Introduction to economics

2022年9月16日 11:42

The basic economic problem

- Resources (factors of production) are limited (scarce), but how society wants to use them is unlimited.

What is economics?

- The science of managing scarce (limited) resources.

Goods and services

- Goods: physical items that can be produced, bought and sold
- Services: non-physical items that can be provided by firms and paid by customers

Needs and wants

- Needs: the essential goods and services required for human survival
- Wants: goods and services that are not necessary for survival but are human desires

Opportunity costs

- Opportunity cost: the value of the next best alternative given up when making a decision.

Free and economic goods

- Economic goods
  - Each input was limited in supply (scarce)
  - There is opportunity cost in producing or consuming them
- Free goods
  - Some goods are not scarce (plentiful) so there is no opportunity cost in producing or consuming them
  - e.g. air and sunlight

Factors of production

2022年12月6日 19:01

Economic factors (CELL)

Land	Natural resources used in production
Labour	Human resources used in production
Capital	Manufactured resources used in production (manufactured from land)
Enterprise	Skills to combine other resources to make profit

What can change the quantity and quality of factors of production

- Increase quality of capital - innovation
- Decrease quantity of land - war / natural disaster
- Increase quality of labour - education
- Increase quantity of labour - higher birthrate / migration

Rewards of factors of production

- Land = rent
- Enterprise = profits
- Labour = wages
- Capital = interest

Mobility of factors of production

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Can a petrol station be changed into electric charging?
Yes: because most factors of production can be used in the new charging station

- e.g. Capital such as pumps can be changed to electric chargers
- Payment system does not really need to be changed
- Enough land to accommodate cars
- Workers can be used to take payments like before

Immobile factors of production:

- Machines for manufacturing cars - specialised

Mobility of factors of production: the ability of factors of production to be used for various competing purposes

Labour mobility

- Can be broken down into geographical and occupational
    - Geographical - ability of labour to move from one location to another for work
        - Not relocating due to family ties and other commitments
            - They want to live near their family and friends
            - Schooling arrangement for children
        - Not relocating due to cost of living
            - Too high in other locations, uneconomical to relocate
    - Occupational - ability of workers to move from one job to another
        - Cost and length of training required to change profession
        - Developing and training employees to improve their skills set improves occupational mobility

Production Possibility Curve

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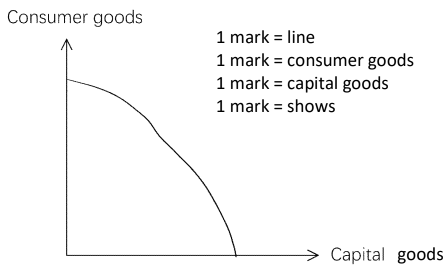


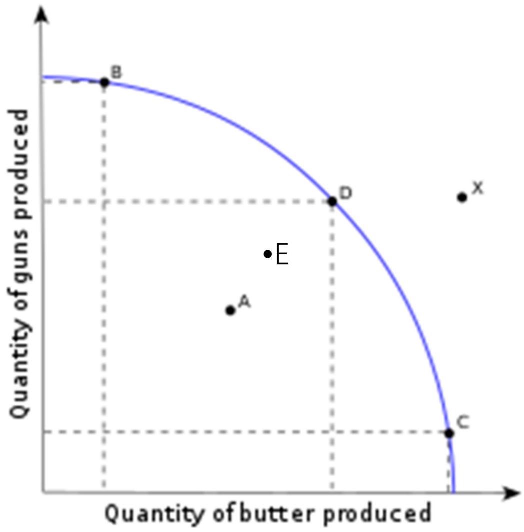
1 mark = line
1 mark = consumer goods
1 mark = capital goods
1 mark = shows

To pruduce anything in the economy one needs inputs

Inputs = CELL
Manage inputs to get the most output

PPC definition: maximum potential output combination if all resources are fully used (all land, labour, capital and enterprise is used)

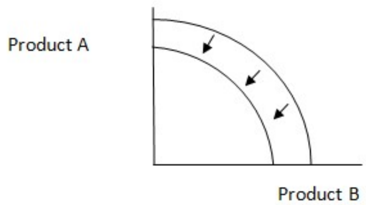
Capital goods: machine, tool, etc. used for producing consumer goods
Consumer goods: goods produced

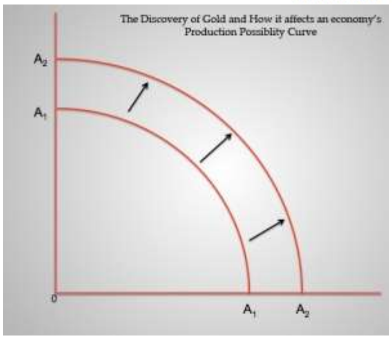


PPC shows opportunity cost
Opportunity cost = the other products lost by producing more
Opportunity cost of moving from B to D = guns lost from B to D

Inefficient allocation of resources: a point **inside** the PPC
A, E: Inefficient
A to E: using more of the resources
B,C,D = efficient use
X: impossible to reach (unobtainable), because there is no enough resources for this point. (Beyond PPC)
B to C / D = reallocation of resources

Reallocation of resources = movement along the line,
Going from B to D: losing guns, gaining butter

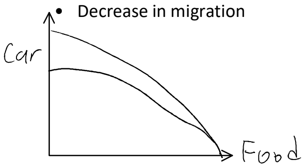




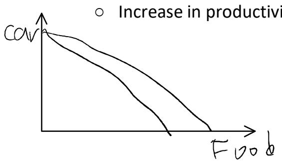
<u>Shift the PPC</u>

- Any change in the **quality or quantity** of inputs (factors of production)
  Parallel shift outwards
  - More resources are found (more land)
  - Immigration (more labour)
  - Improved productivity of labour (quality of labour is higher) e.g. education
- Parallel inwards shift
  - War

- Natural disaster
- Decrease in productivity (lower quality of labour)
- Decrease in migration



- Non parallel shift:
    - Something affecting the car industry only
        - Increase in productivity of car engineers



- e.g. more land for farming

7 Demand

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Demand: The willingness and ability of customers to pay a price for a good
Market demand: summation of all individuals demand
In economics, we look at the market demand

Law of demand
As the price asked increase, quantity demanded falls
As the price asked decrease, quantity demanded rises

Demand schedule: shows the negative relationship between price and the quantity demanded

Price (dollars)	Quantity demanded (units)	New quantity demanded - shift in the curve (units)
1	7	11
2	6	10
3	5	9
4	4	8
5	3	7
6	2	6
7	1	5

*increase by the same amount each time - parallel shift

Substitute and complement
- Substitute: something similar to the product
- Complement: used with the product

Movement or shift
- Change in the price of the good - movement along the line
  - Price rise = contraction in demand
  - Price fall = expansion / extension in demand
- Change in the price of other goods - shift
- Change in factors other than price - shift

Factors that cause a shift in demand - PICTSA
- Population changes
  - Higher population gives higher demand
- Income changes
  - Inferior goods - increase demand when income falls
  - Higher level of income means the customers are more able and willing to buy goods and services
- Complement good price changes
  - Jointly demanded
  - Demand falls if the complement's price rise
- Tastes / trends
  - More demand when the product becomes fashionable
  - Less demand when unfashionable
- Substitute good price changes
  - Demand falls if the price of substitutes fall
- Advertising
  - Successful advertising increase demand

8 Supply

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Supply: the quantity of a good or service that a producer is willing and able to supply onto the market in a given time period at a given price
Market supply: the total supply brought to the market by producers at each price. To calculate, sum the individual supply schedules

Reasoning for the Law of Supply

- **The profit motive:** if the market price rises following an increase in demand, it becomes more profitable for businesses to increase their output
- **Production and costs:** when output expands, a firm's production costs tends to rise, therefore a higher price is needed to cover these extra costs of production

Shift & movement

- Movement along the curve: only price changes (extension / contraction in supply)
- Shifts
  - Changes in the unit costs of production
    - Lower unit costs mean that a business can supply more at each price, having a shift to the right - for example higher productivity
    - Higher unit costs - supply less at each price - inward shift of supply e.g. a rise in wage rates or an increase in energy prices / other raw materials
  - Advances in production technologies / productivity
    - Lower unit cost
    - Greater level of output at each price level
    - Outward shift of supply
  - The entry of new producers into the market
    - Outward shift
  - Favourable weather conditions
    - e.g. outward shift for agricultural products, inward shift for airline carriers when there is a poor weather
  - Taxes
    - Increased unit cost of production, reducing supply level
    - Inward shift of supply
  - Subsidies
    - Reducing the unit cost of production
    - An outward shift of supply
  - Regulations increase costs - causing a leftward shift of supply

Equilibrium

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Market equilibrium definition

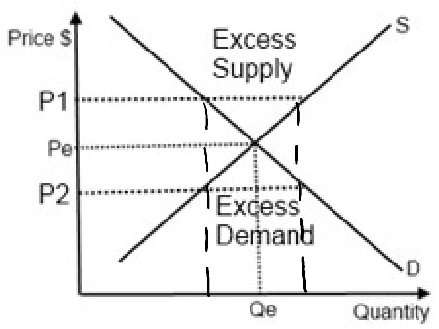
- Exists when the demand of the product matched the supply, so there is no excess demand (shortage) or excess supply (surplus)
- At equilibrium, there is no tendency for the market price to change.

