1 Unit 1

Notes:

- Use prelim practice exam in the end of the **physical workbook**
- Use the topic test in Edrolo in additional materials on each unit

Economics is concerned with addressing the economic problem of satisfying unlimited wants with our scarce resources

Glossery

Chapter 1

→ A **trade-off** is the fundamental concept that choosing one option means giving up another, arising from **scarcity** where resources (time, money, etc.) are limited, forcing choices between competing alternatives, with the value of the best foregone option being the **opportunity cost**

Government subsidy - A benefit given by the government to groups or individuals (childcare for families, students in health fields, ect), usually through cash or tax reduction

Fiscal policy - the use of government spending and taxation to influence a nation's economy, including growth, employment, and inflation

Utility - satisfaction or pleasure an individual receives from consuming good or services

Chapter 3

Ceterius Paribus - all things being equal

Laissez-faire - “let things be” - to describe a ‘pure market economy’

Invisible hand - self-interest and competition working together to regulate the marketplace. Through voluntary trade, competition, and specialising, resources are efficiently allocated without central planning. Eg. Rising prices of goods encourage firms to supply more (Introduced by economist Adam Smith)

Surplus - Something in excess and more than necessary

Counter-cyclical - Opposing; such as the government implementing methods to negate recession/peaks

Welfare - The health and happiness of a person
Consumer sovereignty - Consumers hold the ultimate power in a market economy and dictate what and how much goods to produce
Chapter 4
Discretionary goods - non-essential goods
Autonomous saving - spending even at 0 income

Wants: non-essential resources that satisfy us
Individual - preferred by different people based on perspective
Collective - what all people desire
Recurrant - needs to be satisfied over and over until the future
Complementary - goods/services that are bought together (such as iPhones with chargers)

(1.1) **Opportunity cost**:

$$\frac{\text{Quantity of Good Y Given Up}}{\text{Quantity of Good X Gained}} \quad \text{or} \quad \frac{Rise(Given\ up)}{Run(Gained)}$$

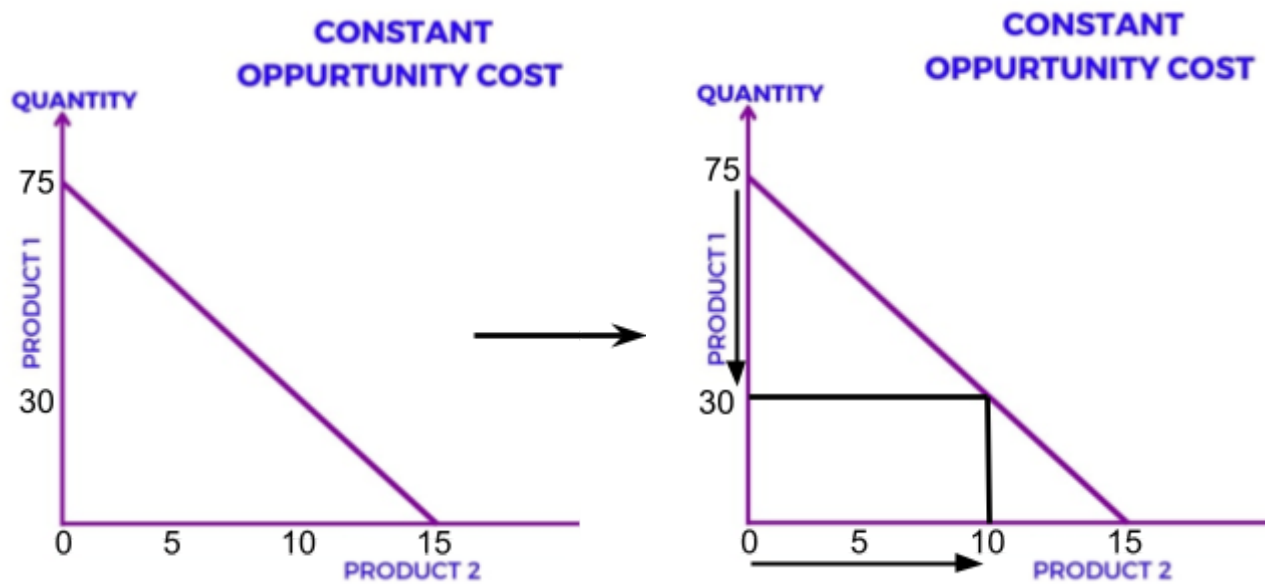
Calculating from a table

Item A	60	40	20	0
Item B	0	40	80	120

Goal: Find the opportunity cost of ONE item B
Subtract 2 points in the same section of both sides →
$\frac{Items\ given\ up}{Items\ gained} = \frac{A: 40-60}{B: 40-0} = \frac{-20}{40}$
→ When 40B is produced; 20A is lost, so the OC of 40B is 20A
⇒ The OC of ONE of B is $\frac{20}{40}$ = 0.5A

⇒⇒ The OC of ONE of A is $\frac{40}{20}$ = 2B

<u>Calculating from a graph</u>



Goal: Find the OC of ONE Product 2

Pick 2 points, then measure the **change from point 1 to point 2**

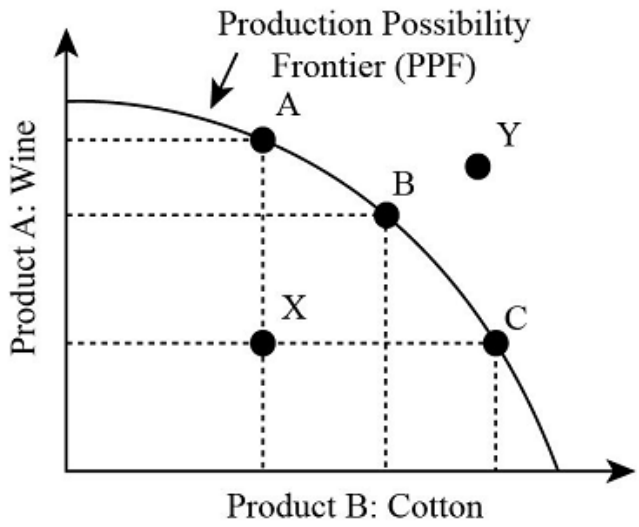
$\frac{Given\ up}{Gained} = \frac{Product\ 1}{Product\ 2} = \frac{75-30}{0-10} = \frac{45}{-10} = 4.5$

→ The OC of P2 = 4.5P1

Easier option: $\frac{Given\ up}{Gained} = \frac{75}{15}$, OC = 5P1

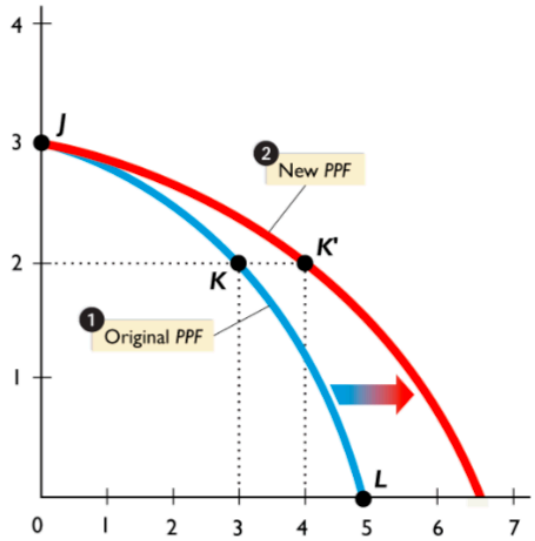
(1.2) <u>Production Possibility Frontier</u>

The maximum output combination an economy can achieve given fixed resources



Y = Impossible
X = Unemplyment

The PPF line moving to Y means an increase in production for BOTH cotton and wine



This movement shows increase in Technology for ONLY one product

(1.3) **Capital vs Consumer goods**

Consumer goods - resources that are used for immediate consumption
Capital goods - machinery, buildings, tools, and vehicles—used by

businesses to produce consumer goods, typically for future profit

How these are used by each:

Individuals must make choices between spending or saving. Spending satisfies present wants while **saving raises future living standards**
A **business** must choose to focus on one area of business activity over another. They have a limited amount of labour, capital, entrepreneurial skill and other resources, so they must focus on the products in which they are likely to maximise profit in the medium or long-term.
Governments can influence the choices of individuals and businesses by affecting the cost of choices and other factors underlying their decision-making processes. For example, a government may **prioritize immediate needs** like increased welfare payments. Consequently, it may allocate less funding to education, infrastructure, and research. In the long term, this will likely result in lower economic growth because the country will have a **less skilled workforce** and **less innovation**.

(1.4) <u>Economic factors underlying choices</u>

Individuals' choices are influenced by many things, like their age, income, expectations, future plans and family circumstances. Personality affects how people make economic decisions. For example, some people like to take risks and embrace change, while others prefer to avoid risk for security.

Individuals must make a choice about how much of their income they will **save** and how much they will **spend.**

Firms face choices in many aspects of their business operations. In pricing its products, a business may choose a higher price, hoping

that this will maximize profits and only have a small impact on the level of sales. The pricing decisions that businesses make are also based on their marketing strategy – whether they are trying to sell a product to the mass market or target a more exclusive group of consumers
Governments can have a significant influence over the economic choices of individuals and businesses. This influence may include making it less or more expensive to make some choices, like taxing cigarettes more heavily to discourage individuals from smoking. And imposing heavy penalties on those who break the law. For example, businesses operating in the same industry are prohibited from meeting together to set prices.

(2.1) <u>**Production**</u>

Inputs → Production → Output
Businesses must decide:

- What to produce
- How to produce it (based on available resources/technology)
- How much to produce
- For whom to produce

Consumers are the deciding factor on these questions

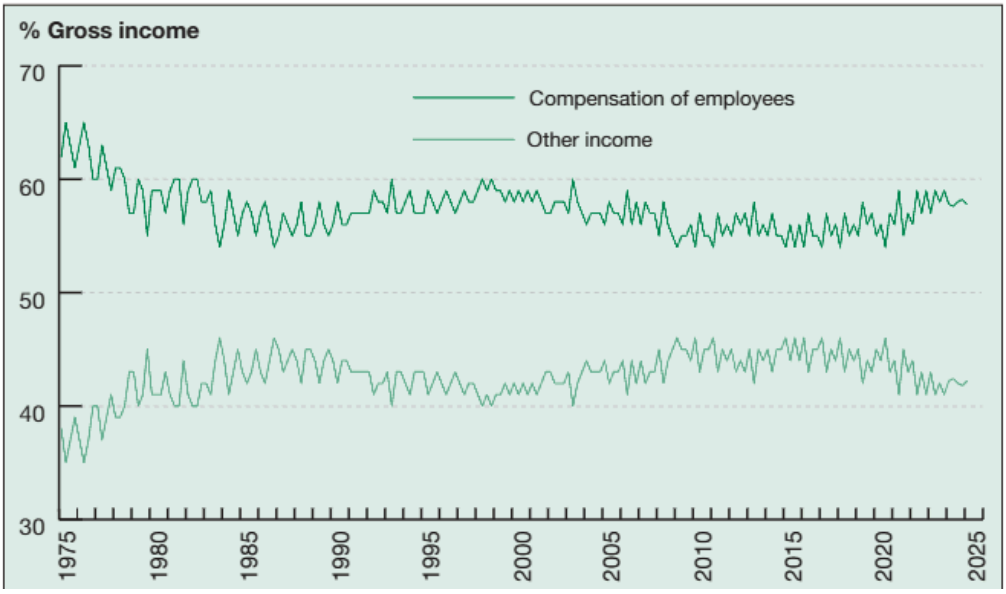
Land	Labour	Capital	Enterprise
Naturally occurring resources	Human effort / expertise	Goods that produce goods	Taking risk to organise production factors to produce
Rewards:			
Rent	Wages	Interest	Profit

(2.2) **Distribution and exchange of G&S**

GDP - Gross Domestic Product - Measures the total income of a society for the production of goods or services within a given year

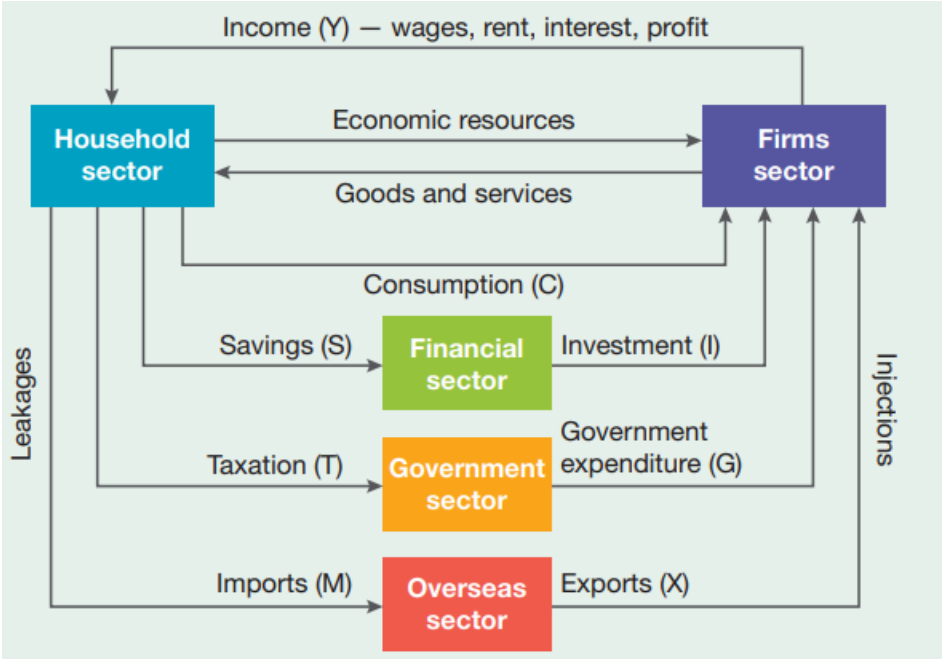
Market economies provide people with income as a reward for their contribution to the production, such as owners of land, capital or entrepreneurial skill, and workers are paid by their value of labour.

