (Landing Fees, taxi charges & Nav. aid, use of airspace)

Aircraft insurance

Rental / Lease of flight equipment / crew

### Direct Ops. cost ≠ Maintenance & Overhaul

Engineering staff costs

Spare parts consumed

Maintenance Administration

### Indirect operation costs

Station & ground expenses

pass services

Ticketing sales & promotion

General & Administration

other operation costs.

## Income Statement.

Role : - Showing how much profit =  $\frac{\text{made}}{\text{period}}$

- indication of how & where profit might increase

- Comparing results - financial control

Limitations :- profit  $\neq$  cashflow.

# Measuring Company Performance

## • 3 Main groups of question

1. Financial strength / solvency: is the bus. going to survive?
2. Profitability: Is the bus. sufficiently profitable?
3. Stock Market: How are companies shares performing on stock Market?

• Company collapse      Company collapses if it is unable to pay its liabilities as they fall due

## • Financial Strength / solvency ratios

Short term:

$$\text{Current ratio (working capital ratio)} = \frac{\text{Current assets}}{\text{Current liabilities}}$$
$$\text{Quick ratio (acid test)} = \frac{\text{Current assets excl. inventories}}{\text{Current liabilities}}$$

long term:      Capital gearing Ratio =  $\frac{\text{long-term borrowings}}{\text{Equity plus long-term borrowings}} \times 100$   
(financial gearing, or leverage)

$$\text{interest times cover} = \frac{\text{profit before deducting interest}}{\text{Interest}}$$

## • Profitability

Overall profitability: Return on Shareholders' fund =  $\frac{\text{Profit of the year}}{\text{Equity at end of year}} \times 100$

Return on long-term capital employed =  $\frac{\text{Operating profit}}{\text{Equity + long-term borrowings}} \times 100$

Operating profit as a % of sales =  $\frac{\text{Operating profit}}{\text{Sales}} \times 100$

profitability,  
of sales

$$\text{Gross Profit Ratio} : \frac{\text{Gross Profit}}{\text{Sales}} \times 100$$

$$\text{Distribution costs as a \% of sales} : \frac{\text{Dish. costs}}{\text{Sales}} \times 100$$

$$\text{Administrative expenses as a \% of sales} : \frac{\text{Admin. expenses}}{\text{Sales}} \times 100$$

Utilisation of  
Assets

$$\text{Sales / non-current Assets} : \frac{\text{Sales}}{\text{non-current Assets}}$$

$$\text{Sales / current Assets} : \frac{\text{Sales}}{\text{current Assets}}$$

$$\text{Inventory (stock) turnover ratio} : \frac{\text{Inventories}}{\text{cost of sales}} \times 365$$

$$\text{Trade receivables (debtors) ratio} : \frac{\text{Trade receivables}}{\text{Sales revenue}} \times 365$$

$$\text{Trade payables (creditors) ratio} : \frac{\text{Trade payables}}{\text{costs of sales}} \times 365$$

Stock Market  
Ratios

$$\text{Earnings / share} : \frac{\text{Profit of the year}}{\text{Number of shares}}$$

$$\text{Price / earnings ratio} : \frac{\text{Share Price}}{\text{Earnings per share}}$$

$$\text{Dividend / share} : \frac{\text{Total dividends}}{\text{number of shares}}$$

$$\text{Dividend yield} : \frac{\text{Dividend per share}}{\text{Share Price}} \times 100$$

$$\text{Dividend cover: } \frac{\text{Total Profit for the Period}}{\text{Total dividends}}$$

$$\text{Net assets per share: } \frac{\text{Net Assets}}{\text{Number of shares}}$$

• Working capital management:

Ensure sufficient funds to pay liabilities as they fall due

VS.

The need to ensure the profitable use of capital employed.

# Product Costing Systems

## • meaning of cost:

The use of valuable resources, in order to achieve a stated purpose.  
In accounting, cost is reported in monetary terms