Drawing demand / supply curve

- Drawing demand & supply curve together: use 'quantity of ...'
- Per time period: just at this moment in time, not later on
- *Have to be in graphs

Market disequilibrium

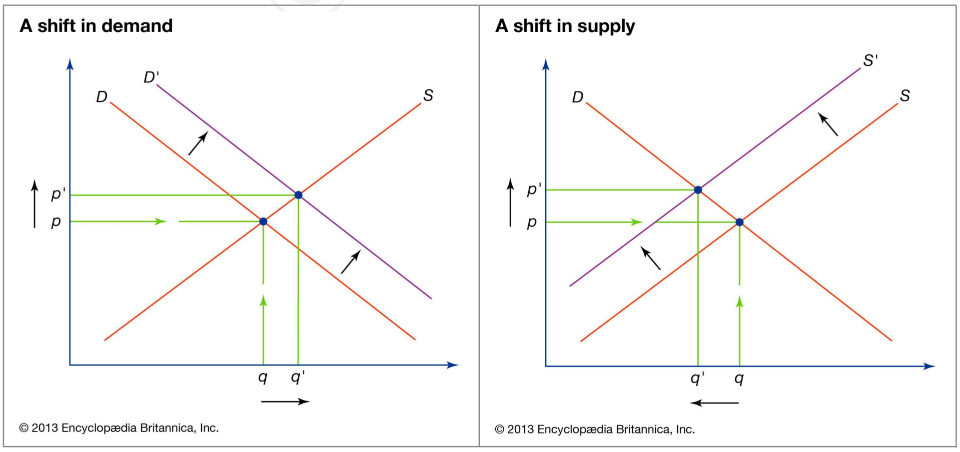
- Exists when the price is too high or too low, so the quantity demanded is not matched by the quantity supplied, causing excess demand at prices that are too low and excess supply at prices that are too high
- At price P1 there is an excess supply, price will need to fall to persuade consumers to buy more and for producers to contract their supply.
- At price P2 there is an excess demand. Price will need to rise to reduce consumer demand and to encourage producers to supply more.



Excess supply - sale to increase demand

Equilibrium change

If market demand rises or if market supply falls: increase in market price



Market demand fall or market supply increase: decrease in market price

Price mechanism

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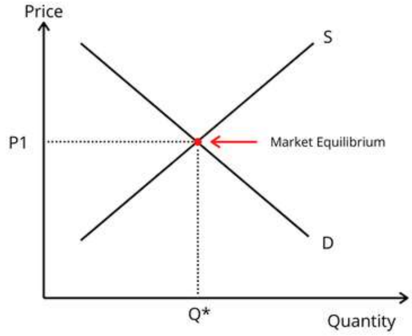
Price mechanism: system of using the interaction of supply and demand to allocate resources
Market system: the method of allocating scarce resources through the market forces of demand and supply

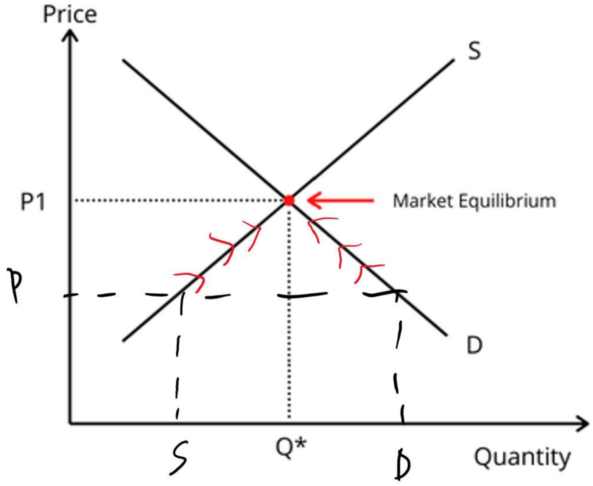


Key decisions about resource allocation

- What to produce?
  - Deciding which goods and services should be provided in the economy
  - Decision makers consider opportunity cost
- How to produce?
  - The methods and processed used to produce the desired goods and services
  - Combining factors of production
- For whom should production take place?
  - Which economic agents receive goods and services

Responding to signals

- The change in equilibrium price will tell resources where to go (allocate resources)
- Price change first
- Change in equilibrium price acts as a signal
- For example:
  - Demand increases (shift) - the equilibrium price goes up - extension in supply (not shift)
  - Shift in demand first, than change in equilibrium price (signal), than supply changes
  - Change the price in response to price increasing to produce more



- In shortage (excess demand):
  - Firms will raise their price (the good is scarce), extension of supply (both happens at the same time)
  - Then, a contraction in demand
- Excess supply:
  - Firms will lower their price, contraction of supply

    - A extension in demand then

Functions of price mechanism

- Signals to producers and consumers
- Solve a shortage or a surplus

Features

- There is no government interference in economic activities
    - Resources are owned by private economic agents who have the economic freedom to allocate resources without government interference
- Goods and services are allocated on the basis of price
    - High price encourages more supply
    - Low prices encourage more consumer spending
    - Goods are sold to these who are able and willing to buy
- The allocation of factor resources is based on financial incentives
    - Using factors of production with the greatest profit
- Competition creates choice and opportunities for firms and individuals
    - Consumers can benefit from a variety of innovative products at competitive prices and low quality

11 Price elasticity of demand

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If price rises, demand will fall, but by how much?

Calculation

- How will quantity demand react to a price change?
- PED = $\frac{\text{Percentage Change in Quantity Demanded}}{\text{Percentage Change in Price}} = \frac{P}{Q} \times \frac{1}{\text{Slope}}$
- PED is always negative - negative correlation

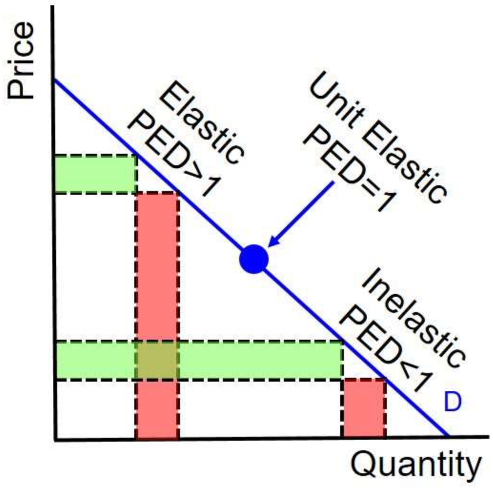
Values for PED

- PED = 0
    - Perfectly inelastic
    - Vertical demand curve ("perfect i")
- 0 < PED < 1
    - Inelastic
    - Less than proportional decrease (gradient < 1) in quantity demanded
    - Steep gradient
    - Hit x-axis only
- PED = 1
    - Unitary elastic
    - Curve
    - Not hitting both axis
- PED > 1
    - Responds more than proportionately to change in price
    - More than proportional decrease in quantity demanded
    - Elastic
    - Smaller gradient
    - Hit y-axis only

Factors that determine PED

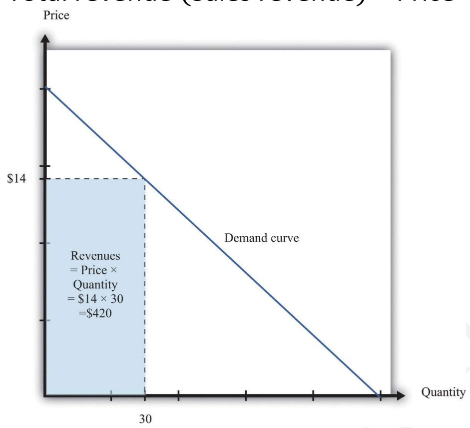
- The proportion of income spent on it
    - Small proportion = PED will be more inelastic (chewing gum) because the change in price is insignificant to consumers
- The availability of substitutes
    - No substitutes = demand is very inelastic (e.g. petrol) because they are difficult to be replaced
- Habit
    - If the consumer has a habit of using that good or service the demand is inelastic (cigarettes)
    - People with habit are more willing to pay, even at higher prices
- Luxury or necessity
    - Higher necessity = inelastic
    - Households needs these goods or services and will continue to purchase them even if price is rising
- Width of definition
    - Wider the definition e.g. food is more likely to be inelastic, brand is more elastic than the whole industry

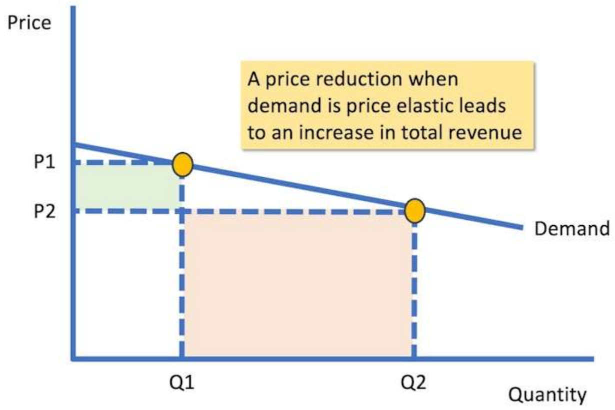
Parts on demand curve



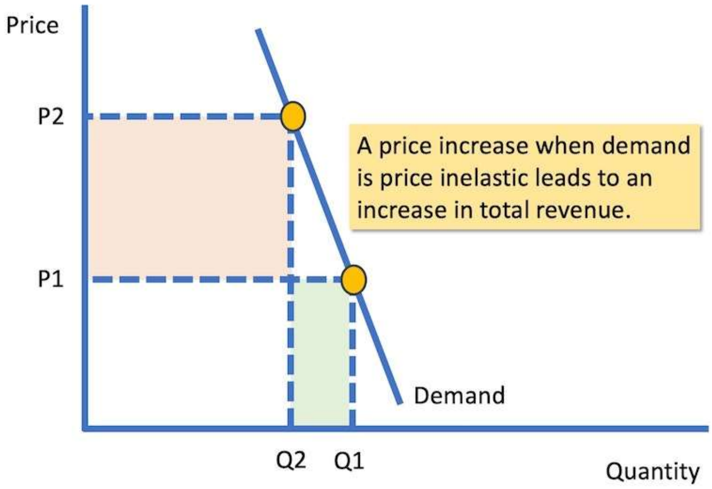
- Expensive - bigger reaction
- Cheap - less market reaction
- Touching which axis determines the elasticity of the curve
  - Inelastic - x-axis
  - Elastic - y-axis
  - Doesn't hit any axis or hit all axis - can't know elasticity
- The gradient is not changed when only drawing one part