Worker's income and wages are not equal, their pay is influenced by hours / skills / enterprise / education qualifications and bargaining power in wage negotiations.



Over time, the distribution of income has increased for enterprise and interest earnings, while employee wages are decreasing.

Circular flow of Income



<u>Individuals</u>:

Supply factors of production to firms:

- Land
- Labour (work)
- Capital
- Entrepreneurship

Receive income in return:

- Rent
- Wages
- Interest
- Profit

→ **Consume** and **spend income on goods and services** produced by firms

<u>Businesses:</u>

Produce goods and services.

Main roles:

- **Hire factors of production** from households.
- **Pay incomes** (wages, rent, interest, profit).
- **Produce goods and services**.
- **Sell those goods/services** to households and other sectors

<u>Financial sector:</u>

Act as financial intermediaries - **matching those with savings to those requiring funds for investment**

Why are they important for future growth?
Savings are required so that funds are available for investments in capital which will **expand the PPF outwards,** making a greater output possible.

Examples:

- Households deposit money in banks → banks lend that money to businesses to expand
- The **RBA** (a central bank) Changes **interest rates** which influence **savings and investment** (changes how much households **spend** and firms **invest**) to manage the economy
- **Foreign investment: buying assets, businesses, or funding projects in another country for a financial return**

<u>Government sector:</u>
The government sector **manages public services**, **redistributes income** and **stabilises the economy**

This is also known as the **public sector**, and when combined with the **private sector**, it makes up the **domestic sector**

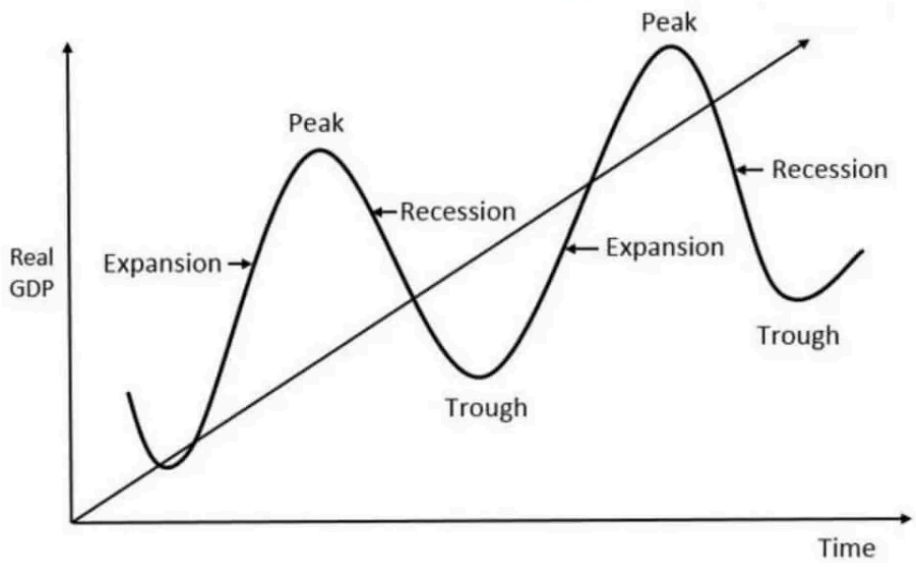
<u>Overseas sector:</u>
The overseas sector represents trade between the domestic economy and other countries

Leakage and injection:

- **Imports = leakage** (goods enter but **money leaves the country**).
- **Exports = injection (**goods leave and **money enters the country).**

(2.3) **The business cycle**

Over time, economies usually experience an overall trend of growth in their output. However, they are subject to a continuing pattern where a period of strong growth is followed by an economic slowdown



Expansion	**Contraction**
Increasing production of G&S	Falling production of G&S
Rising levels of consumption and investment	Falling levels of consumption and investment
Falling unemployment	Rising unemployment
Rising income / quality of life	Falling income / quality of life
Inflation (prices) are rising	Inflation (prices) are falling

Boom - Time of inflation
Inflation = a general rise in prices over time.

It means:
- Your money buys less than before
- Cost of living increases

Inflation is strongest during 📈**Economic Boom / Expansion**
- High consumer spending
- Strong business investment
- Low unemployment
- Demand > Supply

This means:
Consumers raise demand higher than the supply of resources that we have
Result:
➡️ Firms raise prices because people are willing to pay more

What Do Governments Do to Reduce Inflation?

Governments (via the **central bank**) use **contractionary policies**

💰 1. Monetary Policy (Most Important Tool)

Handled by the central bank (RBA in Australia)

> Note: the RBA is independent from the government so it can be a more 'credible' source of stability (an elected government might rig the RBA, stimulate growth and win votes)

Main weapon: Interest Rates

If inflation is high:

> ⬆️ **Raise interest rates** - The RBA sets the interest rates that the banks charge for borrowing/mortgages/business loans

Effects:

- Borrowing becomes expensive
- Spending decreases
- Investment falls
- Demand cools down

➡️ Price pressures reduce

🧾 **2. Fiscal Policy**

Handled by the government

If inflation is high:

- ⬇️ Reduce government spending
- ⬆️ Increase taxes

Effects:
➡️ Less money circulating in the economy
➡️ Lower demand → lower inflation

High inflation causes:

- Reduced purchasing power
- Wage-price spirals
- Economic uncertainty

But too low inflation / deflation causes:

- Weak spending
- Slower growth

👉 Most governments target **low & stable inflation**

(3.1) **Economies**

Mixed Market Economy

A mixed market economy combines **market forces** with **government intervention.**

Key idea:
Resources are mainly allocated by **supply and demand**, but the **government steps in** to correct market failures. **Consumer sovereignty** (consumers determine market demand) is achieved through freedom to choose how they spend money

Features:
- Private ownership dominates
- Profit motive drives firms
- Consumer sovereignty: consumers dictate production
- Government regulates industries: Markets cannot operate unfairly, treat workers unfairly or set price with their competitor
- Taxes provide essential services: healthcare, education, infrastructure, a “safety net”, and distributes more equally
- **Balances innovation and equality**

Disadvantages:
- Too much regulation inhibits growth
- Encourages social dependence on Gov programs - people rely on Gov payments rather than get a job
- Where/When/What extent to step in?

Example: Australia

Market Economy (Free Market / Capitalist)

An economy where **private individuals and firms** make most decisions

Prices and production are determined by **consumer choice and competition** with **minimal government involvement**

Features:
- High innovation, efficiency and profit motive

- Individuals own FoP

Disadvantages:

- Large gap in distribution of wealth
- Booms and Busts in the economy
- Does not provide what the market doesn't address:
  Roads, schools, parks, defence are not built

Command (planned) economy

Features:

- Government decides **what, how, how much, and for whom** goods are produced
- Prices set by government
- Focus on social welfare goals

DIsadvantages:

- No profit motive
- Gov owns FoP rather than individuals
- Little consumer choice
- Quantity not quality
- No incentive for workers / no freedom

Bartering (traditional) economy

- Production focuses on survival
- Barter system requires individuals with coincidental wants and items on hand
- Limited technology

The invisible hand:

Introduced by economist Adam Smith: The concept that consumers pursuing their own self interest in purchasing, specialising in jobs, competition and the price mechanism, **unintentionally promotes a general benefit for society.**
This concept only applies in a free/mixed markets where consumers have choice and sovereignty to dictate the market

(3.2) **Australia and the role of Government**

<u>Purpose of Government intervention:</u>
the government intervenes in production because the free market does not always provide the most efficient allocation of resources for the economy as a whole
<u>The are three considerations:</u>

1. Some necessary goods and services may not be provided under a pure market system:
    BOM weather stations - private enterprise will be unwilling to undertake due to high costs
    Collective goods - parks/roads/national defence
2. It is sometimes better for essential goods and services to be provided by government, rather than being **left to private individuals**
    it is safer to have a defence force in the hands of the government than to have a system of private armies
3. Markets do not always operate freely, competitively or in the **best interests** of the economy as a whole
    - The government provides regulations that are enforced by the **Australian Competition and Consumer Commission (ACCC)** to prevent producers from exploiting consumers with misleading information or by agreeing with their competitors to raise prices
    - Legislate to ban the production of undesirable/demerit goods and services (for example, illicit drugs or internet gambling) and ensure adequate safety standards

<u>Governments also intervene the **distribution** of output</u>
the free market will not necessarily provide a socially desirable or fair distribution
Interventions can include:

1. <u>Social welfare payments</u>: Under the price mechanism alone, there would be no income earned by those **who did not contribute to the production process**. There would be no provision made for the elderly, the unemployed or the chronically sick. In Australia, the government provides social welfare payments to some members of society who do not contribute to the production process

2. Progressive income tax: The government also causes an overall redistribution of income in order to achieve a more equitable (even) sharing of produced output. Under this system, high-income earners are taxed at higher marginal rates and pay proportionately more tax than low-income earners

the market economy is subject to the fluctuations of the business cycle. Governments intervene through the implementation of macro economic (**counter-cyclical**) policies in order to smooth the effects of the cycle and reduce the problems of **insufficient or excessive economic activity**. Governments also intervene during times where there is a threat of major economic or financial problems, such as during the COVID-19

Summary of Government intervention reasons:

Resource allocation

- to provide important goods and services that would not otherwise be provided by the private sector
- to restrict production of harmful goods

Income distribution

- to create a fairer society and look after people

Economic stability

- to smooth out sharp fluctuations in the economic cycle
- to ensure stability in the economy and the financial system

How the mixed economy aims to solve the economic problem:

In a mixed economy like Australia's, the answers to the four important questions – what to produce, how much to produce, how to produce and how production will be shared are **primarily determined by the operation of markets** but also **Government intervention**

What to produce?

The government can be a producer itself. It can provide collective goods and services such as schools, roads, bridges and a defence force, as well as competing directly with private enterprise

How much to produce?

The government can limit the production of some goods or delivery of some services. For example, Australian local governments have regulated the number of licences issued for short-term rental properties, such as those listed on Airbnb, to manage housing affordability

How to produce?

Example - example, industrial relations laws provide a framework for setting minimum wage levels and working conditions in different industries, influencing labour costs.

How to distribute production?

Higher- income earners pay more of their income in tax, and this money is redistributed to lower- income earners through welfare

(3.3) **Comparing economies**

Methods of comparing economies:

Economic growth: Increase in the total value of goods & services produced over time

How it's measured:

- **Real GDP growth rate (%)** — GDP adjusted for inflation (national accounts).
- **Real GDP per capita** = real GDP ÷ population (better for living-standard comparisons).

Good for:

- Showing how fast an economy is expanding.
- Comparing short-run performance and business-cycle swings.

Limitations:

- **Doesn't show distribution** (growth can be concentrated).
- **Ignores non-market output** (housework, informal economy).
- **Misses quality changes** (better phones count the same as old ones unless deflators adjust).
- **Doesn't capture wellbeing** (environmental damage, leisure time).

<u>Human Development Index (HDI)</u> - A composite measure of **health, education and living standards**

How it's measured:

Three components combined into a single index:

1. Life expectancy (health)
2. Mean & expected years of schooling (education)
3. GNI per capita (standard of living) — often PPP adjusted

Good for:

- Comparing **broad human welfare**, not just output.
- Capturing non-economic dimensions (health & education).

Limitations:

- **Simplifies** many dimensions into one number.
- **Ignores inequality** between groups
- **Misses environmental quality**, political freedom, mental health, etc.

<u>Unemployment rate</u> - Share of the labour force who are **actively looking for work but can't find it**

Unemployment rate = $\frac{Labour\ force}{Unemployed} \times 100$

Good for:

- Tracking economic health, labour utilisation and social welfare.
- Comparing short-term joblessness trends.

Limitations:

- Misses underemployment (people working fewer hours than they want).
- Ignorance discouraged workers who stopped searching (they exit the labour force).
- Age/population structure affects comparability (older populations often have lower rates).
- Doesn't measure job quality (wage levels, security, casualisation).

<u>Public spending on health & education</u> - Government expenditures directed to health and education services

How it's measured:

- **% of GDP** spent on health/education

- **Outcomes**: life expectancy, infant mortality, PISA scores, graduation rates

Good for:

- Showing **government commitment** to human capital.
- Linking spending to long-run productivity and wellbeing.

Limitations (spending ≠ outcomes):

- **Efficiency matters** — high spending can produce poor outcomes if the system is inefficient.
- **Private vs public mix**: some countries have low public spending but high private spending.
- **Time lags**: education spending affects productivity decades later.
- **Distribution & access**: national averages hide regional/ethnic inequalities

<u>Income distribution</u>

How is it measured:

- Using the **Gini coefficient**

2 Unit 2

(4.1) **Consumer sovereignty**

Consumer sovereignty - consumers dictate the answer to the questions of what to produce and how much should be produced. They hold the ultimate power

How does sovereignty work - Firms aim to maximise profit by meeting consumer demand, so production is geared to what people want and their wants are satisfied.