### product costs:

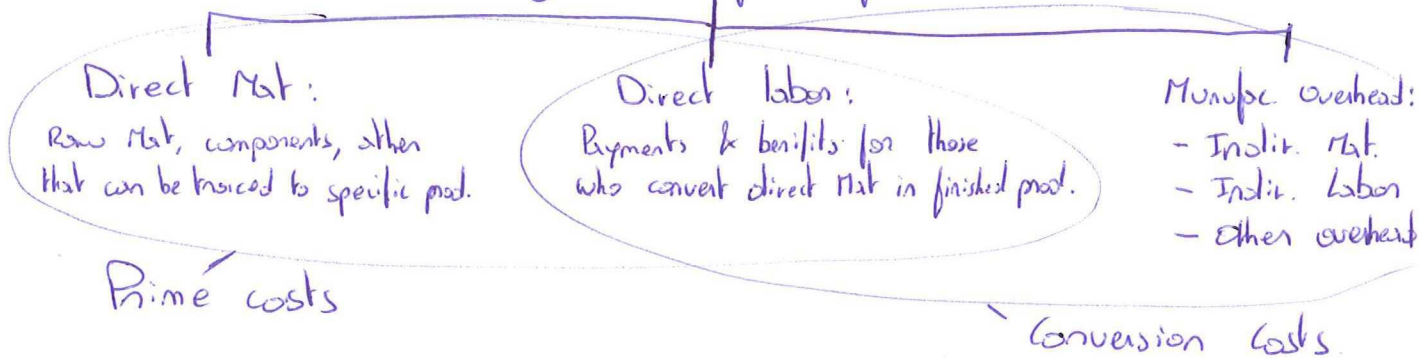
- related to the purchase or manufacture of goods for resale
- Assigned to inventory and costs of goods sold.

### period costs:

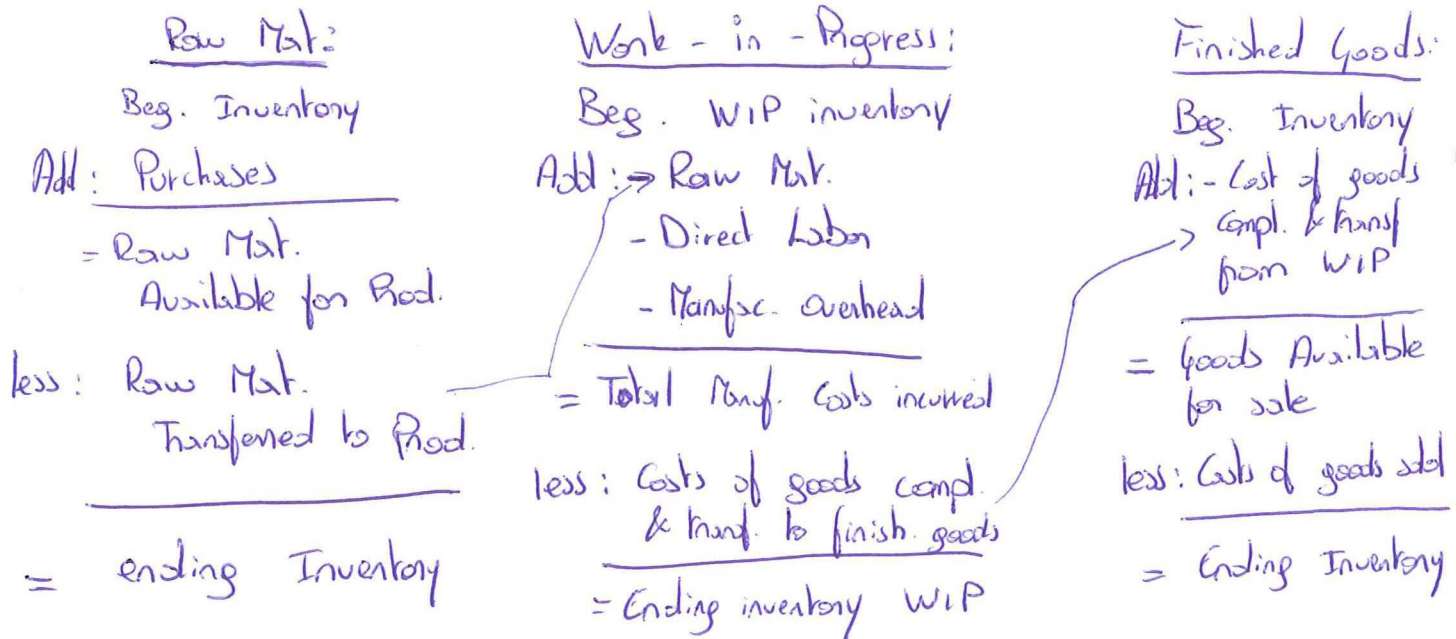
- Related to selling & administrative operations
- Recognized as expenses in the same time period

## • Manufacturing Companies:

### 3 Major cat. of manuf. costs:



## • Stages of Production & Flow of Costs:



## • Absorption (Full) Costing

A system of accounting for costs in which both fixed and variable prod. costs are included in product costs



## • Variable Costing

A system of cost accounting that assigns only the variable cost of production to products

• Absorption Costing vs. Variable Costing