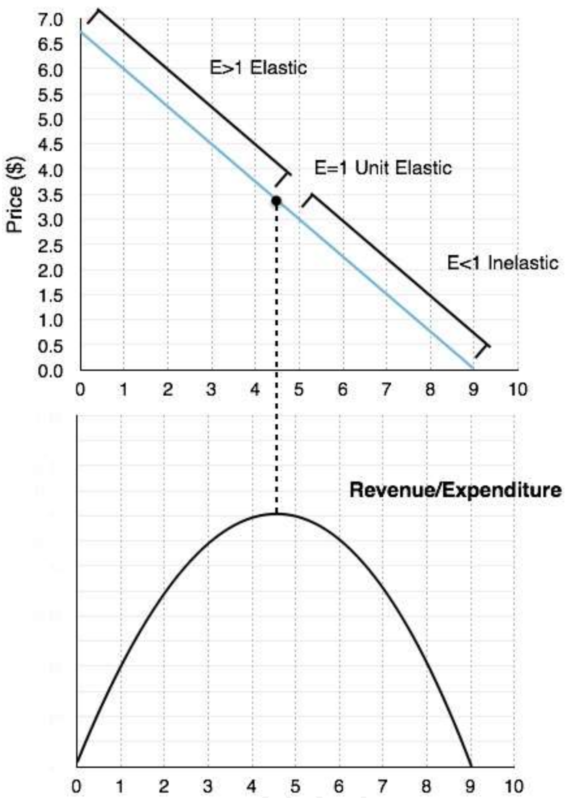
PED and total revenue (sales revenue)

- Total revenue (Sales revenue) = Price × Quantity demanded
- 

- Largest at the midpoint
- If demand is inelastic, a firm should increase price to raise total revenue
- If demand is elastic, a firm should lower the price to raise total revenue
  - 

  - The gain is greater than the loss
- If demand is inelastic, a firm should raise the price to raise total revenue

- 

- 

<u>The significance of PED</u>

- Help firms decide a pricing strategy e.g. price discrimination
  - Different PED for different customers
  - If PED is inelastic - set higher price
- Decide which products to put a tax on to get high government revenue
  - Tax lead to higher price
  - Inelastic - less fall in demand
- Help decide which products to put a large tax on
  - If product is inelastic - need to put a high tax to reduce demand
  - e.g. cigarettes

12 Price elasticity of supply

2022年11月23日 10:57

What is price elasticity of supply?

How responsive firms are to a change in price
Responsive, immediate response = elastic
Not very responsive, slow response = inelastic
Rise in demand → rise in price → rise in quantity supplied

Calculation

$$\text{PES} = \frac{\text{Percentage Change in Quantity Supplied}}{\text{Percentage Change in Price}}$$

Showing PES on a diagram

- Always proportional increase
- Touching y-axis - elastic
- Touching x-axis - inelastic
- Unitary inelastic - gradient = 1

Factors that affect the PES

- The amount of spare capacity of factors of production
    - If it is high then the PED is more elastic
    - The firm can increase the supply relatively easily without increasing the cost of production
- The cost of increasing production
    - If it is high then the PED is more inelastic
    - High cost to increase the supply
- Complexity of producing the product
    - If the product is easy to make then the PES will be more elastic (higher)
    - Easier to increase supply in a short time
- Level of stocks of finished products
    - If this is high then the PED will be more elastic (higher) (depends on perishability)
    - More able to respond quickly to a change in price by increasing supply
- Time
    - Short run supply is more likely to be inelastic
    - Most firms are not able to change their input factors, such as the size of their workforce or the fixed am ount of capital equipment they employ in a short time

Why is PES important?

- Useful for government
    - Housing has inelastic supply (slow to build a house) and this means some cannot get a house
    - Shortage of workers (not a lot of spare capacity) may be the cause of inelastic supply so may indicate more migration is needed
- Useful for firms
    - Inelastic supply can signal to firms they may need to change production techniques
        - To become more elastic
        - Elastic = more competitive and larger sales revenue

13 Economic systems

2023年1月9日 9:08

Types of economic system

- Market economic system
  - Relies on the price mechanism (producers and consumers) to allocate resources
  - Minimal (no) government intervention
  - Price dictates where resources need to go. There is no need for the government to decide.
  - No economies in the real world
- Planned economic system
  - Everything is provided by the government
  - Relies on the government to allocate resources
  - Very few economies (e.g. North Korea)
- Mixed economic system
  - Some is provided by government and some is private
  - Most economies in the world

Costs and benefits of market system

- Benefits
  - More efficient
    - Higher competition will:
      - Reduce waste and make economies more responsive due to consumer sovereignty (can influence in what is produced)
      - Encourage innovation
  - Choice
    - Higher competition will lead to more options available
  - Incentives
    - Profit motive for firms and possibilities for individuals to earn unlimited wealth create incentives to work hard
    - Helps to boost economic growth and living standards
- Costs
  - Income inequalities
    - No government method to redistribute incomes
  - Environmental issues
    - Firms have no reason to reduce pollution
  - Social hardship
    - No government control so public goods may not be provided due to lack of profit
    - Relief of poverty in society might only be done through society
  - Wasteful competition
    - Competitive pressure can mean that firms use up unnecessary resources e.g. excess packaging and advertising clutter to gain advantages
    - Consumer can be exploited by marketing tactics
    - Products might be less safe because there is no government involvement

14 Market failure

2023年1月11日 11:18

Definition

- Market failure: market fails to allocate resources efficiently
    - (The free market is failing)

Ways the market can fail

- Too many resources allocated to the production of things that cause external costs e.g. demerit goods
- Not enough resources allocated towards producing things that create external benefits e.g. merit goods
- No resources allocated to producing things people require e.g. public goods
- The free market can be determined by a monopoly
- Immobility of labour can arise

Public good

- Public goods are non-rival and non-excludable
- A type of market failure because they would not be provided in a free market due to the lack of profit available
- Non-rival
    - Consumption of a good by one person does not reduce the amount available for others
- Non-excludable
    - It is not possible to exclude people from using the good
- Free rider problem
    - Using something without paying for it
    - Because this exists, public goods would not be provided in a free market due to low profit

Merit and demerit goods

- Merit goods: goods when consumed or produced create external benefits
    - Firms and consumers do not take external benefits into account
    - Underestimates the true benefits of a good
    - Merit goods are under consumed + under provided in free market
- Demerit goods: goods when consumed or produced lead to external costs
    - Firms and consumers do not take external costs into account
    - Underestimates the true cost of a good
    - Demerit goods are over consumed + over provided in free market

External costs

- Negative effects on a third party
    - First party = consumer (buying or using the goods or services)
    - Second party = producer (providing the goods or services)
    - Third party = others beyond the transaction
- Examples
    - Pollutions
    - Noise pollution
    - Cigarette smoking
    - Litter
- Also called negative externality

Social costs

- Costs that affect all and it is comprised of private costs and external costs
- Private costs + external costs = social costs
    - Private cost = only on first and second party (people involved in the transaction)

- Not the same as external costs, external costs are a part of the social costs

External benefits
- These are positive effects on a third party
- Benefits not to producers or consumers, but to those beyond the transaction
- Examples = education, vaccinations
- Also called positive externality

Examples

	Private costs	**External costs**
Go to a nightclub	Ticket / drink price Cost to nightclub / DJ	Noise pollution Crime in area Littering
Go to a football match	Ticket price Food prices Transport fees Lawn costs	Traffic congestion in area

	Private benefit	**External benefit**
A person sings	Joy, relaxing Improve singing skill	
Going to university	Knowledge Degree	Future employers
Creating a garden		Air quality Bees

Labour immobility
- The inability of worker to move
- Why is it a market failure
  - The free market suggests that the price mechanism should allocate resources efficiently. This includes labour.
    - Labour should move to its highest reward
  - Sometimes high wages do not incentivise workers to move jobs
- Difficulty moving between jobs - occupational
- Difficulty moving to a new location to work - geographical
- Possible reasons
  - Has not got the skills and qualifications (O)
  - Contracted (O)
  - Job is very far away (G)
  - May have to leave family and friends to do job (G)
  - Job is in a location with high cost of living (G)
  - Migration controls (G)
- In a free market, labour immobility can be higher because the government is not there to intervene
- e.g. government cannot help advertise jobs in different regions

Monopoly
- When a single firm dominates the market
- Control market supply as no other firms can compete
- Monopoly power
  - > 25% market share
- What can cause a monopoly
  - Ownership of key resource - e.g. rare earth metals
  - Sell a unique product - market dominance e.g. Netflix
  - Legal protection - a patent / copyright

- Why is it a type of market failure
  - In a free market economy no government can prevent a monopoly from exploiting customers
    - High price or low quality
  - Monopolies have no incentive to be efficient because of their market power / waste resources
    - Inefficiency
    - No incentive for innovation
- Netflix
  - Better internet at homes - better complement goods
  - Substitute goods such as cinema or TV has become complacent (inefficient)
  - The rise of Smart TVs

15 Mixed economic system

2023年1月27日 11:25

Definition
- Resources are owned and controlled by private and public sector

Why is there a need for a mixed system
- Market failure
- Types
    - Monopoly power
    - Merit goods
    - Demerit goods
    - Public goods
    - Immobility of labour