There are times when consumer sovereignty isn't absolute:

1. **Marketing -** Advertising and marketing have a powerful influence over the **spending patterns of consumers** and can **change consumer tastes** and **preferences**. While some marketing strategies are informative, most marketing is focused on influencing consumer behaviour by whatever means are available. Consumer sovereignty is diminished by manipulative marketing practices.
2. **Misleading or deceptive conduct -** Consumers can be **deceived by false or dishonest claims** about a product, leading them to pay for items that do not do what they claim. This is especially common among claims about beauty products, weight-loss supplements, anti-ageing formulas, investment schemes, baldness treatments and other health products and services.
3. **Planned obsolescence -** Firms sometimes produce goods that are designed to wear out quickly or go out of date, in order to encourage consumers to make further purchases. Also by emphasising the importance of keeping up with the latest technology, firms can manipulate people to buy a product more often than they would otherwise. E.g. The latest iPhone.
4. **Anti-competitive behaviour -** Markets with few sellers can also diminish consumer sovereignty through limited product options. For example, businesses may manufacture electronic devices so that only the company's brand of accessories are compatible. The device could work just as well with generic alternatives but this can be a strategy to reduce consumer choice to try and manipulate consumers into purchasing more

products from the same business.

Economists debate the extent to which these factors diminish true consumer sovereignty and create a degree of business sovereignty.

<u>The government can intervene to protect consumer sovereignty by:</u>

1. Create laws to protect consumers from unsafe or misleading products - laws that require: products to be **safe, Accurate descriptions** of goods
2. Governments regulate firms to prevent unfair practices such as: False advertising, Fraud and Price fixing
   (In Australia this is enforced by the **Australian Competition and Consumer Commission (ACCC))**

<u>Governments can also **work against both consumer/business sovereignty and promote ethics:**</u>

- Regulation of Harmful Goods

(4.2) <u>Decision to save or spend</u>

Factor	How it affects saving	Explanation
Income levels	Higher income → higher saving	Households that earn more income can meet their basic consumption needs and have disposable income left over to save. Low-income households usually spend most of their income on necessities, leaving little to save.
Future expectations	Optimistic expectations → less saving; pessimistic expectations → more saving	If people expect strong economic growth and job security, they are more likely to **spend rather than save**. If they fear unemployment or recession, they increase **precautionary savings**.
Cultural factors	Culture influences attitudes to saving	In some cultures, saving is strongly encouraged for future security, education, or family support. Other cultures may emphasise **consumption and lifestyle spending**, resulting in lower savings rates.

Confidence (consumer confidence)	High confidence → lower saving; low confidence → higher saving	When consumers feel confident about the economy and their job prospects, they tend to **spend more**. If confidence falls, people reduce spending and **increase savings as a precaution**.
Life stage & age distribution	Young/retired save less; middle-aged save more	Younger people often have lower incomes and higher spending (education, housing). Middle-aged individuals usually earn more and save for retirement. Older retirees often **use savings instead of accumulating them**.
Governmen t policies	Policies can encourage or discourage saving	Governments influence saving through **tax policies, superannuation rules, and interest rate policies**. For example, tax incentives for retirement accounts or compulsory superannuation increase national savings.
Availability of credit	Easy credit → lower saving	When loans and credit cards are easily available, households may **borrow to finance consumption** rather than saving first. If credit is restricted, people may need to **save before purchasing goods**.

Income:

$$Y = C + S$$

Where:

Y = Disposable (after tax) income

C = Consumption expenditure

S = Savings

$$\frac{C}{Y} = APC \qquad \frac{S}{Y} = APS$$

Where:

APC = Average propensity to consume

APS = Average propensity to save

<u>Average propensity to consume (APC)</u> - Proportion of total income spent on consumption

<u>Average propensity to save (APS)</u> - The proportion of total income that is not spent but is saved for future consumption

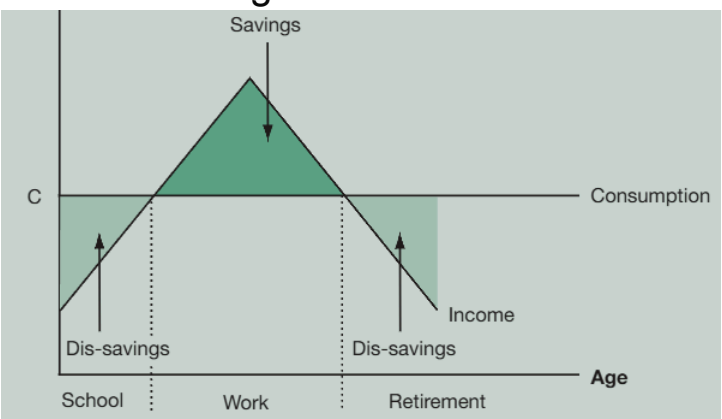
$$MPC = \frac{\text{change in consumption}}{\text{change in income}}$$

$$MPS = \frac{\text{change in saving}}{\text{change in income}}$$

Marginal Propensity to Consume - The proportion of extra income that a person spends instead of saves
Marginal Propensity to Save - The proportion of extra income that a person saves instead of spends

$$MPC + MPS = 1$$

Age
individual's income stream and propensity to consume and save are not constant throughout their life



- Younger people lack skills and experience, and receive little income so they must consume more than they save
- In middle age, incomes rises and they will consume a smaller proportion of their income, as they start saving and accumulating
- In retirement, people no longer earn income from their labour, and they consume out of past savings

Autonomous saving is when **income is 0** and a person must consume and purchase essential needs even without income

(4.3) Factors influencing individual consumer choice

The demand of each consumer for a particular good or service is known as individual demand, whereas the demand of all consumers in the entire economy is known as market demand.

The main factors affecting consumer expenditure choices are:	
Influence	**Explanation**
Level of income	The amount of income a consumer earns affects how much they can spend. Higher income usually leads to higher spending on goods and services, while lower income limits spending to necessities. Another factor that may influence consumption is house prices. Rising house prices makes people feel wealthier as their assets are now worth more – the “wealth effect” – which makes them more likely to spend money.
Price of the good itself	The price of a product affects how much consumers are willing and able to buy. If the price increases, consumers usually buy less; if the price falls, consumers tend to buy more.
Price of substitute and complementary goods	A **substitute** is an alternative product (e.g., tea and coffee). If the price of a substitute rises, consumers may switch to the other goods. A **complementary good** is used together with another good (e.g., printers and ink); if the price of one rises, demand for the other may fall.
Advertising	Advertising influences consumer preferences by informing consumers about products and persuading them to buy certain brands or goods. This can increase demand and spending on those products.

(4.4) Sources of consumer income

Consumers gain their income from a variety of sources. Consumer income mainly comes as a **return for the factors of production**. Consumer income can also come from the government in the form of social welfare

The returns (income) to factors of production are:

- Wages from Labour
- Rent from Land
- Interest from Capital
- Profit from entrepreneurial skills

Social welfare includes: - Age pensions (for people over 67) - Parenting payments - Disability support - Jobseeker payments (People 22-67 who are looking for work but cannot find it) Social welfare is provides a basic standard of living for those who need it
Effects of Income/Source of income on consumer behaviour Higher income levels **increase disposable income**, allowing consumers to spend more on both necessities and luxury goods, while lower income restricts spending to essential items The source of income also affects behaviour, as stable income sources such as full-time employment **increase consumer confidence** and spending, whereas irregular or uncertain income leads to more cautious spending and higher saving

(5.1) <u>**Business firms and industries**</u>

<u>Business</u> - an organisation using entrepreneurial skills to combine factors of production to produce a good or service for sale <u>Industry</u> - consists of firms involved in making a similar range of products that usually compete with each other

(5.2) <u>**Production decisions**</u>

Decision	**How a business decides it**
What to produce	- Skills and experience of a business - it is likely to successfully operate in an industry they know well - Industries with **strong consumer demand** - Specific **business opportunities** - Amount of **capital** required to start the business
How much to produce	- based on its assessment of the **level of consumer**

	demand and its ability to convert that demand into sales
How to produce	- Depending on the relative efficiency of the four factors of production
For whom to produce	- Consumers with **more income** receive more goods and services

(5.3) **What businesses contribute to the economy**

Successful and growing businesses are essential because they boost economic growth, create jobs, develop regions, and increase a country's productive capacity

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Key Ideas Summary

- Business performance drives economic growth
  - Strong, growing firms increase economic growth and government revenue.
  - Regions with more successful industries (e.g. mining in WA/QLD) tend to grow faster.
- Job creation and unemployment
  - Expanding businesses create jobs, reducing unemployment.
  - Growth is uneven — cities (like Sydney) often see more job creation than regional areas.
- Regional development
  - Businesses support regional economies through industries like:
    - tourism
    - manufacturing
    - food processing
  - This leads to better infrastructure, livability, and population growth.
- Increase in productive capacity
  - Business growth increases an economy's productive capacity (shown by an outward shift in the PPF).
  - This results in:
    - higher output
    - more competition

        - lower inflation
        - improved living standards
- Government support
    - Governments provide assistance programs to encourage business growth because of their major economic benefits.

(5.4) **Goals of a firm**

There are 2 main motives for businesses:

Profit and **Sales maximising**

And a business balances these goals because:

1. Goals can conflict with each other
   Maximising one objective can hurt another.
   - Profit maximisation → higher prices
     → fewer sales, lower market share
   - Sales maximisation → lower prices
     → smaller profit margins

So businesses balance instead of pushing one to the extreme

2. Long-term survival > short-term gains
   → Growing and investing in capital can build:
   - customer loyalty
   - brand reputation
   - future profits

3. Government suspicion
   → An extremely fast growing business might get investigated by the government for anti-competitive behaviour

(5.5) **Efficiency and production**

Productivity is how much we produce with a given quantity of resources, over time.

$$\text{Productivity} = \frac{\text{total output}}{\text{total input}}$$

Increasing productivity means a business is making more efficient use of its limited resources

Benefits of productivity

- **Less wastage of scarce resources**: Because we are using our resources more efficiently, we are able to produce more with a given quantity of resources.
- **Lower production costs** and **higher profits** for the business firm: Because each factor of production can produce more in any given time period, it costs less to produce the same quantity of goods and services.
- A **lower inflation rate**: Because of lower production costs, firms do not have to raise the prices of the goods they produce and may even be able to reduce these prices due to producing a larger quantity of products.
- **Higher incomes**: Since labour is more productive, firms can afford to pay better wage rates to workers without increasing prices.
- **Improved international competitiveness** of Australia's industries: Increased productivity compared with foreign businesses will make Australian goods more competitive on local and international markets

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Specialisation and productivity

Specialisation is where the factors of production – labour, natural resources and capital – are used more intensely for a smaller number of production processes

Types of specialisation

Type	Definition	Example

Division of labour	businesses break down their production process into a number of sub-processes, allowing labour to specialise in a particular part of the process	The assembly-line approach to car production, where each worker completes a small task in the construction
Location of industry (Specialisation of **natural resources)**	Similar businesses set up in the same area to reduce production costs by sharing common resources / infrastructure	Tech companies locating in Silicon Valley
Large-scale production (specialisation of **capital**)	When businesses grow so large they can use highly specialised capital in their production process	A large wine producer that uses specialised machines to bottle, cap, and label wines

Pros/Cons of specialisation

Advantages	Disadvantages
Higher productivity - workers repeat the same task and get faster and more efficient Improved skill level - Fewer mistakes Time saved between switching between tasks Lower average costs - The output is more efficient	Worker boredom - repetitive tasks reduce motivation Reduced quality (sometimes) - bored workers → less care / pride in work Dependence on each stage - If one part of the process stops, the whole line of production will stop

→ Specialisation increases productivity, efficiency, and lowers costs, but can reduce worker motivation, flexibility, and create dependence on specific tasks or processes

---

Economies of scale

Economies of scale happen when a business produces more units, and the **average cost per unit falls**

This happens because:

- Processes become more efficient
- Businesses gain advantages from size

Examples:

1. Technical
- Better machinery, automation
- Faster and more efficient production

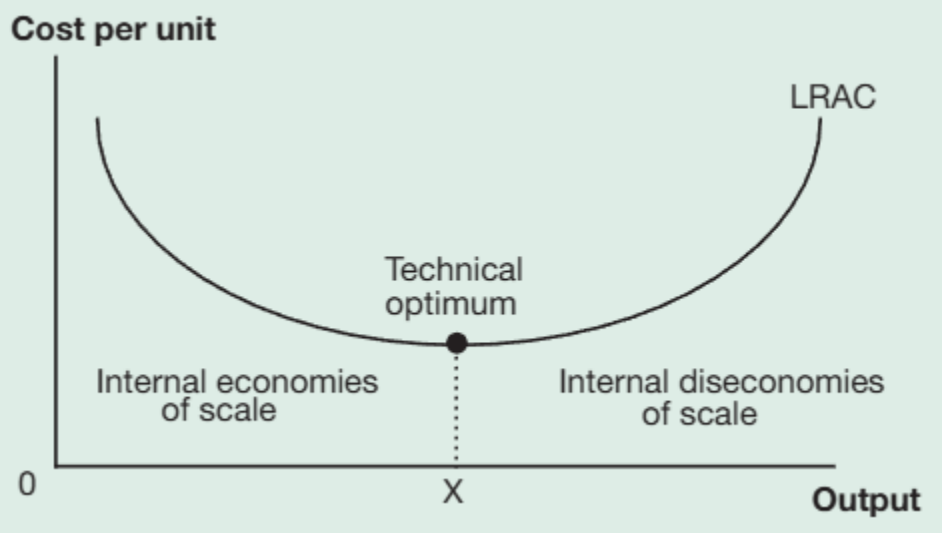
2. Purchasing (bulk buying)
- Buying in large quantities → discounts

3. Managerial
- Can hire specialised managers (HR, marketing, etc.)

<u>Contrast: **Diseconomies of scale**</u>

If a business gets **too big**, costs can start rising again:

- Poor communication
- Slow decision-making
- Lack of coordination



Here, A business can grow until reaching X and its **per-unit production costs will decrease** and become an internal economy of scale

But as it grows after that, it reaches a diseconomy of scale where the production cost increases and loses efficiency

(5.6) **Investment, technological change and ethical decision making**

Ethical decision making:
when business decisions about production methods, employment and other matters are made taking into consideration the impacts on broader society and the environment, and not simply to maximise profits for the firm.

Under law, all businesses must meet equal employment opportunity obligations in hiring new employees, but ethical factors encourage businesses to go further by actively hiring employees from groups that have suffered disadvantage or discrimination

---

How new technology is evolving businesses:

Prices
With the use of the internet, consumers can search through and compare prices of other businesses and only purchase the cheapest option, forcing businesses to compete and reduce prices

Employment
Upgrades in technology brought many job opportunities, such as 1532 businesses seeking workers with AI skills in 2024

Output
by utilising the latest technology, they are better able to respond to changes in market demand and customise their output to the specific needs of the marketplace

3 Unit 3

Demand

The quantity of a product that consumers are willing and able to purchase at various price levels

Law of demand

The law of demand states that, ceteris paribus, as the price of a good increases, the quantity demanded by consumers decreases, and conversely, as the price decreases, the quantity demanded increases

(6.1) <u>Factors affecting market demand</u>

<u>Factors that affect the demand for a product</u>

1. **Price of Substitute goods** (ones that replace others)
   - Example: butter and margarine
   - If one gets expensive → people switch

⇒ Price of margarine ↑ Demand for butter ↑

2. **Price of Complementary goods** (used together)
   - Example: cars and petrol
   - If one gets expensive → people buy less of both

⇒ Price of cars ↑ Demand for petrol ↓

3. **Expected future prices**
   - If people think prices will rise soon → they buy now
   - If they think prices will fall → they wait

⇒ Expected price ↑ Demand now ↑

4. **Tastes and preferences**
   - Trends + lifestyle changes affect demand
   - Example:
     - More people working from home → more desks demanded
     - CDs ↓, streaming ↑

⇒ If something becomes popular → Demand ↑

5. **Income**
   - More income → people can buy more

Two key ideas:

- Luxury goods: demand increases a lot with income
- Necessities: demand barely changes

⇒ Income ↑ Demand ↑ (especially luxuries)

6. **Population & age**
   - More people → more demand overall
   - Different ages → different needs

Example:
- Ageing population → more healthcare + retirement homes

<u>Exception:</u> Expensive luxuries like fancy restaurants might work the opposite to these expectations, they may experience a rise in the quantity demanded as their prices rise – because they become a more sought-after status symbol

<u>Summary table</u>

Factor	Effect on Demand
Substitutes	Other price ↑ demand ↑
Complements	Other price ↑ demand ↓
Expected future price	Expect price ↑ demand now ↑
Tastes	More popular demand ↑
Income	↑ income ↑ demand
Population	↑ people ↑ demand

<u>Ceteris Paribus</u>
Means: “everything else stays the same”

Why is it used?
- In everyday life, everything changes at once and nothing can go as planned
- E.g. The demand for ‘trending products’ cannot be predicted

So economists say:
“Let’s change ONE thing and pretend everything else stays the same.”

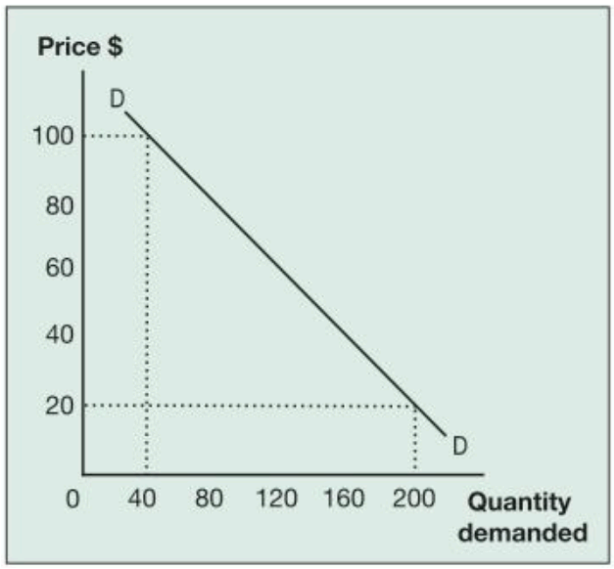
How to sneak in Ceteris Paribus:
→ As consumer income increases, ceteris paribus, the demand for a luxury product will also increase

(6.2) **Movements along the demand curve**

The demand schedule shows how quantity demanded of a good changes of a range of prices

Price ($)	Quantity demanded (pair of shoes)
20	200
40	160
60	120
80	80
100	40

The demand curve



From the table, we can make a graph showing the **demand curve**.

A typical demand curve slopes **downwards from left to right**

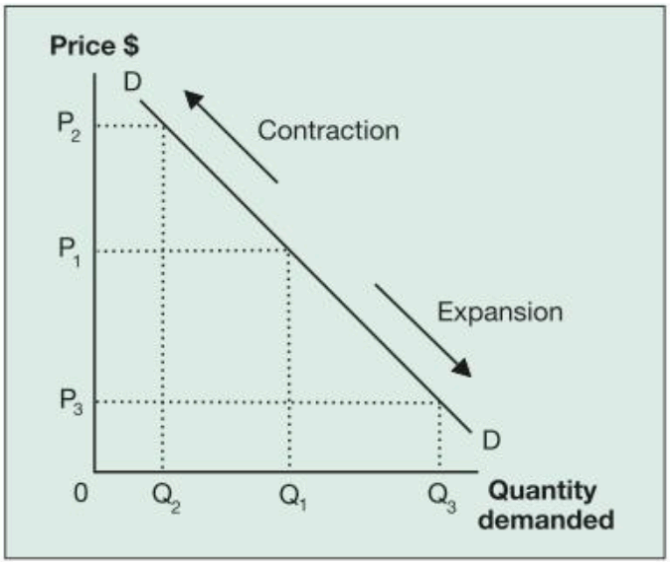
as the price of a product increases, *ceteris paribus*, consumers will demand less

Movements along the demand curve

Movements along the demand curve are **only caused by a change in price**. When this happens, an equilibrium point on the curve moves up or down.

The two types of this are:

- **Increase price** causing a **contraction**
  → Demand lowers
- **Decrease price** causing an **expansion**
  → Demand rises

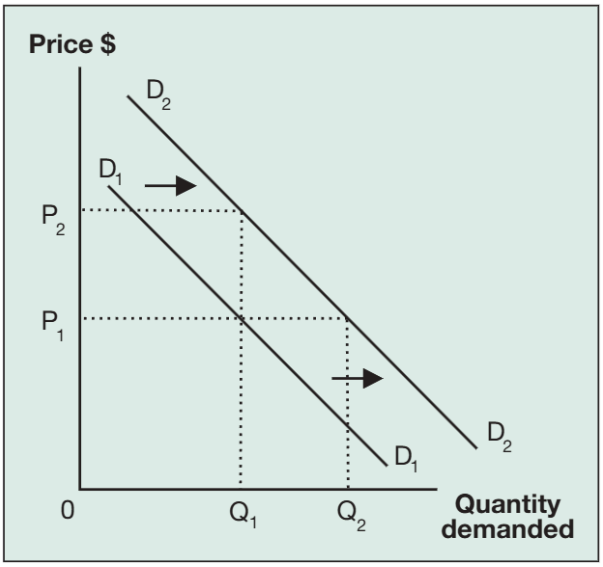


To show this, create 2 points of prices on the y axis labeled P_1 and P_2, then connect them to the x axis labeled Q_1 and Q_2

The demand should change opposite to price

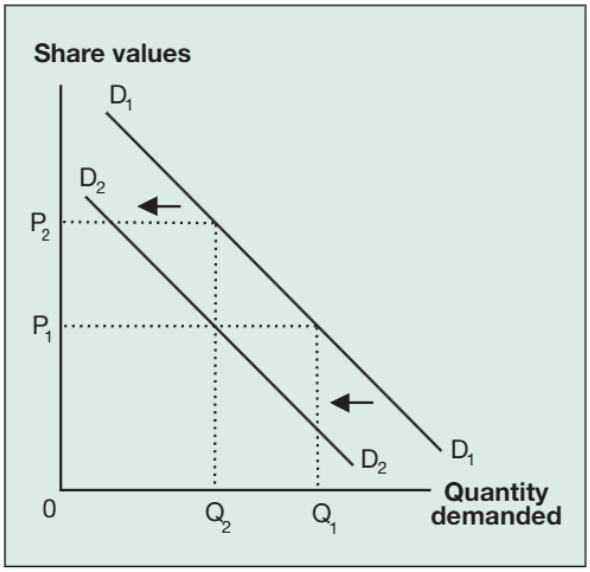
(6.3) **Shifts of the demand curve**

A change in demand by any factor other than prices causes the entire demand curve to shift	
Increase in demand	**Decrease in demand**



Causes:
- Price is expected to rise in the future
- Substitute good is cheaper / complementary good is expensive
- Higher population / more of a certain age group (e.g. younger people demanding shoes types)

If it is a luxury item:
- New trends / popularity
- More disposable income and consumer confidence



Causes:
- Price is expected to drop in the future
- Substitute good is expensive/ complementary good is cheaper
- Lower population / less people in the related age group

If it is a luxury item:
- Decrease in popularity
- Less disposable income / consumers are worried about financial security in the future

<u>How to draw this on a graph</u>

Create a second curve either to the left or the right, label the first D_1 and the second D_2, then draw an arrow pointing to D_2 (like in the images above)

(6.4) **<u>Price elasticity of demand</u>**

The Price Elasticity of Demand (**PED**) measures the responsiveness of the quantity demanded of a product to changes in its price.

Price ($)	Quantity demanded (units)	Total outlay (price × quantity)	Elasticity
5	50	250	
			--------- inelastic
6	45	270	
			--------- inelastic
7	40	280	
			--------- unit elastic
8	35	280	
			--------- elastic
9	30	270	
			--------- elastic
10	25	250	

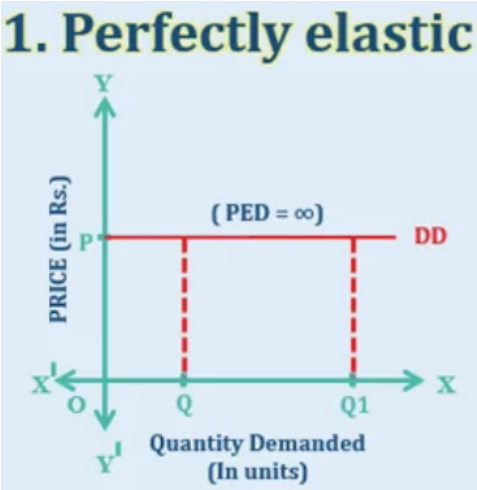
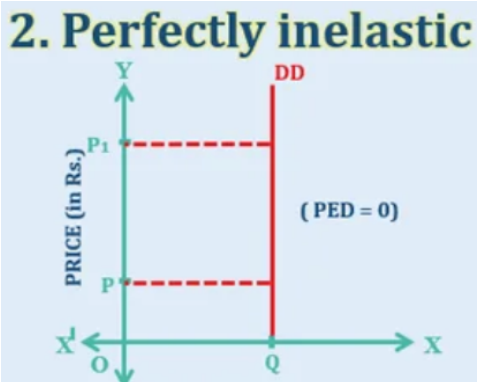
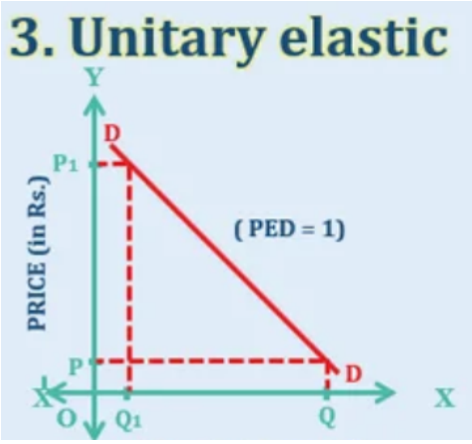
<u>Total outlay method</u>

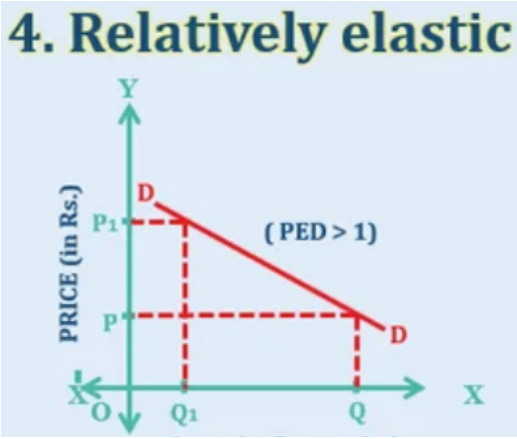
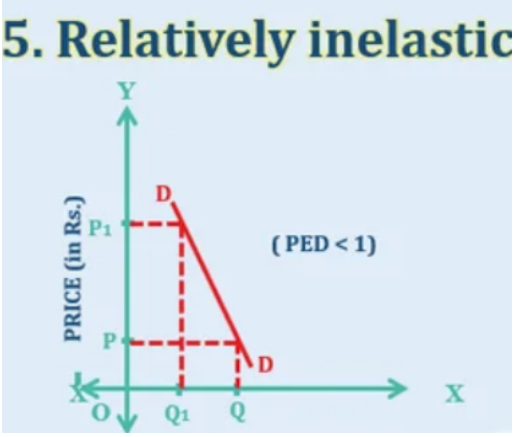
Multiply Price 1 and Quantity 1, then subtract Price 2 and Quantity 2,

Total outlay **< 0** **Inelastic** (Price has little effect on demand)	Total outlay **= 0** **Unit elastic** (Price has equal effect on demand)	Total outlay **> 0** **Elastic** (Price has big effect on demand)