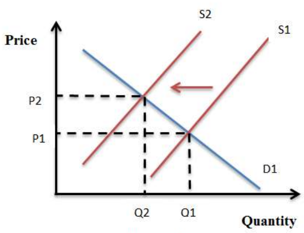
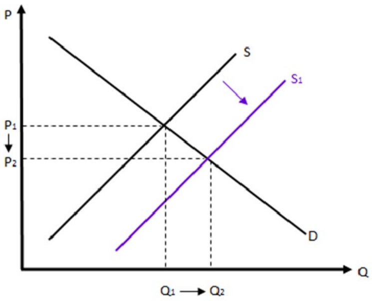
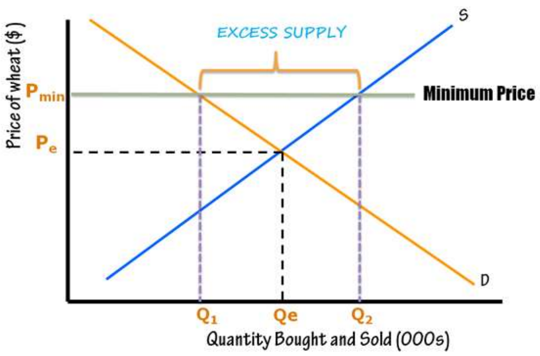
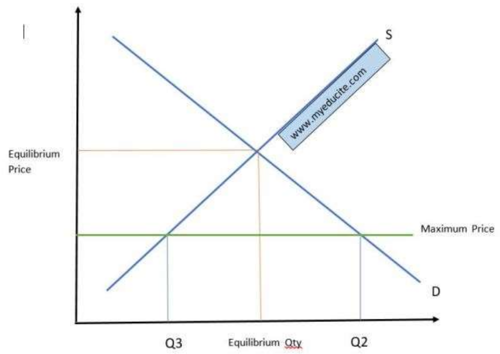
Forms of intervention
- Legislation / targets
    - Maximum price: extension in demand
    - Minimum price: contraction in demand
- Imprisonment
- Fines / taxes
    - 

      Diagram 1
    - Contraction or extension in demand
- Education
- Subsidising
    - 

    - Extension in demand
- State provision / nationalisation
- Privatisation

Minimum and maximum price
- Minimum price
    - Price floor - price cannot be set below it
    - Imposed when the original equilibrium price is too low so it is set above the equilibrium price
    - Makes the good or service less affordable and reduce demand
    - Demerit goods
    - May cause excess supply and government failure
    - May result in an inefficient allocation of resources

- 

- Maximum price
  - Price ceiling - price cannot be set above it
  - Imposed when the original equilibrium price is too high so it is set below the equilibrium price
  - Makes the good or service more affordable and encourage consumption
  - Merit goods
  - May cause excess demand and government failure
  - May result in an inefficient allocation of resources
  - 

<u>Rules and regulations</u>
- Advantages
  - Consumption of the good or service may be changed
  - People's behaviour may be changed in the long term
    - Awareness of the negative impacts of demerit goods is raised
    - Awareness of the positive impacts of consuming merit goods is raised
- Disadvantages
  - Underground markets to provide the good or service often at a very high price.
  - The government has no control over the quality of the goods produced in underground markets
    - In some cases can be dangerous for consumption
  - People break the rules e.g. fake ID cards
  - The fine or punishment must be enforced and set sufficiently high to discourage consumption

<u>Education</u>
- Change pattern of demand for merit / demerit goods
- Correct market failures

<u>State provision</u>
- Benefits
  - Goods and services are accessible to all individuals (public goods)
  - Merit goods causes social benefits when individuals consume
- Drawbacks
  - Opportunity cost
    - Expenses could be spent on other items
  - Overconsumed because it is free of charge
    - Leading to long queues/shortages
  - Free riders issue
    - Not contributing to tax income

Privatisation
- Advantages
  - Earns profits from sale of assets
  - Reduced running costs for government
  - Increase tax income from private firms
  - Private sector firms may work more efficiently to remain competitive because of the profit incentive
  - Reduce tax charged because people don't need to finance the business
- Disadvantages
  - May create private sector monopolist
  - May still require government regulation and intervention to protect public interest
  - Opportunity cost
    - Social benefits provided by state owned enterprises e.g. employment / economic stability

Nationalisation
- Advantages
  - Protect employment
  - Promote economic stability in key industries
- Disadvantages
  - Large opportunity cost

Indirect taxation
- Advantages
  - Reduces demand of demerit good (tax = increase price)
  - It generates tax revenue for the government to fund important goods and services
- Disadvantages
  - Price inelastic (e.g. cigarettes) so not effective in reducing demand
  - The indirect tax will be regressive, so will have a greater impact on low income earners than high income earners

16 Money and banking

2023年2月8日 11:44

Characteristics of money

- Scarcity
  - Money must be limited in supply in order to keep its value
  - The money retains its value over time by being relatively scarce
  - The supply of money, including banknotes and coins, is regulated by the country's central bank
- Portability
  - Must be easy to carry
- Acceptability
  - Money is widely valued, recognised and accepted as a medium of payment for goods and service
- Divisible
  - Can be divided into smaller accounts
- Durability
  - Can last a long time and be easily replaced
- Uniformity
  - Easily recognisable
  - All legal tender denominations of banknotes and coins of the same value will look identical in terms of shape, size and design

Forms of money

- Cash
  - Banknotes and coins are a physical form of money
  - Convenient for many transactions, but inconvenient and risky to use cash for larger transactions
- Bank deposits
  - Money reserves placed in commercial bank accounts
  - This form of money accounts for the vast majority of all money in modern economies
  - In electronic form, transferred electronically by credit and debit cards or make online bank transfers
- Central bank reserves
  - Consist of the money held by the central bank
  - Used by commercial banks to make payments between themselves
  - Electronic form of money

Functions of money

- Medium of exchange
  - Money allows goods and services to be traded without the need for a barter system
  - It is widely recognised and accepted as a means of payment for goods and services (acceptability)
- Method of deferred payment
  - Money can be used to pay off debt as it is still acceptable in the future
- Unit of account
  - Measures the market value of different goods and services
  - It allows the value of something to be expressed in an efficient and understandable way
    - Price = measure of value
    - It is difficult to measure value without price
- Store of value
  - Money can be stored until ready to use at a future date
    - Save money and use it in the future
    - Flexibility in timing of their sales and purchases

Problems of bartering

- The key problem = the need for a double coincidence of wants
    - e.g. the person with chickens must find a trader who wants four chickens in exchange for a sheep
    - Bartering is highly inefficient
        - Two people engaged in a transaction must both want what the other person is offering
- Divisibility
    - Many goods cannot be divided
    - e.g. half a sheep or a third of a chicken
- Portability
    - Many goods are not easily portable

Central bank

- Definition
    - Oversees the banking system and manages the money supply
- Functions
    - Issues notes and coins
        - Has the sole rights to issue legal tender in its own country
        - The coins and notes are produced in the mint and then given to the central bank to allocate to government and commercial banks
        - The central bank also replaces worn out notes or older notes not currently in circulation
    - Lender of last resort
        - Commercial banks must keep a certain percentage of funds in the banks at all times (reserve requirement) for emergencies
        - May need to borrow if they do not meet this amount
        - Build the public's confidence in the banking system
    - Government's bank
        - The central banks receive deposits from the government and keeps revenue raised by the government
        - Makes payments on its behalf
        - It also lends money to the government when needed
    - Bankers' bank
        - All banks in the country must have their accounts with the central bank
            - The central monetary authority can easily manage the claims made by banks against each other
        - Oversee cash reserve for other banks
        - Reduces the need for cash withdrawals
            - Enabling commercial banks to function more efficiently
        - Lend money to banks when needed

The importance of central banks

- Government
    - Controls monetary policy (change in interest rates) and is banker to government and commercial banks
- Producers
    - Changes in interest rates affects the amount firms can borrow
- Consumers
    - Can change consumer behaviour as they may have to pay more to borrow money

Commercial bank functions

- Accepts deposits
    - Businesses and individuals can deposit money in the bank
    - They can put their money into a savings account (typically timed deposit but higher interest) or current account
    - Sight deposits = take money out when needed
    - Time deposits = take money out after a set period of time

- Making advances e.g. loan and overdraft
    - People and businesses can get a loan or a mortgage from the bank. This means the customer gets the money in advance of paying for it as they can pay off the debt (money owed) over a number of years
    - Customers can also use overdrafts which is spending money beyond the amount of money in the account
- Offers financial services
    - Commercial banks allow people to buy and sell foreign currency
    - Increase money supply in an economy by lending money
    - Customers can also get financial advice such as investment strategies or savings advice

~~Commercial bank secondary functions~~

- ~~Collecting and clearing cheques on behalf of their clients~~
- ~~Offering additional financial services~~
    - ~~e.g. tax advice, foreign exchange dealings, buying and selling of shares~~
- ~~Providing safety deposit boxes for customers to safeguard high valued possessions~~
    - ~~e.g.~~
- ~~Providing money transferring facilities~~
- ~~Offering credit card facilities for the convenience of customers~~
- ~~Offering internet banking facilities~~

17 Spending, saving and borrowing

2023年2月27日 9:05

Factors influencing spending

- Disposable income
  - Income - deductions (+ additions)
  - The amount of income a person has that is available to spend
  - Low income
    - Most of income on necessities
  - Middle
    - Lower proportion of income on necessities
    - Some luxuries
  - High
    - Smallest proportion of income on necessities
    - Purchase luxury goods and services
- Inflation
  - Price level is increasing
  - Spending would rise because people is aware that the price will rise in the future
  - Discourage saving because value of money will depreciate
- Wealth effect
  - Value asset e.g. house rising so spending more
- Interest rate
  - Increased interest rate reduce spending
    - More reward for saving so people save more and spend less
    - Cost of borrowing increases so demand for loans fall and leads to less consumer spending
    - If an individual has an existing loan or mortgage, there is an increase in interest repayments so they have less disposable income and spend less
- Age
  - Young single people
    - High spending
    - May earn a relatively low income
    - May spend most of it on goods and services to support their lifestyle
  - Older people
    - Typically have higher income
    - May save a greater proportion for buying properties or marriage and children
  - People with family
    - Save more for children's university education
    - May spend more on children
  - People after retirement
    - Dissave because they have no income so have to spend own savings
- Confidence levels
  - During recession or a period of low economic growth people may prefer saving
    - Lack confidence about the future of the economy e.g. losing job
  - During economic boom or a period of high economic growth people may spend more
    - Confident about the future

Reasons for saving

- Sacrifice current spending so that they have funds to spend in the future e.g. retirement, children's education.
- Save a portion of their income in a bank or other financial institution in order to earn interest
  - Banks also provide a secure place for depositing savings.
- A person may save for precautionary reasons
  - So they have enough money in case of an emergency such as accident or loss of job

Influences on saving

- Age
    - Older people are more likely to save
    - Older people have less bills to pay so they spend less
- Interest rates
    - A rise interest rate increases saving
        - Reduces spending because people with debts have higher payment to make to the lender
        - People save more to get a higher rate of return
- Attitudes to saving (culture)
    - Different spending habit and different attitude to saving in different countries
    - e.g. More borrowing by credit card in the USA and the UK, less in Germany and Japan
- Confidence
    - People spend money more willingly if people have confidence in the economy so less saving
    - People spend less money if people lose confidence in the economy so more saving for emergency
- Income level
    - Higher income is more likely to save
    - Smaller proportion spent on necessities, able to save a higher proportion
- Language
    - More likely to save if speak certain languages e.g. Chinese and Japanese

Influences on borrowing

- Interest rate
    - Higher interest rate discourages borrowing because it is more expensive
- Availability of funds in commercial bank
    - The central bank controls the amount of funds available for borrowing by setting the cash reserve ratio
    - A decrease in the cash reserve ratio means that more funds are available for lending
    - If banks have money they are more likely to lend money out
- Confidence levels
    - Tend to borrow more if confidence in economy is high so they can pay the bank loans
- Wealth
    - Bank will be more willing to lend money to wealthier individuals or highly profitable firms
    - They have valuable assets and so are more likely to repay the loan
    - Banks often make sure that they have some guarantee to get money back to avoid bad debts
    - Large businesses or richer people have valuable assets that can be used as collateral for a loan

18 Labour market (Workers)

2023年3月1日 11:43

Economic reasons for differences in earnings

- Differences in productivity
  - Higher productivity = higher wage
- Differences in risk
  - Compensate for negative aspects
  - Higher risk = higher wage
- Differences in skill level
  - Skilled workers earn more in general because of the high demand and low supply
  - Unskilled jobs are relatively easy to increase in supply in short term so they are elastic in supply
  - A small increase in wages is needed to attract them
  - Skilled jobs need a lot of training and high level of qualification so inelastic in supply
  - Large increase in wages is needed to attract them
- Discrimination
  - Differences in gender
  - There are more women in part-time work than men so their earnings are lower on average
  - Women take career breaks to have children and therefore miss out on promotional opportunities
  - Women may accept low-paid and part-time jobs as hours are flexible and can fit in with childcare arrangements
  - Women may face discrimination at work
- Differences in sector of the economy
  - Primary: miner, farmer
    - Tends to have the lowest wages
    - Much of the work is unskilled
    - Output have low sales value
  - Secondary: manufacturing
  - Tertiary: banking, sales, teaching
    - Tends to have the highest wages
    - Produces services of a higher value than in the primary sector so workers are rewarded accordingly
      - High added value
    - Lots of training and qualification needed so there is higher wages to attract people
  - Higher value of goods produced = higher wage
- Public and private sector
  - Salary in the public sectors are generally less than the private sector
  - Jobs in the public sector are more secure and have pensions
  - Private sector jobs have higher earning potential but are less secure and often have no pension

Wage factors

- Wages
  - Time-based, paid hourly, daily or weekly so is a variable cost to firms
- Salary
  - Paid monthly at a fixed rate irrespective of the amount of work done so they are fixed costs
- Basic pay
  - The amount of money for working
- Earnings
  - Basic pay + additions e.g. bonus
- Overtime
  - Paid for work beyond normal hours (higher rate)

- Bonus
  - Extra money for meeting a target
  - Dependent upon performance
- Commission
  - A percentage of the values of products or services sold
- Piece rate
  - Based on amount of work you do
  - A fix amount paid per item sold of produced
  - e.g. bricklayers
- Profit-related pay
  - Based on the amount of profits made by a firm
- Share options
  - Workers receive shares in the firm to give them an incentive to work hard so the firm is profitable
- Fringe benefits or perks
  - Additional benefits which have a monetary value

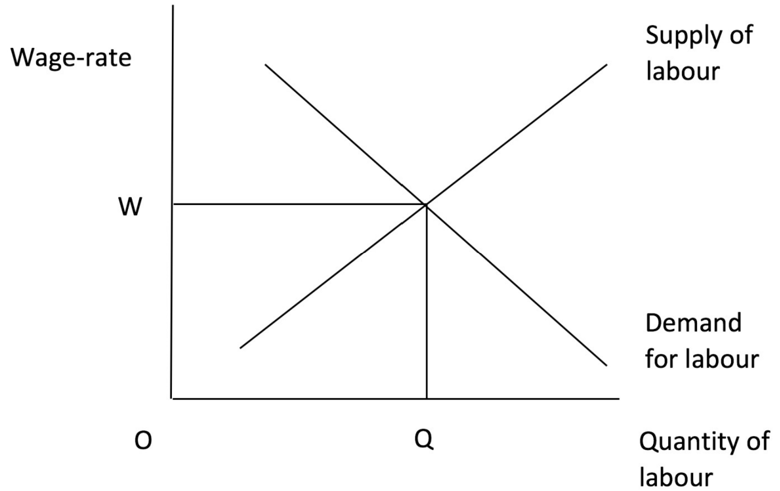
<u>Non-wage factors</u>

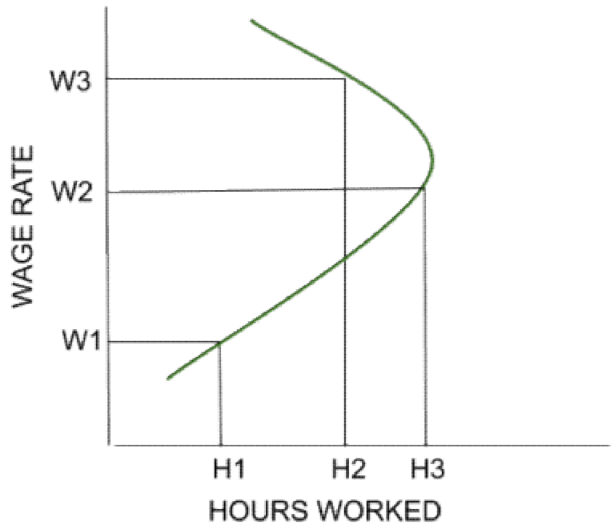
- Level of challenge
- Career prospects
  - Are there opportunities for promotion within the firm or will a person have to change jobs to be promoted?
- Level of risk involved
- Length of training required
- Length of education required
- Recognition in the job
  - If the worker receive praise and recognition for their performance at work
  - If a worker feel respected they may then be motivated to work harder and remain in the job
- Job satisfaction
  - If a worker feel satisfied and happy in their work they may work harder and stay in the job longer
  - e.g. voluntary employment
- Level of experience required
- Annual leave / holidays
- Perks

<u>Factors affecting labour market</u>

- Labour demand = by firms
- Labour supply = by people

<u>The labour market diagram</u>



- 

<u>Factors that affect labour supply</u>

- Anything that influence the amount of workers willing to work
- Working conditions
  - Better working conditions attracts people to work in the firm
- Income tax rate
  - Higher disposable income if tax rate falls
  - More motivation to work
- Migration
  - More people with the required skills able to work

<u>Factors that affect the structure of labour supply</u>

- Labour force participation rate
  - The percentage of the working population that is working rather than unemployed
- Availability and level of social benefits
  - Welfare benefits are paid to the unemployed
  - If welfare benefits are high and readily available this can discourage people from seeking employment
- Changing social attitudes
  - More women are entering the workforce and delaying having families
  - More men are looking after the home and children

<u>Factors that affect labour demand</u>

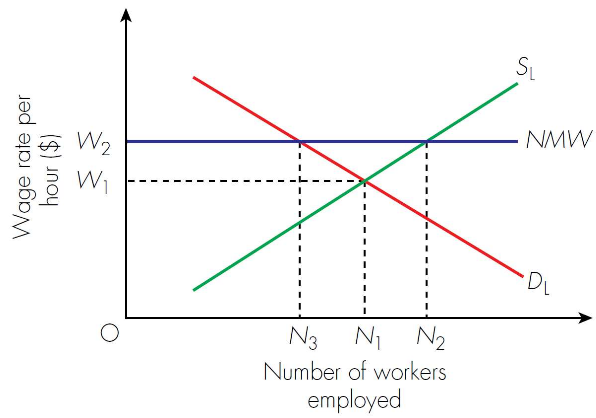
- Anything that affects business decisions to hire workers
- Labour demand is a derived demand
  - Labour demand depends on demand for products e.g. increase demand in tourism might increase demand in pilots
- Profit levels
  - Higher profit enables the firm to hire more workers so there will be more labour demand
- Level of total demand in the economy for good / service produced
  - Labour demand is derived demand
  - During a boom or period of economic growth demand for goods and services will be higher hence the demand for labour to produce them increases
  - Demand of labour falls in recession or declining economic growth
- Productivity of labour (output per worker over a period of time)
  - The demand for workers increase as their productivity increases through training and changes in production methods
  - Motivating the workers can increase productivity
    - Allowing them to make suggestions and put them into practice
    - Recognising workers' achievements

- Price of capital relative to wages (technology and machinery)
  - Technology and machinery can often perform the tasks carried out by the workers and replace the workers (substitute)
  - They are expensive to purchase in the short run but saves money in the long run
  - Lower price for technology and machinery will decrease labour demand

Factors affecting relative bargaining power

- Trade unions
  - Use their bargaining strength to negotiate on behalf of their members
  - The more united the trade union and the larger its membership, the more successful it is likely to be in negotiating with employer representatives.
- Age and experience
  - Age has a direct impact on workers' bargaining power in achieving higher wages
  - Inexperienced workers, such as graduates in their first year of work, will earn less than highly experienced workers
  - Workers can negotiate higher salaries and wages if they have a greater degree of experience
  - A person's earnings potential declines after the age of 60.
- Level of education
  - People with higher level of education tends to earn more and is more able to negotiate higher wages