Price ($)	Quantity demanded (units)	Total outlay (price × quantity)	Elasticity
(5 ×	50)	→ 250	**250 - 270 = -20**
			--------- inelastic
- (6 ×	45)	→ 270	
			--------- inelastic
7	40	280	
			--------- unit elastic

-20 < 0 → inelastic

	The price is the **ultimate factor**, deciding whether or not the producer will even sell the product. Example: An apple farmer tries to get the best deal for selling the product, but if they go above the price of every other farmer, no one will purchase, and they will not sell below the range of other farmers because they will get the best deal by matching the market price. → Hence, there is **only one price option** to sell apples at
	The price does **not play a role** in the quantity demanded of a product Example: A person with a life-threatening disease that can only be treated with a specific drug will pay anything to stay alive.
	This creates a perfect 45° slope This is where the **total outlay = 0**, and a change in price in any degree will result in the same revenue

	The slope is not very steep **Total outlay > 0.** When price increases, the total revenue drops and the the revenue for the original price is higher
	The slope is very steep **Total outlay < 0.** When price increases, the total revenue increases and the revenue for the original price is lower.
Elasticity and total outlays Price ↑ Revenue ↑ = Inelastic Price ↑ Revenue ↓ = Elastic Price ↑ Revenue = = Unit elastic	

(6.5) <u>**Factors affecting elasticity of demand**</u>

Factors Affecting PED

1. **Luxury vs Necessity**
- Necessities → inelastic demand (people still buy even if price rises)
- Luxuries → elastic demand (people cut back when price rises)
2. **Availability of Substitutes**
- Many close substitutes → elastic (easy to switch)
- Few or no substitutes → inelastic (no alternatives)
3. **Proportion of Income**
- Small cost (e.g. gum) → inelastic
- Large cost (e.g. cars) → elastic
4. **Time After Price Change**
- Short run → more inelastic (people haven't adjusted yet)
- Long run → more elastic (people find alternatives or change habits)
5. **Durability of the Good**
- Durable goods (e.g. cars) → more elastic (can delay purchase/repair instead)
- Non-durable goods → more inelastic
6. **Addictiveness** (Habit-forming goods)
- Addictive goods (e.g. cigarettes) → inelastic (consumers keep buying despite price rises)

Supply

The quantity of a product that producers are willing and able to provide at various price levels

Law of Supply

The law of supply states that, cetirus paribus, an increase in price results in an increase in the quantity supplied, while a decrease in price leads to a decrease in quantity supplied.
It represents a direct, positive relationship between price and producers' willingness to supply goods.

(7.1) <u>Factors affecting market supply</u>

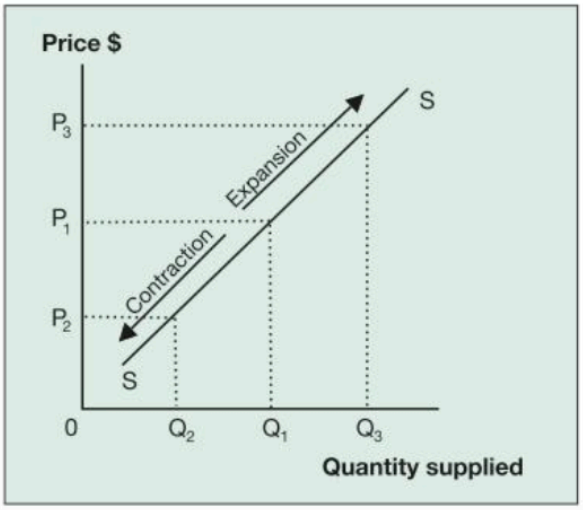
Main factors affecting market supply

1. **Price of the good itself:** Higher prices usually encourage producers to supply more because they can make more profit.
   ⇒ This causes the movement **along** the supply graph (expansion and contraction)
2. **Prices of other goods:** If another product becomes more profitable, firms may switch production to that good.
3. **Expected future prices:** If producers expect prices to rise later, they may increase output now or hold back stock.
4. **Technology:** Better technology lowers costs and makes production easier, so supply rises.
5. **Costs of production:** If input costs rise, supply falls; if they fall, supply rises.
6. **Quantity available / number of suppliers:** Limited resources reduce supply, while more suppliers increase it.
7. **Climate and seasons:** Weather and seasonal changes can strongly affect agricultural supply.

→ Supply changes because of **price, alternatives, expectations, technology, production costs, available resources, and weather**

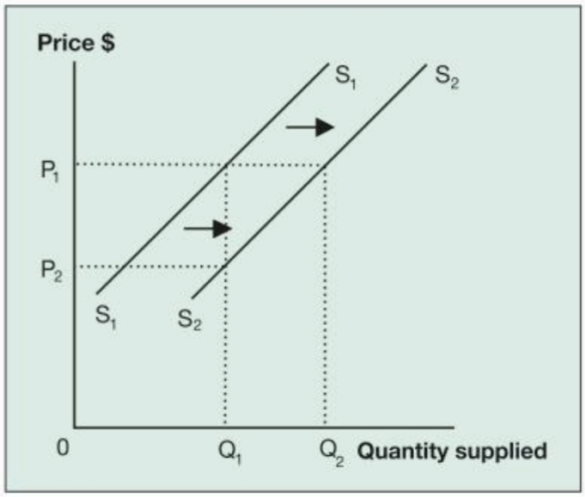
(7.2) <u>Movement along the supply curve</u>

Due to the law of supply (a direct, positive relationship between price and supply of producers), the supply curve slopes upwards.



- During an expansion (where **the price of the product rises**), both values increase
- During a contraction (only caused by a reduction in price) the quantity supplied will decrease alongside the decrease in price.

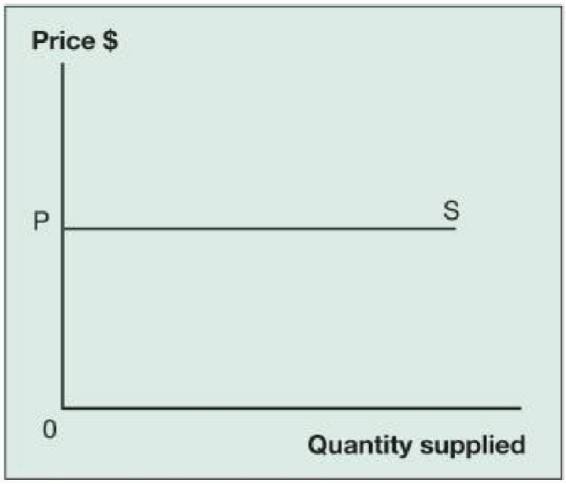
(7.3) <u>**Shifts of the supply curve**</u>



Increase firms are willing and able to supply more of a product at each price level than before	**Decrease** firms are willing and able to supply less of a good at each price level than before
● A fall in the price of other goods, which makes production of other goods less profitable ● The expectation of a future price rise will usually result in an increase in supply in the medium term (but sometimes a decrease in supply in the short term). ● An improvement in the technology used in the production process ● A fall in the cost of factors of production, such as labour or capital ● An increase in the quantity of resources available to be used in production ● Climatic conditions or seasonal changes that are more favourable to the production process	● A rise in the price of other goods ● A certain technology no longer being available (which is highly unlikely) ● A rise in the cost of factors of production ● A decrease in the quantity of resources available ● Regulations relating to health and safety (for example, COVID-19 social distancing rules restricting the number of people allowed inside premises such as a cinema or restaurant at any one time) ● Climatic conditions or seasonal changes that are less favourable to the production of a particular good

(7.4) **Price elasticity of supply**

The price elasticity of supply measures the responsiveness of the quantity supplied of a product to changes in price



Perfectly inelastic supply

Perfectly elastic supply

(7.5) **Factors affecting elasticity of supply**

- **Time lags after a price change** - Generally speaking, the more time producers have to respond to a price change, the more elastic the supply. Short-term supply is inelastic due to limited production adjustments. In the long run, supply becomes more elastic as producers expand facilities and machinery to respond better to price changes
- **The ability to hold and store stock** - During market downturns, unused goods can be stored (inventory) and sold when prices rise, affecting producers' flexibility in responding to price changes. The ease of holding stock determines supply elasticity.
- **Excess capacity** - Firms with excess capacity have more elastic supply as they can easily boost output by utilizing resources more intensively in response to price increases. In contrast, when resources are fully utilized, supply tends to be inelastic.

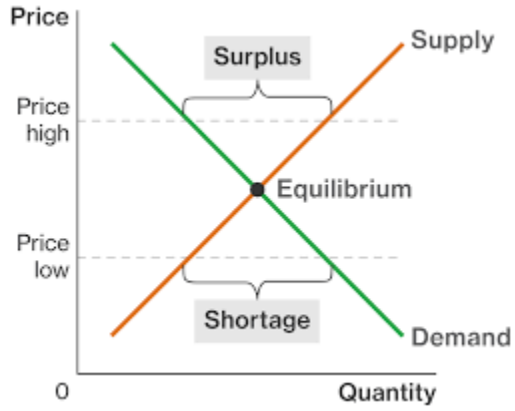
(8.1) <u>The concept of market equilibrium</u>

This analysis assumes that there is **no government** intervention and that the market is completely **competitive**, meaning that market participants **cannot influence prices**.

→ Market equilibrium is defined as a specific price level at which the supply and demand curves intersect. At this point, the quantity of a product supplied and the quantity demanded are equal. This indicates that the market has cleared, making sure there is no excess supply or demand and keeping the price and amount sold steady.

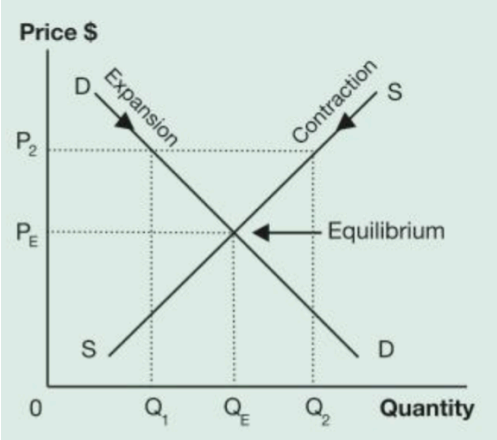
The price mechanism turns **market demand/supply** into **equilibrium price/quantity**

(8.2) **Establishing market equilibrium**



→ Surplus is above the equilibrium (Price is too high)
→ Shortage is below (Price is too low)

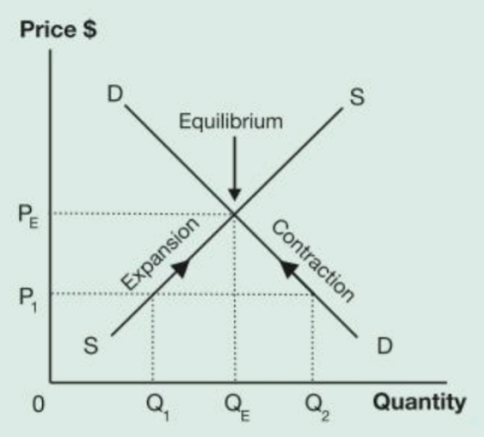
Surplus



At price level $\mathbf{P_2}$:
Supply > Demanded

Cause
→ Producers lower prices or offer discounts
Effect
→ **Expansion in demand** and a contraction in supply (movement along the curves towards the equilibrium)
→ This continues as long as there is **excess supply**

Shortange



At price level $\mathbf{P_1}$:
Demand > Supply

Cause
→ Consumers **bid up** the price to secure a purchase
Effect
→ **Expansion in supply** and a contraction in demand (movement along the curves towards the equilibrium)
→ This continues as long as there is **excess demand**

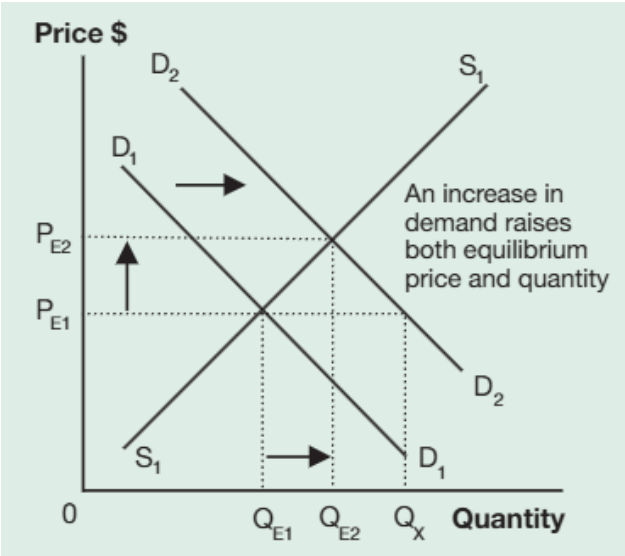
Example	**Example**
A business is not getting any sales from selling gum, which they now have a lot of, so they offer discounts to attract buyers	Rare paintings are being sold, buyers are willing to pay more to avoid missing out

The equilibrium price clears the market and eliminates any excess supply or demand. At the equilibrium point, there is no tendency to change.

the market mechanism achieves consistency between the plans and outcomes for consumers and producers without any explicit coordination

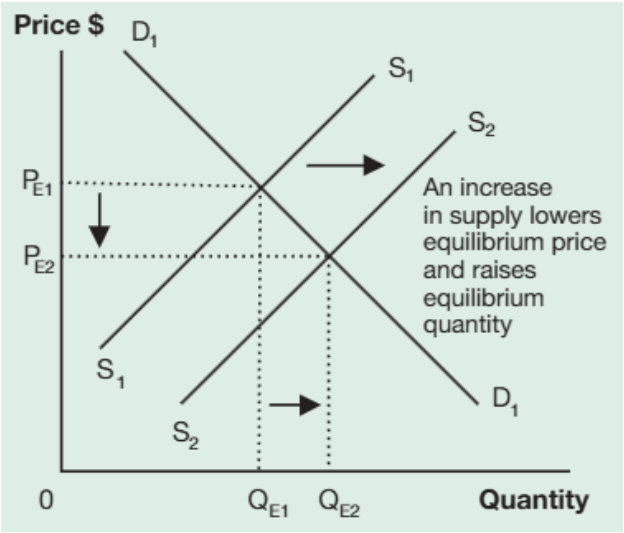
(8.3) **Changes in equilibrium**

Changes in demand



→ **Both** price and quantity increases
Example: On a rainy day, consumers demand more umbrellas, and competition among buyers for the limited quantity of umbrellas will force the price up, causing an expansion in supply

Change in supply



→ **Quantity increases** but **Price decreases**
Example: New technology for factories allows the production cost to reduce, allowing producers to supply more and reduce the prices to attract customers without losing revenue, as costs are lower.

(8.4) <u>**The role of the Market**</u>

The price mechanism plays the most important role in determining the **solutions to the economic problem**.

Other roles of the Price Mechanism:

- Prices convey information on production, distribution, and exchange of goods/services.
- Demand and supply curves shape price and quantity that meet consumer wants.

Producer Behavior:

- Producers respond to consumer demand by allocating resources accordingly.
- Higher prices signal producers to increase production, reallocating resources.

- Producers focus on goods/services with demand to mitigate opportunity costs.

Factor Markets:

- Demand and supply in factor markets set prices for production factors.
- Individuals with scarce resources or skills earn higher incomes.

Allocative Efficiency:

- The market mechanism fosters allocative efficiency by balancing consumer value and producer cost.
- Equilibrium is at the intersection of demand and supply curves.
- Competitive producers adapt to consumer demand and minimize production costs.

(8.5) **Government intervention in the marketplace**

Market Efficiency and Failure

- Markets can effectively determine what and how much to produce.
- However, they can still lead to poor results.
- Prices for goods and services may be too high or too low.

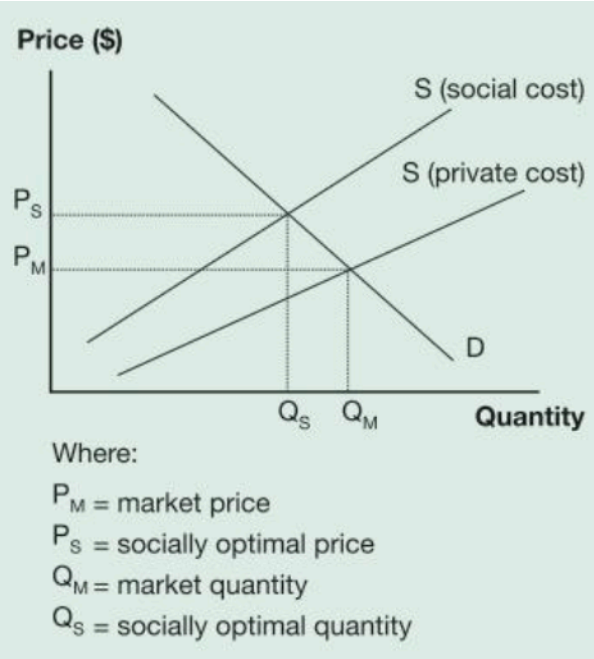
Market Outcomes

- Equilibrium quantity might also be seen as excessive or insufficient.
- Some goods and services may not be produced at all.

Market Failure

- Occurs when desired outcomes are not achieved.
- The price mechanism considers only private costs and benefits.
- Social costs and benefits are often ignored.
- Government intervention may be necessary to address market failures.

<u>The social cost curve</u>



This graph shows **negative externalities** of production, where producing a good creates extra costs for society that businesses don't fully pay for

The **private cost curve** is the costs directly paid by producers, such as wages/materials

The **social cost curve** is higher than the private cost curve because it includes both the producer's private costs **and** the external costs imposed on society (like pollution)

<u>Effects of the social curve</u>

Since the social curve considers **all costs**, it means the overall cost of production increases, and when this happens, supply **decreases**.
→ Here, **social price increases** compared to market price (So the price mechanism undervalues the cost to the natural environment)

→ And **social quantity decreases** compared to market equilibrium quantity (Market forces result in the overuse of natural resources)

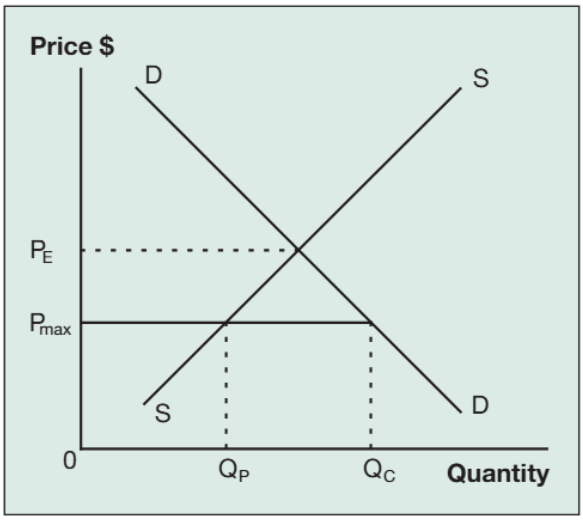
<u>Price Intervention</u>
Governments set **price ceilings** and **price floors** to control prices when they believe the free market outcome is unfair/harmful to society

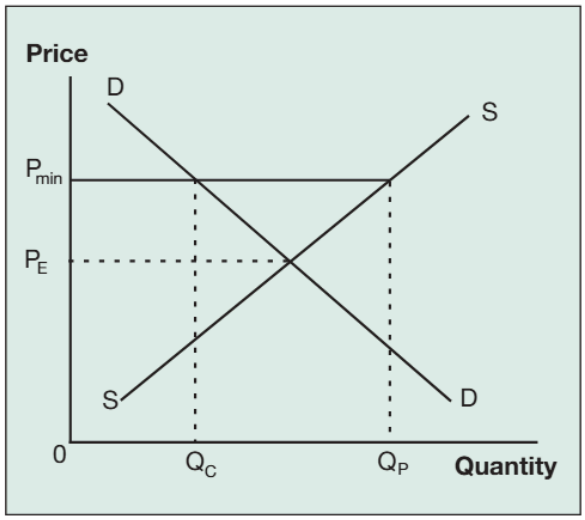
- Governments may intervene in markets if prices are too high or too low.
- Price ceilings set a **maximum price** for commodities, while price floors set a **minimum price**.
- The goal of such interventions is to influence income distribution.
- Price ceilings **benefit buyers** by reducing costs, while price floors **benefit sellers** by increasing prices.

For this to be effective, Governments usually set the price **floor above** the equilibrium and the **ceiling below**.

Examples:
- Gov's set **price ceilings below the market** equilibrium price to make essential goods more affordable for consumers.
  → E.g. Rent controls and caps on electricity or fuel prices
- **Price floors** are set **above the market equilibrium price** to protect producers/workers from prices considered too low.
  → E.g. Minimum wages and guaranteed prices for farmers

<u>Price ceiling</u> **vs** **<u>Price floor</u>**





Effects:

Creates a **shortage**: At the same price, demand is much higher than supply	Creates a **surplus**: At the same price, supply is much higher than demand

Examples:

If the equilibrium rent for apartments is $700 per week and the gov sets a **price ceiling of $500**, landlords cannot charge above $500. This helps consumers afford housing but creates a shortage due to increased demand and decreased supply.	The equilibrium wage is $18 per hour and the gov sets a **minimum wage of $24**. This raises worker income, but some businesses may hire fewer workers because labour is now more expensive, creating a surplus of labour (unemployment). Or, price floors placed on essential commodities like wheat or dairy to prevent fluctuating market prices. Or, used to discourage demerit goods by making them expensive

(8.6) **Competition and market power**

In pure competition, no firm has **market power** to raise the price above market equilibrium. In reality, no such situation exists (although some industries, such as fresh food, might come close)

In most industries, firms enjoy some degree of market power, which results in a higher equilibrium price (and lower equilibrium quantity)

The competition level in an industry depends on its market structure, including the number and size of firms, the product type, and how easily new firms can enter the industry.

<u>Pure competition</u>

Market Conditions in Pure Competition

- Many small buyers unable to influence market price
- Products sold are **homogeneous** (identical) across firms
- Buyers and sellers know prices and product sameness
- No cost for switching suppliers
- **No barriers** for new or existing firms in the market

Pricing and Selling Behavior

- Firms are **price takers**, accepting market prices
- Can sell any quantity at market price, not above it
- Selling below market price is not profit-maximizing
- **Advertising is ineffective** for increasing sales

Theoretical Nature of Pure Competition

- Pure competition is more of a theoretical model
- Hard to find real-life examples of pure competition

<u>Monopoly</u>

Monopoly Characteristics

- One firm controls the market with no competition
- Unique product with **no close substitutes**
- **High entry barriers** prevent new competitors

Monopoly Pricing and Advertising

- Monopolist **sets prices** to maximize profit
- Advertising aimed at maintaining product image

Market Comparison

- Few monopolies exist in Australia, e.g., water supply

- Monopolists limit output and raise prices unlike in pure competition
- Increased competition leads to lower prices and higher output

<u>Monopolistic competition</u>

- It is a type of imperfect competition with many small firms.
- Firms sell similar but not identical products, engaging in **product differentiation**.
- This differentiation allows **some ability** to set prices.
- There are low barriers for new firms, with brand loyalty affecting customer choice.
- Firms have limited price control due to many substitutes and fierce competition.
- Advertising is key for attracting and retaining customers.
- Examples include restaurants and hairdressers

<u>Oligopoly</u>

- Oligopoly is the most common market structure in large Australian industries.
- Characterized by few large firms with significant market shares.
- Firms sell similar but differentiated products.
- There are high barriers to entry for new competitors.

Strategic Behavior

- Oligopolists monitor rival firms closely.
- Price changes by one firm can lead to competitive reactions, like price wars.
- Instead of competing on price, firms often use advertising to promote their products.

Examples of Oligopolies

- Supermarkets: Dominated by Woolworths and Coles.
- Airlines: Dominated by Qantas and Virgin Australia.
- Banking: Dominated by Commonwealth Bank, NAB, Westpac, and ANZ.

Market structure	Number and size of firms	Product characteristics	Barriers to entry	Examples
Pure competition ■ ■ ■ ■ ■ ■	many firms, very small	homogeneous product	no barriers to entry	fruit & vegetables, fish markets
Monopoly ■	one firm only, generally large	no close substitutes	extremely high barriers to entry	water supply
Monopolistic competition ■ ▲ ◆ ● ★ ✻	many firms, relatively small	differentiated products	relatively easy entry	motels, restaurants
Oligopoly ■ ● ▲	a few, relatively large firms	usually differentiated products	high barriers to entry	supermarkets, banks, airlines, oil companies

4 Unit 4

Add questions from workbook to study notes
Add websites for statistics (ABS)

Labour Market Overview

- It involves job seekers and employers needing specific skills.
- A poorly functioning labour market limits economic growth.

Multiple Labour Markets

- There are numerous distinct labour markets (by firm, industry, area, occupation).
- Each has different wage levels and employment opportunities.
- Conditions can vary greatly between markets.

Skills Demand and Supply

- Some markets may face a shortage of skilled workers (e.g., aged care).
- Overall unemployment may exist despite high demand for specific skills.

(9.1) The demand for labour

Demand for Labour

- Firms demand labour by offering wages, similar to consumers in product markets.
- Labour demand is a **derived demand**, linked to the demand for goods and services.
- Higher consumer demand leads firms to increase output, requiring more labour.

Characteristics of Labour Demand

- The demand for labour has a downward-sloping curve.
- As wages decrease, firms are likely to employ more labour.
- Factors influencing labour demand include pricing and economic conditions

Factors affecting the demand for labour

1) The output of a firm

Because the demand for labour is a derived demand, the single most significant influence on a firm's demand for labour is its level of output.
→ If a firm is experiencing higher sales, it will increase production and therefore increase demand for labour.

Many factors influence the level of a firm's output, such as:

- General economic conditions
- The pattern of consumer demand
- Demand for the goods and services that the individual firm produces

<u>Economic Growth and Employment</u>

- Strong economic growth leads to higher sales and increased need for employees.
- Demand for labor changes with the business cycle.

Time Lag in Employment Changes

- Employment levels do not immediately change due to economic activity.
- Firms often have excess capacity and wait to adjust staffing levels.
- Existing resources may be utilized more effectively before hiring new staff.

Business Responses to Demand Fluctuations

- During demand increases, firms may require employees to work overtime.
- In declines, firms often delay layoffs, hoping conditions will improve.
- Firms retrench workers only during prolonged economic downturns.

<u>Conditions in the firm's industry</u>

- Labour demand depends on consumer demand patterns.
- Changes in consumer tastes affect labour allocation across industries.
- Barriers to entry, regulation, and competition impact labour demand.

Industry trends

- Demand for labour increases in growing industries.
- Fastest job growth predicted for psychologists, care workers, and tech workers.

- Largest job reductions expected for executive assistants, print manufacturing, and travel agents.

Demand for Firm's Products

- A firm's output depends on its ability to sell goods and services.
- Key factors include product quality, firm reputation, customer service, and marketing.
- A firm can grow even in declining industry demand by increasing market share.

2) The Productivity of labour

$$\text{Labour productivity} = \frac{\text{Total output}}{\text{Labour input}}$$

The productivity of labour can be defined as the output per unit of labour

Production Organization

- Firms must decide how to organize production, balancing between labor and technology.
- Labor productivity depends on workforce quality, including education, skill, health, and motivation.
- Investment in technology can enhance productivity without improving worker skills.