Minimum wage

- 

- Advantages
  - Workers receive a fair wage for an hour's work and are not exploited by employers
  - Unemployed people may have an incentive to work
    - The wage rate may be more attractive than relying on welfare payments
  - Low income earners may have more money to spend
    - This may increase consumption in the economy
    - Easing any fears that higher wages (and hence costs of production) might cause unemployment
- Disadvantages of a minimum wage include the following:
  - Workers who earn more than the minimum wage may request a higher wage rate
    - Maintain the wage differential between them and workers who earn less than they do
    - e.g. when cleaners in an office receive a pay rise as a result of an increase in the NMW, other office staff may ask for a wage increase to maintain the wage difference
    - Causes an even larger increase in the cost of labour for firms
  - Unemployment in the economy may increase
    - Firms face higher wage bills and reduce their demand for labour
    - Firms may purchase machinery and equipment to reduce the number of workers required

Specialisation / division of labour

- Labour focuses on a particular task
- Benefits of specialisation / division of labour
  - Increased skill of worker

    - They repeat their task
    - Earning potential may increase
  - Workers become experts in the field
    - Higher productivity and efficiency
  - Quality of the product or service increases
  - Firm should get more profit as average costs fall
    - Average cost = total costs / quantity produced
    - Total cost and quantity produced both rise
  - Less time wasted moving between tasks
  - Output in country should rise so higher standard of living
- Negative effects
  - Workers become bored and may make mistakes
  - Workers may become alienated, especially for those specialising in low-skilled work
  - Production process may become overspecialised
    - Too dependent on an individual worker or group of workers
    - Too much interconnection so if one worker does not do their job the whole system fails
  - Risky for individual as only specialise in one skill
    - Deskilled in other areas
    - Lack of flexibility (labour immobility)

Factors affecting elasticity of labour demand

- Labour costs as a percent of total production
  - When labour expenses are a high percent of total costs then labour demand is more elastic
- Ease and cost of factor substitution
  - Labour demand is more elastic when a firm can substitute easily between labour and capital inputs
- Price elasticity of demand for the final output
  - Inelastic of the demand for final produce is inelastic
  - Can get away with increasing prices
  - When workers ask for pay rise they can just raise the price to compensate

Factors influencing elasticity of labour supply

- Elastic in lower skilled jobs because it is easy to switch to the job
- Inelastic when the job requires specific qualification and training as it is difficult to switch to the job

Mobility of labour

- Geographical mobility
  - The willingness and ability of a person to relocate from one part of a country to another for work
  - Reasons for geographical immobility
    - Family ties and related commitments
      - People may not want to leave their family and friends
      - Other commitments such as schooling arrangements for children
    - Costs of living
      - May be too high in another location making it uneconomical for a person to relocate there
- Occupational mobility
  - The extent to which a person is able to change between jobs
  - Depends on the cost and length of training required to change professions
  - The more skilled and qualified a person, is the greater their occupational mobility tends to be

19 Trade unions

2023年3月15日 11:04

What is a trade union

- Trade unions are organizations that promote and protect the interests of their members (employees) to improve their wages and working conditions

Types of trade unions

- Craft trade union
  - Organize the workers according to their particular skill
- Industrial
  - Represent all workers in their industry regardless of their skills or the type of work done
- White collar
  - Recruit professional, administrative and clerical staff and other non-manual workers
- General trade union
  - Usually prepared to accept anyone

The aims of unions

- Negotiating improvements in wages and other non-wage benefits
- Defending employees' rights and jobs
- Improving working conditions, such as securing better hours of work and better health and safety policies
- Supporting members who have been dismissed or who are taking industrial action
- Developing the skills of union members, by providing training and education courses
- Improving employment law

Reasons for claims

- A rise in the cost of living due to inflation which reduces the real wage of trade union members
- Workers in comparable occupations who have received a wage increase
- Increased profits of the firm and industry as a whole, justifying a higher return for labour services
- An increase in the productivity of labour, further justifying an increase in wages

What can unions do to achieve aims

- Collective bargaining
  - Negotiations take place between trade unions and employers over improvements in wages and other non-wage benefits for employees
- Industrial action
  - Increase their bargaining strength. Industrial action disrupts production, increases costs and reduces revenues for employers
- Forms of industrial action
  - Overtime ban
    - Does not do any extra work beyond the working hours
  - Work to rule
    - Work to fulfil the minimum requirements of their job, do not go beyond the contract
    - Cannot be disciplined or sacked because they have met contractual responsibilities
  - Go-slow
    - Complete work very slowly
    - Productivity and efficiency of firms fall
    - Morale of workers may drop as a result of low targets or productivity
  - Sit in
    - Turn up to work but do nothing
    - Production of goods and services ceases temporarily and immediately impacts the firm
    - Workers have a loss in wages and may fall in standards of living if sustained
  - Strike

    - Refuse to work
    - Output of goods and services of the firm ceases
    - Workers do not get paid so they lose their wages / salaries

<u>Reasons for growth and decline of trade union membership</u>

- Growth of trade union membership
  - Growth in manufacturing jobs in these countries
    - Manufacturing industry is often unionised
    - Workers typically receive low pay and have poor working conditions
  - A widening wealth gap and higher costs of living
    - Cause workers to petition for higher wages and better working conditions
- Declining trade union membership
  - Government legislation which seeks to reduce trade union influence
  - A decline in manufacturing jobs in these countries
    - Manufacturing is traditionally unionised
  - Growth in part-time employment
    - Part-time workers are less likely to join a trade union
  - A growing number of firms independently agreeing to fairer terms and conditions of employment as part of their corporate social responsibility without negotiating with trade unions
  - An increase in unemployment
  - An increase in employment in small firms
    - It is more difficult to organise trade unions within such organisations
  - An increase in the number of self-employed people
    - They are not trade union members

<u>Union bargaining strength</u>

- Strong bargaining position if
  - The union represents most or all of the workers in the firms or industry
  - Union members provide essential goods and services such as health care and electricity (necessities)
  - The union is able to support its members financially during strike action
- Weak bargaining if
  - Many workers in the firm or industry do not belong to a union
  - Union members provide non-essential goods or services for which there are many close substitutes
  - The union lacks financial resources
  - Laws severely restrict union activity

<u>Advantages and disadvantages of a union membership</u>

- Play a positive role in an economy
  - They act as a channel of communication between employers and employees
    - Through negotiations and collective bargaining, they help to solve disputes and settle pay claims harmoniously and efficiently
  - They negotiate with employers on behalf of their members for better pay and working conditions
    - This benefits the government as productivity also improves
    - Overall, there is a positive impact on standards of living
  - They negotiate with the government for the introduction of or an increase in the minimum wage
    - Also help to increase standards of living for the poorest workers
    - Increased pay and improvements in working conditions may lead to a better motivated workforce and result in an increase in the profits of firms (increase productivity)
  - Unions can help to reduce conflict and develop improved industrial relations
    - Ultimately benefits fi rms through improved labour productivity and higher employee motivation and loyalty
  - They offer legal support and advice to workers who may have lost their jobs or be facing the

threat of redundancies

- Potential negative impacts
  - Trade unions are often portrayed in the media as having a negative role in an economy when they take industrial action
    - May result in lost productivity of workers
    - Strikes are the most extreme form of industrial action and can cause serious disruption to firms and the wider economy
  - From an employer's point of view
    - A trade union's demands for better pay and conditions for its members may increase the firm's production costs
    - Reduce the firm's profits
    - If so government tax revenues will also fall

20 Firms

2023年4月19日 11:02

Economic sectors

- Primary
  - Contains firms that:
    - Extract raw materials from the earth
  - E.g. fishing, mining and agricultural farming
- Secondary
  - Contains firms that:
    - Manufacture goods, changing raw materials into finished products
    - Construct buildings, roads and bridges.
- Tertiary
  - Contains firms that:
    - Provide services to the general public and other firms
  - E.g. retail shops, doctors, lawyers

Public and private sectors

- Public sector
  - Economic activities directly involving the government
  - e.g. provision of state education / healthcare
  - Main aim = provide a service to the general public
- Private sector
  - Economic activities of private individuals and firms
  - Sole trader: business owned and controlled by a single person
  - Partnership: business owned by between 2-20 people, with share ownership and risk taking
  - Private limited company: owned by shareholders, unable to buy or sell shares without the consent of other shareholders
  - Public limited company: owned by shareholders, openly and freely buy or sell their shares on a stock exchange

Measure size of firms

- Number of employees
- Market share
  - Firms sales revenue as a proportion of industry sales revenue
- Market capitalisation
  - Stock market value of a company
  - = total number of shares * current share price
- Sales revenue
  - Unit price of the product * quantity sold

Reasons of staying small

- Responsive to customer needs
  - Adapt quickly to the changing demands
- Personal shopping experience
  - Compared to self-service style in large supermarkets
- Located in a remote area
  - Small demand
  - Only local seller of provisions
- Marketing reasons
  - Advertising
- Tax reasons
  - May not have to pay VAT
- May be in an niche market (a very specific market)

- Providing a range of goods which cannot be bought in large firms
- e.g. speciality cheese and wines

Advantages of small firms

- Few legal formalities exist
  - Sole tradors are quite easy to set up
  - Start-up costs are usually much lower than setting up larger types of business
- The sole trader is the only owner of a firm
  - Receives all of the profits made by the business
  - Incentive to work hard to become successful
- Personal advantages of being sole trader
  - Not having to take orders from others
  - Flexibility in decision making e.g. working hours
  - Higher self-esteem from being successful
- Likely to know their customers on a more personal level
  - Lead to better relationships
  - Larger firms might not have the time to get to know their customers - impersonal service
- Smaller firms are easier to manage and control
  - Larger firms can suffer from diseconomies of scale due to coordination problems