Short-Term Impacts on Labor Demand

- Higher productivity allows existing workers to produce more goods without increasing headcount.
- If aggregate demand rises faster than productivity, firms will need more labor.
- If aggregate demand remains unchanged with rising productivity, firms may reduce labor needs due to excess capacity.
- If aggregate demand falls despite rising productivity, firms will cut labor demand to maintain profits.

Long-Term Labor Demand Trends

- In the long run, higher productivity may make labor more appealing than capital.
- Firms may shift towards labor-intensive methods if labor productivity exceeds capital productivity.
- If labor productivity lags behind technology improvements, firms might reduce labor demand while maintaining output.

3) The cost of other inputs

Production Inputs and Labour-Capital Dynamics

- Firms can choose how to blend labour and capital in production.
- New technology reduces costs, leading firms to use more capital and less labour.
- If labour costs decrease, firms will use more labour than capital.

Elasticity of Demand for Labour

- Demand for labour is more elastic when:
- Substitution between labour and capital is easy.
- Labour costs constitute a high portion of total costs.
- Passing increased labour costs onto consumers is difficult.

Cost Analysis of Labour and Capital

- Labour costs for employers include wage rates and additional expenses like taxes and benefits.
- Demand for labour increases as costs decrease, and vice versa.
- Capital costs are influenced by interest rates and tax structures.

Global Considerations

- Firms may move operations overseas to access cheaper labour.
- Setting up foreign operations or using offshore contractors is easier now.
- Many Australian manufacturers have relocated to low-cost countries like China and Indonesia.
- Service industries also shift jobs to countries like India and the Philippines for cost savings.

Output factors	~~**Output factors**~~ Input factors
• General economic conditions	• Productivity of labour versus other inputs
• Conditions in the firm's industry	• Cost of labour versus other inputs
• Demand for an individual firm's goods or services	• Cost of labour versus cost of foreign labour

(9.2) The supply of labour

Individuals provide labour when they are **willing to work**, and the labour supply curve rises with higher wages, contrasting with product markets where firms supply and individuals demand.

Factors affecting the supply for labour

1) Pay levels

The wage or salary paid to employees significantly affects the supply of labor for firms. Higher wages encourage more people to work. Other incentives, like bonuses and extra benefits, also impact the willingness to supply labor.

2) Working conditions

● Attractive working conditions increase labor supply; unattractive conditions discourage it.

- Flexibility and a pleasant environment attract more workers.
- Since 2024, Australian workers have a right to disconnect after hours, to refuse contact with employers outside working hours
- Some jobs offer travel opportunities or excellent training, appealing to younger workers.
- Meaningful work and job satisfaction can attract workers despite lower pay.
- Post-pandemic, employers provide more flexibility in hours and location to meet remote work demands.

3) Education, skills and experience requirements

● Jobs often need training or qualifications.

- Labour supply depends on available human capital.
- Skill shortages can arise in advanced roles due to long training periods and costs.
- Education and immigration influence the skilled workforce supply.

4) The mobility of labour

Supply of Labour - Affected by demand changes in various sectors

- Two types of labour mobility: occupational and geographical

Occupational Mobility

- Ability to switch between jobs due to wage differences and opportunities

- Depends on education, skills required, and time to gain credentials
- Higher skill requirements make transitions harder (e.g., motor mechanic to veterinary surgeon)

Geographical Mobility
- Ability to move locations for better wages and jobs
- Limited by costs of relocating and personal upheaval
- Greater job challenges in remote areas lead to lower labour supply
- Employers in distant areas may need to offer higher wages

Remote Working
- Reduces geographical barriers
- “Digital nomad” visas introduced in over thirty countries
- Attract remote workers to live locally and boost economies

5) The labour force participation rate

The previous factors affect if the labour force is **willing** to supply its labour, but the The labour force participation rate is the amount of the eligible population (over 15) that are **actually working** and part of the labour force

$$\text{Labour force participation rate (\%)} = \frac{\text{Labour force}}{\text{Population aged 15 or over}} \times \frac{100}{1}$$

Labour Force Participation Trends in Australia
- Overall participation rate increased from 61% in the 1980s to 67% in 2025.
- Male participation rate dropped from over 80% in the 1970s to around 70%.
- Female participation rate rose significantly, reaching 63.2% in mid-2025, narrowing the gap with males to under 10 percentage points.

Factors Influencing Participation Rates
- Economic conditions affect participation; it is pro-cyclical, rising in good times and falling during recessions.

- COVID-19 recession led to many stopping job searches, but recovery showed people's willingness to enter the workforce again.
- Ageing population impacts long-term participation; projected decline to 63.8% by 2062-63. The pension age raised to 67 may encourage older workers to stay longer.

Additional Influences

- Increased female workforce participation driven by social changes, childcare support, and economic pressures.
- Higher school retention rates result in delayed workforce entry; significant increase in tertiary qualifications among young adults since 2000.

6) Immigration

Immigration plays a major role in **expanding** the supply of labour in Australia.

- Australia has a higher proportion of overseas-born residents than any OECD economy other than Luxembourg.
- Australia's immigration intake is focused on skilled workers who can expand the supply of labour.
  - Over 70 per cent of all adult immigrants gain entry to Australia on the basis of their skills.

The immigration system gives priority to people with skills that are in **short supply** in Australia, through employers being able to sponsor individuals to migrate to Australia.

7) Other factors

- Policy decisions impact labor supply by setting industry standards.
  - Professional associations enforce education and conduct standards, limiting labor supply.
  - Government qualifications and licenses restrict occupations, such as builders needing competency standards.

- **Occupational mobility** is the ability to switch between jobs due to wage differences and opportunities. It depends on education,

skills, and time taken to gain the credentials. Higher skill requirements make transitions harder.

- **Geographical mobility** is the ability to move locations for better wages and jobs. It is limited by the costs of relocation and personal upheaval. Greater job challenges in remote areas lead to a lower labour supply. Employers in these areas may need to offer higher wages.

(9.3) The Australian workforce

The workforce consists of individuals aged 15 and older who are employed or actively seeking work.

- The workforce is divided into employed (those working at least one hour per week) and unemployed (those seeking work but unable to find it).
- Economic importance lies in both the size and quality of the workforce.
- A larger workforce enhances production, while a skilled and educated workforce boosts productivity.
- Three main factors influencing workforce size and quality are population size, age distribution, and educational patterns.

Understanding the characteristics of the workforce is crucial for assessing its impact on economic productivity.

1) Population size

Population and Workforce Growth

- Population size limits workforce growth; larger population means greater potential workforce.
- Population growth results from natural increase and net migration.

Natural Increase

- Natural increase is the difference between births and deaths per year.
- The rate of natural increase has declined since 2010, now

under 0.6 percent due to fewer children born.

Net Migration

- Net migration contributes about 40 percent to population growth, which varies with economic activity.
- Negative net migration occurred during COVID-19; rebounded to 1 million by March 2024, significantly exceeding earlier averages.
- Proposed reduction in immigration could lead to a $3.4 billion reduction in economic activity.

Immigration Impact

- Ongoing job vacancies ensure strong immigration levels; immigration vital for population growth projected at 40.5 million by 2063.
- Increased immigration raises demand for housing but benefits overall supply.

2) Age distribution

Workforce Demographics

- Australia's workforce primarily consists of people aged 15–65.
- Children under 15 are mainly in school; few over 65 work.

Age Distribution Trends

- The proportion of those aged 15–65 is decreasing; those over 65 is increasing.
- Median age rose from 32 in 1991 to 38 in 2024; expected to reach 43.1 by 2062-63.

Population Ageing

- The aging population results from lower birth rates and increased life expectancy.
- This trend may reduce workforce size while increasing support needs for the elderly.

3) Education patterns

Education and Workforce Quality

- Education outcomes heavily impact a nation's workforce quality.
- Higher education correlates with higher earnings; postgraduate degree holders earn about twice as much as those with secondary education.

Unemployment Rates

- Unemployment rates are nearly 6% higher for those without secondary education compared to those with tertiary qualifications across OECD countries in 2023.

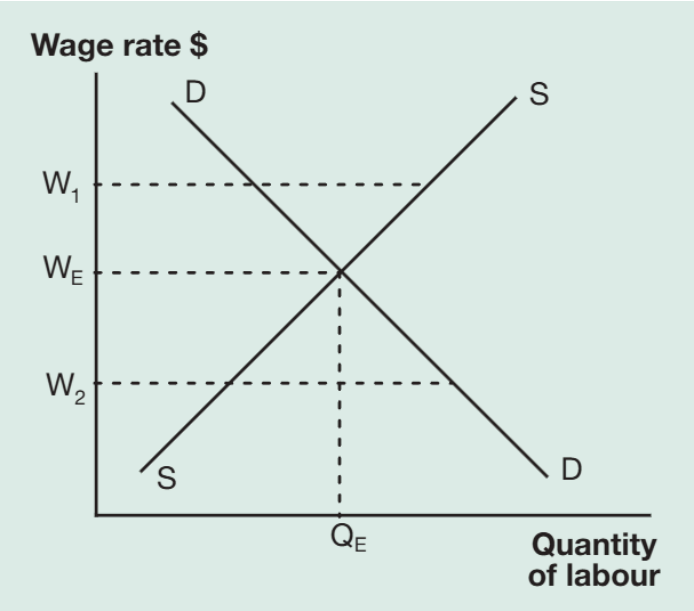
Trends in Education

- More Australians complete Year 12 compared to older generations
- Post-school qualifications among people aged 15–64 increased

Education Spending

- Australia spends above average on education; 24% more per secondary student than the OECD average.
- Private funding represented a third of education spending in Australia in 2019, significantly higher than the OECD average.

(9.4) Labour market equilibrium



Supply Curve

- The supply curve slopes upwards; higher wages lead to increased labor supply.
- Individuals balance leisure satisfaction and income from work in their decisions.
- As wages rise, leisure becomes costlier, making work more appealing.
- At very high wages, workers may work less for the same income, causing a backward-bending supply curve.
- Labor supply is generally unaffected by wage rate changes and is considered wage-inelastic.

Demand Curve

- The demand curve slopes downwards; additional workers contribute less to total output.
- Firms will only hire workers if the wage is lower than the marginal revenue generated.
- As wages decrease, demand for labor increases, resulting in a downward-sloping demand curve.

Equilibrium

- Equilibrium occurs where supply and demand curves intersect,

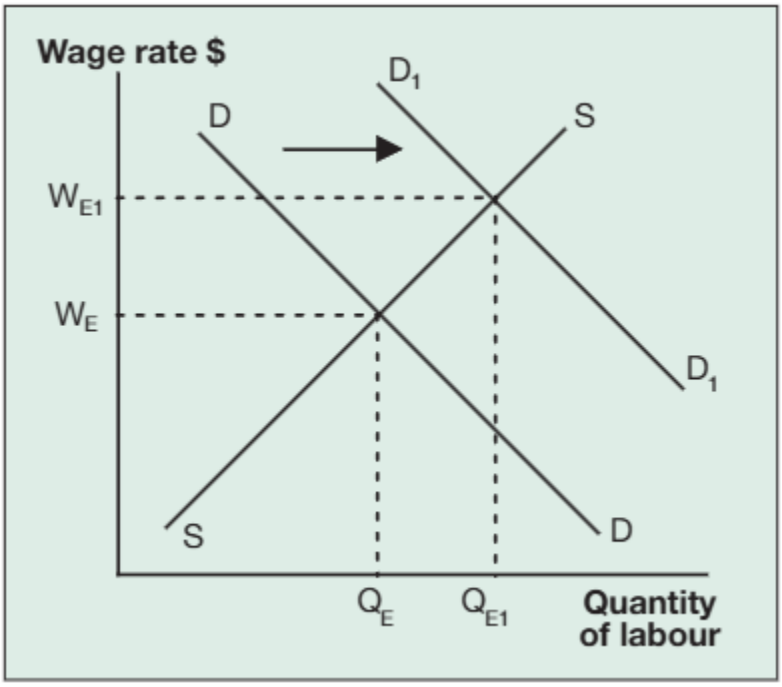
defining the equilibrium wage.

At wage rates above equilibrium (e.g., W1), labor supply exceeds demand, leading to unemployment.

Unemployment causes wage bids to lower, driving the wage to equilibrium.

At wage rates below equilibrium (e.g., W2), demand exceeds supply, prompting firms to raise wages to equilibrium.

<u>Changes in supply/demand for labour</u>



Increase in demand for labour

Causes	Effects
Labour is derived demand, an increase in the ageing population increases the demand for aged-care workers	Increase in Wages Increase in Quantity of employees
Conversely, a decrease in demand for CDs (due to music	Conversely: Decrease in wages

streaming) lowers demand for workers in CD factories	Decrease in quantity of employees

Increase in supply

Causes	Effects
A firm reduces the job requirements for a field of work. Conversely, a decrease in supply can be caused by COVID restricting travel, reducing geographical mobility	Decrease in wages (the value of labour decreases) Increase in quantity of employees Conversely: Increase in wages (labour is heavily valued) Decrease in quantity

(10.1) Wages outcomes

Similar to the product market where changes in supply/demand cause changes in price/quantity, changes in the **labour market** can result in changes in the price of labour **(wages)** or **quantity** of labour

Nominal wage is the pay received by employees in dollar terms for their contribution to the production process, not adjusted for inflation.	**Real wage** is a measure of the actual purchasing power of money wages (that is, nominal wages adjusted for the effects of inflation).