Disadvantages of small firms

- Limited start-up capital
  - Difficult to raise finance to establish the business
  - Sole traders may find it difficult to find any funds beyond their personal savings
  - Difficult to expand because of the lack of finance available
- Small firms have the largest risk of business failure
  - Intense competition due to the vast number of small firms that exist
  - Larger and more established businesses often poses a huge threat to the survival of smaller firms
  - Have to keep the customers happy all the time
- The success very much depends on the abilities and commitment of the owners
  - Hard to run
  - Sole traders often have to do their own financial accounts, marketing and management of human resources
  - Unlikely to be equally effective in the different roles
  - Having to do all these tasks adds to the workload, stress and challenges in running a small firm.
- Lack of continuity
  - The running of the business can be jeopardised if the owner is not there
  - Maybe due to going on holiday, or due to illness
- Higher unit costs of production
  - Because they are unable to exploit the benefits of large-scale production
    - No economies of scale compared to large firms
  - So their prices tend to be less competitive than those of larger competitors
  - This can reduce the competitiveness and profits of smaller firms
- Market share does not increase
- Perspective of others are not considered (staff)

Business growth

- Internal / organic growth
  - When firms expand using their own resources
  - Ways to grow
    - Increasing the number of branches (stores) within a particular country
    - Opening branches in different countries
    - Selling their products in a greater number of countries
    - Finance the expansion using profits earned within the business
  - Increase its market share
- External / inorganic growth

- Expansion involves another organisation
- Merger
  - Two or more firms joining together to form just one firm
- Takeover
  - A firm is taken over by another through buying a majority share
  - Can be hostile when the firm being taken over does not agree or the two firms might have agreed to takeover
- Franchise
  - An individual or firm purchases a license from another firm to trade using the name of the parent company

<u>Types of mergers</u>

- Horizontal
  - Same sector
  - Benefits
    - Higher market share
    - Gaining skilled employees from each other
    - Operating with fewer employees, reduce cost of production
    - Economies of scale
  - Drawbacks
    - May be duplication of resources
      - Some workers may lost their jobs - anxiety - less productivity
    - Increasing costs arising from diseconomies of scale
    - Suffer from culture clashes after merged so communication and organisational problems
- Vertical - different sector same industry
  - Backward - closer to primary
  - Forward - closer to tertiary e.g. farmer takeover carpet producer
  - Benefits
    - Firm in secondary sector has control over the quality of raw materials supplied
    - Price of raw materials fall as the manufacturer does not have to pay another firm for them
  - Drawbacks
    - Cost of running in the primary sector increases total cost as more land, labour and capital resources are used
    - Transport costs increase for the merged firm as raw materials were delivered by external suppliers
- Conglomerate integration
  - Unrelated sectors and industry
  - Benefit
    - Diversification spread risk as a failing business in the group may be protected by other successful businesses
  - Drawback
    - May become too diverse and cause management problems in human resources and capital
    - If a segment is underperforming it may drain resources from others

<u>Economies of scale</u>

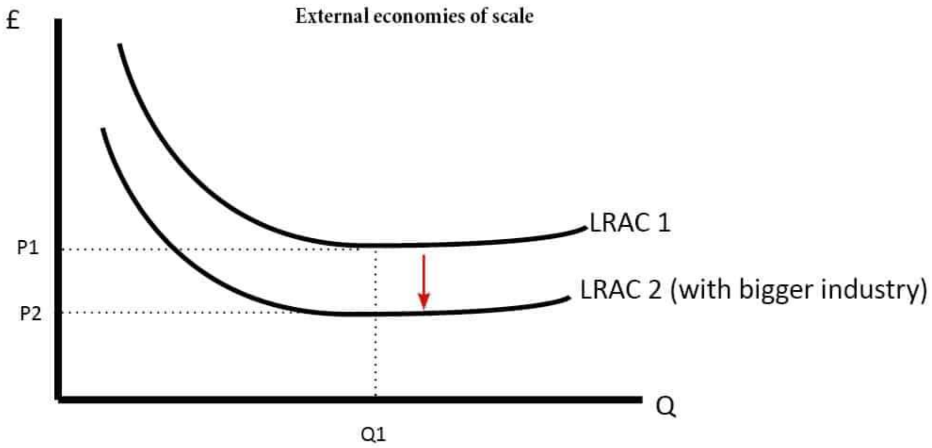
- As the size of the firm increases the average costs will fall in the long term
- Average cost = total costs / quantity output

<u>Internal economies of scale (why do average cost fall)</u>

- Really fat mums try making pies
- Average cost↓ = costs↑ / quantity↑↑↑
- Risk bearing economics of scale
  - Bigger firms have lower risk of failing
  - Spread risks as weak sales in one country can be supported by another
  - Risk = a cost for firm

    - Spread over more quantity, risk / Q
- Marketing economics of scale
    - Advertising costs / quantity large = low average marketing cost, cost spread over large quantity
    - A lot more products but small increase in cost
- Financial economies of scale
    - Cheaper loans from bank
    - More easily get loans because perceived by less risky
- Buying economics of scale
    - Bulk buying raw materials so get discount
- Technical economics of scale
    - Invest in machinery to help lower average costs
    - Produce in large quantity so high initial cost can be spread across
- Managerial economics of scale
    - Have specialist managers
    - Increase productivity despite high salary
- Research and development economies of scale
    - Large firms can fund R&D
    - Be innovative and create products to become market leaders

<u>External economies of scale</u>

- As the industry grows in size a firm's long run average costs fall
- 

- External = irrelevant to the situation
- The firm enjoys lower average costs, not because they have grown in size, but because something externally has benefited them
- Shift in the curve of average cost

<u>Returns to scale</u>

- Ratio of input to output
- Double input - double output = constant returns to scale
- Economies of scale: double inputs - more than double output = increasing return
- Diseconomies of scale: double inputs - less than double output = decreasing return

<u>Sources of external economies of scale</u>

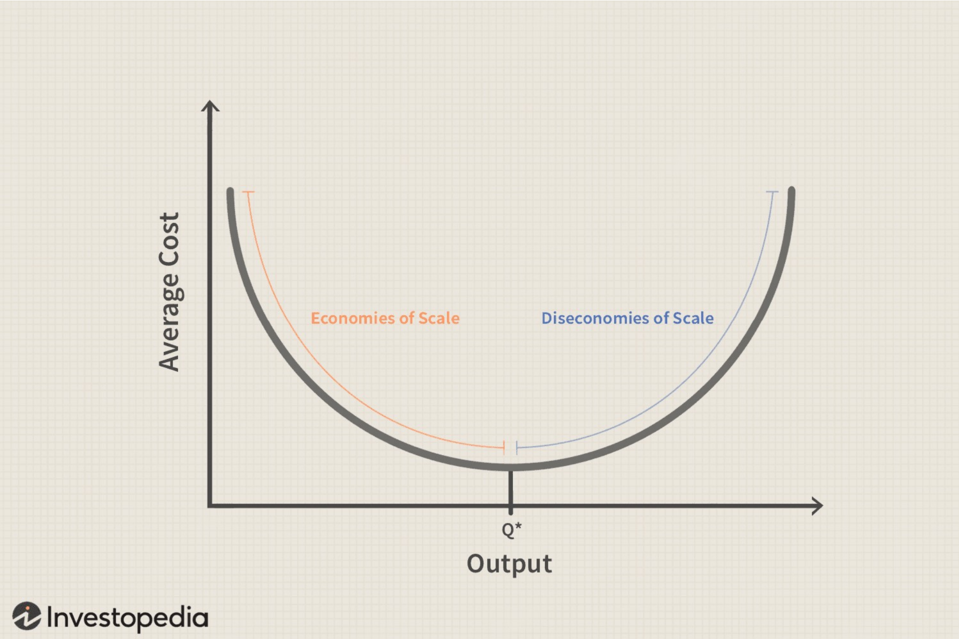
- Government assistance
    - Facilities such as telecommunications, roads, railways and subsidies
    - Efficient transportation, less cost
- Assistance from firms who move nearby
    - e.g. Formula 1 suppliers
    - Easy access to suppliers and reduce transportation costs
- Availability of skilled workers
    - University courses / nearby pool of workers
    - Easy to recruit skilled workers
    - Less cost

- Reputation of area
    - Free publicity and exposure
    - Lots of suitable and qualified worker flock to the area

Sources of external ineconomies of scale

- Scarcity of raw material - price ↑ - average cost ↑
- Shortage of workers - poach from others at a higher wage

Diseconomies of scale

- When average costs of production start to increase in the long run as the size of a firm increases
- 

Why it happens

- Average costs rise
- Control
    - Span of control too wide
    - Difficult to monitor productivity of every worker and some workers feel alienated
    - Less motivation and less productivity
    - Also difficult to coordinate all processes
- Communication
    - Chain of command is too long
    - Too many branches to communicate with effectively due to indirect communication
    - Mistakes made so need to be rebuilt
- Unsuccessful merger
    - Clash of organisational culture
    - May be beneficial to demerge
- Need more employees or new factory for increasing level of production
    - A lot higher total costs, average costs may rise
- Too diverse
    - Operate in areas with less expertise
    - Reduced control and coordination

21 Firms and production

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Demand for factors of production

- Derived demand
  - Depends on the demand for goods and services which the factors will be used to produce
  - Demand for the factors of production in a country results from the total level of demand for goods and services in the economy
    - e.g. firms will demand less labour during an economic recession

- Cost of factors production
  - Higher cost = lower demand
  - If labour costs are relatively high compared with capital they might be replaced with machine and technology
  - Demand of capital depend of the rate of borrowing money
    - High interest rate = more cost to finance capital-intensive production
  - e.g. Apple outsource iPhone and iPad production to Foxconn
- Quantity of factors of production
  - Greater quantity = lower cost = higher demand
  - e.g. higher availability of workforce in China and India have boosted demand from multinational companies for labour
- Productivity
  - Higher productivity = higher demand
  - e.g. Surgeons, pilots and barristers are in high demand due to their highly valued skill and reputations

Labour intensive and capital intensive production

- Labour intensive
  - Production uses more labour compared to capital
  - Higher proportion of inputs is labour
  - Spend more money on labour than other factors
- Capital intensive
  - Production uses more capital compared to labour
  - Higher proportion of inputs is capital
  - Spend more money on capital than other factors

Factors for choosing between labour and capital intensive

- Cost of labour compared to capital
  - More capital intensive methods of cost of labour is relatively high
  - If capital can be a substitute to labour
  - Capital is expensive in short run but save money in long run
- Size of the market
  - Capital intensive production tends to take place for mass-market products
    - e.g. soft drinks, passenger vehicles, consumer electronics
  - Labour intensive production often used for personalised services
    - e.g. private tutor, counsellor, advisor
- The firm's objectives
  - Profit maximising + large market = capital intensive to minimize unit costs for production
  - Other might use labour intensive
    - Smaller scale / safeguard jobs

Capital intensive pro and cons

- Advantages
  - Enables mass production techniques e.g. automation in manufacturing

        - More output in less time than labour intensive
        - Lower unit cost as a result
        - Save money in long run
    - Reduces human error
        - Machinery is more accurate than human
            - Won't be distracted / make careless mistakes
- Drawbacks
    - Higher cost
        - Huge set up costs as machines are expensive to purchase and install
        - High running cost
        - High replacement cost
    - Rely on assembly lines
        - Any breakdowns will cause major problems for the business

<u>Labour intensive pro and cons</u>

- Advantages
    - Customised product / service
        - Suitable for producing highly customised products e.g. tailer-made suits and wedding gowns
        - Customers receive a personalised service so can charge higher prices
    - Products have high quality
        - Workers are highly skilled and experienced
    - More flexible than capital intensive
        - Labour can be used flexibly to meet changing levels of demand
            - Easier to increase / decrease labour employed
        - e.g. retail businesses tend to hire more temporary workers during peak trading seasons
- Drawbacks
    - Can be expensive
        - Hiring highly skilled and experienced workers = higher cost
        - A higher price charged to customers
    - Human errors / mistakes / distracted

<u>Productivity</u>

- Measure efficiency of production
- Output per unit of a factor of a production e.g. a worker

<u>Ways to improve productivity</u>

- Investment
    - Expenditure on physical capital such as machinery, equipment and buildings
    - e.g. investment in the latest technologies to produce more and better quality output
- Innovation
    - The commercialisation of new ideas and products
    - Advances in production technology increase speed of work, communication and enhanced organisation at work to boost productivity
        - More output with less input
- Skills and experience
    - Improve skill and experience = improve labour quality = higher productivity
    - e.g. Apprenticeships / training to boost labour skills
- Higher degree of competition in a market / industry
    - Creates an incentive for firms to be more efficient to remain competitive
        - Increase productivity to be more efficient

<u>Production</u>

- = total output of goods and services in production process
- The conversion of inputs (factors of production) into output
- Measure the value of output

- Using more factors of production - may increase production without a change in productivity

<u>Derived demand</u>

- Demand for a factor of production is dependent on demand for the final product
- e.g. more demand for car → more demand for steel (capital)

22 Firms - costs of production

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Calculations

- Average cost = total cost / quantity
- Total cost = sum of all costs
  - Total costs = sum of fixed costs and sum of variable costs
- Average age = total age / quantity in class
- Total age = sum of all ages
  - Total age = sum of the age of girls and the sum of the age of boys

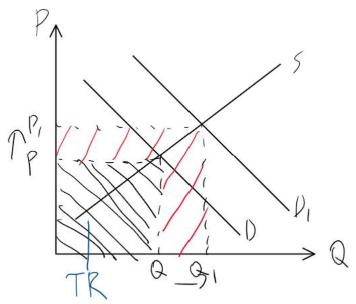
Examples

- Advertising = fixed, not directly related to change in output
- Maintenance = fixed
- Loan repayment = fixed
- Packaging / raw material = variable

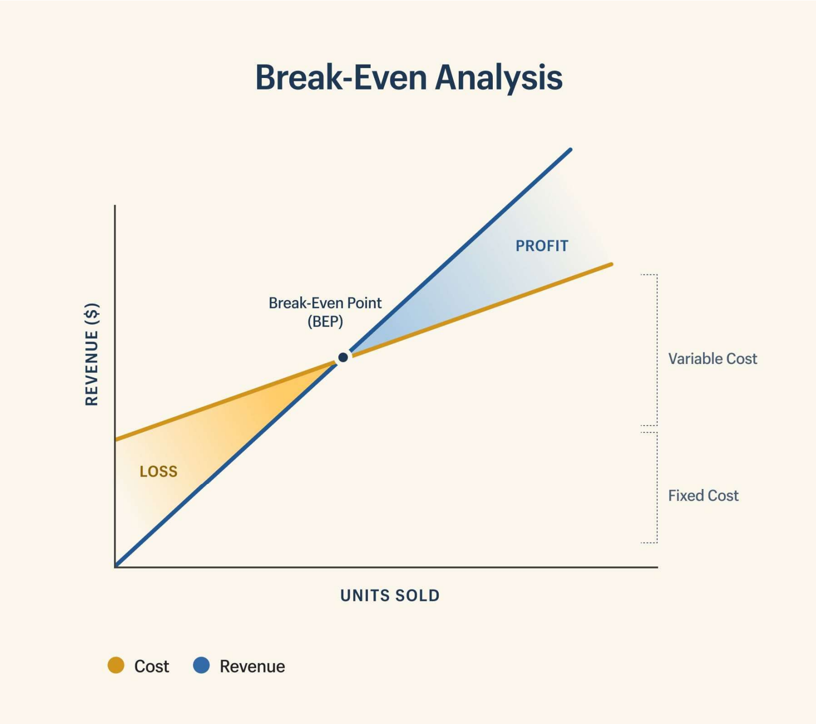
Fixed and variable costs

- Fixed cost
  - Costs that are paid even if output is zero.
  - Costs unrelated to output and do not vary directly with output (pay everyone used)
  - e.g. Insurance, salary, rent
- Variable cost
  - Costs related to output, varies directly with output
  - (Very few things are variable costs)
  - (= marginal cost)
  - e.g. Taxi fuel, wage, raw materials
- Free apps
  - Variable cost = 0

Revenue

- Money received from selling goods
- Total revenue (TR) = P * Q
- Average revenue (AR) = TR / Q = P * Q / Q = P
- 

- Break-even point

- 

<u>Main types of objectives</u>

- Profit maximisation
  - Biggest difference between revenue and costs
  - Incentive for entrepreneurs to take risks
  - Main goal for most private sector firms
- Growth
  - Increase size of business
    - Increase the firm's sale revenues and its market share
    - Increase sale revenue = increase market share
- Survival
  - Keep the firm in business
  - Needs to be profitable to survive in the long run
- Social awareness
  - Business activity that concerns for the quality of life for people in society
    - = socially responsible
  - Include having ethical objectives and using moral principles to guide business activity
  - Improve how general public perceives the organisation
    - Bad perception = low demand

23 Market structure

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<u>Competitive markets characteristics</u>

- Price takers
  - The price firms charge is determined by the market forces of demand and supply rather than firms setting their own prices
  - Unique - set own price
  - Common - use market price
- Similar quality
  - Firms sell homogenous goods (goods are similar) in some highly competitive markets
  - Do not focus on quality as a form of product differentiation
- Lots of choice
  - In some competitive markets firm focus on producing differentiated products
  - e.g. branding, different designs, colours and qualities,
  - e.g. many successful large firms develop memorable slogans
- Low barriers to entry
- Profits are relatively low
  - Both consumer and seller have easy access to information about the product and the price charged by competitors
  - Many rivals in the industry

<u>Features of a monopoly</u>

- Price makers
  - Significant market power as it controls enough of the market supply
  - Can charge higher prices and produce lower output
- Imperfect knowledge
  - Monopolist firms have secret knowledge
  - More knowledge than consumers and other firms
  - A result of the monopolist's ability to protect its trade secrets
- High barriers to entry (hard to get into the market)
  - Prevent new firms from entering the market
  - Obstacles
    - Investment capital
    - Economies of scale
    - Intellectual property / patent: legal protection over a process or product
    - Regulations and approvals
- Single supplier
  - Monopolist = sole supplier of a product in a given market
  - Due to lack of substitute products caused by barriers to entry into the market

<u>How do monopolies occur</u>

- Invent new product / service - patent - legal protection
- Merger
- Own natural resource

<u>Advantages and disadvantages of monopoly</u>

- Advantages of monopoly
  - Economies of scale
    - Operate on a very large scale as monopolists control market supply
    - Lower average cost of production
    - Supply larger quantities of output at lower prices
    - Source of international competitiveness against foreign competitors
  - Innovation

- Monopolists have financial resources to invest in innovation
    - Generate new ideas, products and production processes
    - Act as a source of profit and improve the productive capacity of the company
  - Eliminate wasteful competition
    - Profit seeking firms might not have financial incentive to provide services in remote areas of the country
    - Single provider can gain huge EoS
    - e.g. only one monopoly supplier of postal services in a town / state / country
- Disadvantages
  - Inefficient in resource allocation
    - Can restrict output of a product and / or charge a higher price for it to maximise profit
    - Loss in welfare of customers
  - Charge high price / low quality
    - No substitutes for the product
    - Price inelastic demand
    - Monopolist = price makers so they charge higher prices to maximise profit from this relatively low PED
  - Less innovation
    - Less incentive to be innovative (complacent) due to lack of competition pressure so no worry of survival
    - Innovation = commercial exploitation of inventions
  - Imperfect knowledge about the prices and products being charged
    - Consumers may not necessary make rational choices
    - e.g. mobile phone network providers use very confusing pricing packages
  - High barriers to entry
    - Prevent new firms from setting up in the market
    - Limits the degree of competition - charge higher prices

Price and non-price competition

- Competitive firms engage in price and non-price competitions
- Price examples
  - Discount / sale
- Non-price examples
  - Loyalty points
  - Eco-friendly platform
  - Better after sale service
  - Advertisement
  - High quality raw material / resources
  - Research and development