Wage Outcomes Analysis

- Changes in average total earnings are measured by the average weekly gross pay for all employees, including overtime.
- In 2025, average total earnings were $1542 per week with a growth rate of 3.5% from 2020 to 2025.
- Nominal wages do not reveal if people feel financially better

due to inflation's impact on purchasing power.

Real Wages

- Real wages reflect actual purchasing power, adjusting nominal wages for inflation.
- In most years, nominal wage increases have outpaced general price level increases, indicating real wages are rising.
- From 2021 to 2023, wage growth lagged behind inflation caused by supply shortages post-COVID-19 and geopolitical issues, but real wages resumed growth in 2024.

Employer and Profit Dynamics

- Higher real wages depend on strong productivity increases; when real wage growth exceeds productivity, it reduces profits.
- In 2023, productivity fell while nominal wages rose, impacting employer profits.
- If real labor costs rise, employers may reduce labor and adopt more technology, potentially increasing unemployment.
- Typically, nominal wage changes have been lower than combined changes in prices and productivity, leading to falling real labor costs.

Wage differentials between **different** occupations

- Different occupations require varying education and skills.
- Wage differences reflect the education and skill levels needed.
- Higher skill jobs typically offer greater pay rewards.

Occupational conditions and wages

- Some roles, like CEOs, earn significantly more (e.g., $4.2 million median pay for top Australian CEOs).
- Less appealing jobs may offer higher wages due to poor working conditions.

Occupational mobility

- High occupational mobility leads to abundant labor supply and stable wages.
- Limited mobility in specialized jobs, like veterinary surgeons

and lawyers, results in higher wages due to lower labor availability.

Wage differentials **in the same** occupations

Factors influencing them

- Wages vary by experience, with more experienced and qualified workers earning higher.
- Geographic mobility affects wage rates; remote areas often pay more to attract workers.
- 2022 saw significant labor shortages in Australia, impacting industries like farming and hospitality.
- Delays in visa processing hinder the arrival of foreign workers.
- Labor productivity and firm capacity influence wage rates.

Discrimination in Employment

- Discrimination based on attributes is illegal, but some groups have fewer job opportunities.
- Historically disadvantaged groups include women, Indigenous Australians, and people with disabilities.

1. Age and Income Trends

- Income peaks between ages 25 and 64, especially in the 35 to 44 age group ($1700 weekly).
- Younger workers (15 to 19) earn the least ($269), with minimal fluctuation in full-time earnings.
- Income tends to be lower in early career stages and declines in older age due to retirement income reliance.

Age groups	15–19	20–24	25–34	35–44	45–54	55–59	60–64	65+
Weekly income ($)	269	920	1411	1700	1696	1500	1400	1100

2. Gender Pay Gap

- There is a clear wage gap between men and women.
- Equal pay for equal work has been recognized since 1969, but it hasn't closed the wage gap.

- Many women reduce work hours for unpaid roles like child-rearing.
- A second principle of equal pay for work of equal value addresses both quality and quantity of work.

Barriers for Women

- Women face a "glass ceiling," a hidden barrier to high-paying jobs.
- Average weekly earnings show women earned 73% of what men earned in 2025.
- Half of the wage gap is due to part-time work but other factors persist.

Human Capital Factors

- The gender wage gap is partly due to fewer educational opportunities for women.
- Even with similar skills and qualifications, women earn less than men in many jobs.

Workplace Gender Equality Agency (WGEA) Findings

- In 2024, men earned 11.5% more than women in the same full-time jobs.
- This is the lowest recorded gap, indicating persistent discrimination in the labor market.

Year	Males ($)	Females ($)
1990	520	345
1995	623	420
2000	784	516
2005	955	640
2010	1227	819
2015	1370	907
2020	1538	1083
2021	1555	1069
2022	1587	1115
2023	1641	1169
2024	1724	1247
2025	1791	1303

Source: ABS *Average Weekly Earnings, Australia*, Table 2

KPMG Report Insights

- The 2022 report by KPMG, WGEA, and the Diversity Council identifies causes of the pay gap.
- Women are paid $2.56 less per hour on average than men.
- Main contributing factors to the gender pay gap include discrimination, work-life interruptions, and predominance in lower-paid occupations.

Factor	Percentage effect (%)			Monetary equivalent per hour ($)		
	2014	2017	2020	2014	2017	2020
Gender discrimination	29	39	36	0.9	1	0.91
Years not working (interruption)	23	25	20	0.71	0.64	0.51
Occupation-based segregation	20	8	4	0.6	0.2	0.1
Industry-based segregation	11	9	20	0.33	0.23	0.5
Part-time employment	6	7	11	0.19	0.19	0.27
Unpaid care and work	6	7	2	0.18	0.18	0.06
Age (years)	5	3	9	0.14	0.08	0.23
Tenure with current employer	1	1	1	0.02	0.03	0.03
Working in government or NGO	–1	1	–2	–0.02	0.02	–0.05
COVID-19 paid leave	N/A	N/A	–0.3	N/A	N/A	0.01

Source: KPMG, Workplace Gender Equality Agency, Diversity Council of Australia. *She's Price(d)less: The Economics of the Gender Pay Gap* 2016, 2019 and 2022

3. Migrant status and cultural background

- One-third of Australian workers are migrants (5.3 million out of 15 million in 2024).
- Median income for migrant workers was $45,351, 13% lower than the national average in 2019-20.
- The wage gap for immigrant workers is consistent across high-income countries, averaging 13%.
- Minimum salary for temporary skilled migrants increased to $76,515 in July 2025, reflecting higher skill levels.
- Recent migrants have lower incomes than long-term residents but experience rapid income increases.
- A 2024 study showed migrants receive lower rewards for education than local workers due to underemployment.
- Weak English proficiency contributes to skills not being utilized effectively.
- A 2025 study found refugees often face occupational

downgrades, especially women from management roles.
- Wage outcomes for migrants usually align with the national average in about 15 years.
- Australia's migrant income integration differs from the US and Europe, where levels remain lower.

Indigenous Australians
- Indigenous Australians comprise 3.8% of the population, with up to 32% in the Northern Territory.
- Median weekly income for Indigenous Australians over 15 is 33% lower than non-Indigenous ($830 vs. $1,250).
- Less than 10% of Indigenous Australians are in the highest income quintile.
- About 35% fall within the lowest income quintile, showing significant income disparities.

(10.2) Trends in the distribution of income for work

Income distribution refers to the way in which an economy's income is spread among the members of different social and socio-economic groups.

<u>Trends in the distribution of income from work</u>
- Wage increases were previously decided by government-appointed tribunals.
- Shift to enterprise bargaining since the 1990s has increased wage differences.
  → **Enterprise bargaining** refers to negotiations between employers and employees about pay and work conditions.
- Income distribution has changed but household incomes have only slightly varied since the mid-1990s.
- Increased family benefits for lower-income earners balance out wage differentials.

<u>Income distribution within occupations</u>

Due to Australia shifting from a centralised wage determination system and unions having less involvement recently, wages are becoming **more distributed** between people in the same occupation

(10.3) Non-wage outcomes

Non-Wage Outcomes

- Employees receive benefits beyond regular pay, such as sick leave, holiday leave, and superannuation.
- These benefits are valuable to employees and costly for employers but are not included in earnings statistics.
- There is no standardized measure for non-wage outcomes due to their variable nature across workplaces.

Types of Non-Wage Outcomes

- Salary packaging includes benefits like car allowances and gym memberships.
- Bonus cash payments may be given based on company profits or individual performance.
- Flexibility in work patterns includes study leave, extra parental leave, and remote work options, which rose significantly during the COVID-19 pandemic.

(11.1) The role of trade unions

A **trade union** is a group of workers joining together to support the interest of employees such as rights, pay and work conditions. They do this by negotiating wage, safety etc. with the employers.

<u>Types of unions:</u>

- **Occupational unions** have workers with the same skills (for example, the Australian Medical Association).
- **Industry-based unions** cover workers in a particular industry, no matter what their job is (for example, the Australasian Meat Industry Employees Union and the Finance Sector Union).
- A **firm-based union** represents only the workers of one

company. This kind of union is very unusual these days.
- **General unions** include workers with all kinds of skills from different industries (for example, the Australian Workers' Union).

Trends with union involvement
- Unions had the most involvement in the 1970s at 55%
- Union involvement has **declined** since then, reaching 13%
- Since male-dominated industries (like manufacturing) have declined, so has the involvement of males in unions
- Older workers are more likely to be in a union than younger workers

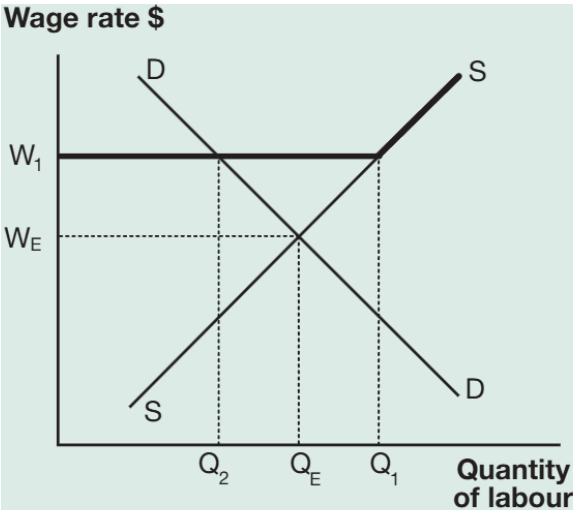
Reasons for this decline:
- **Shift from centralized wage determination to enterprise bargaining** has reduced the influence of unions over wage outcome
- **Growth in low-union sectors** like technology, hospitality, and retail; decline in traditional sectors like manufacturing.
- **Fall in full-time workers'** proportion; rise in casual and part-time jobs, which have lower union membership rates (11% for part-time, 14% for full-time).

Role of a union

Unions give workers a chance to express their interest (like the wages are too low), and since a single worker has **small influence** (e.g. threatening to go on strike will have little effect), unions allow the workers to have a **collective voice**

Unions also have **bargaining power** over employers and have an influence over outcomes in the labour market.

Wage floor (price floor)	Reducing the supply curve



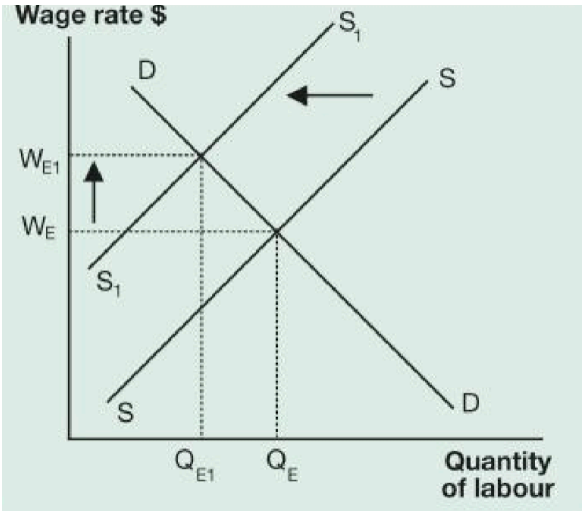
Cause:
- Employees desire higher wages
- Unions bargain with employees for a wage increase

Effect:
- A new wage (W_1) is above the old equilibrium wage (W_E)
- Quantity of labour supplied (Q_1) exceeds what firms demand (Q_2)
- Firms reduce the number of employees to lower their supply

Final result
- Unemployment rises
- Therefore, unions must face a trade-off between wages and unemployment

Example

The Australian Council of Trade Unions (ACTU), have historically campaigned for increases to the National Minimum Wage through submissions to the Fair Work Commission.



Cause
- Employees don't want to be replaced with cheaper overseas labour
- Unions restrict overseas supply

Effect
- The supply curve shifts to the left from S to S_1
- Wages increase but quantity of labour decreases (firms have less labour)

Final result
- Although this has positive impacts on the workers, this might cause economic decline as the firms have a labour shortage

Example

Australian unions have opposed increases in temporary migration and foreign worker programs when they believe overseas workers may reduce wages or replace Australian workers

(11.2) The role of employer associations

Employee associations give employers their own form of organisation/bargaining power, although many businesses are large enough that employers have enough power and instead bargain with unions themselves.

<u>Roles</u>

- Represent members in collective bargaining and industrial tribunals
- Lobbying the government to promote interests of its members
- Assist in resolving conflicts or grievances with trade unions or individual workers

Federal Employer Associations

- Key associations: Business Council of Australia, Australian Industry Group, Australian Chamber of Commerce and Industry.
- They represent employers' interests in labor market policy discussions.

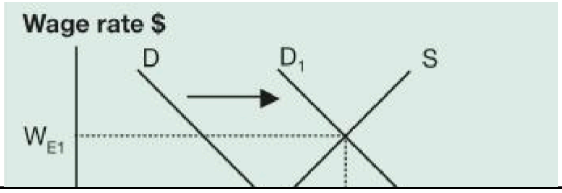
Industry-Specific Organizations

- Examples include National Farmers Federation, Financial Services Council, Minerals Council of Australia.
- They address specific industry concerns and represent employers in disputes.

<u>Role of employer associations in the labour market</u>

Since small businesses have almost no influence on wage outcomes, and large businesses don't need employer associations, EA's affect the labour market by bargaining **minimum wage decisions** with the **Fair Work Commission**

Employer associations have also been able to secure a larger share of domestic markets for Australian producers.



Here, the EA's have increased demand from D to D_1, which increases the Wage and Quantity

of labour.

(11.3) Australia's current workplace relations framework

	Base level rights → Industry rights → Specific to firm → Specific to person			
Feature	**National Employment Standards (NES)**	**Awards / Modern awards**	**Enterprise Agreement**	**Common Law Agreement**
What is it?	minimum employment rights and entitlements that all employees are legally entitled to, e.g. maximum hours, leave, and termination rights	A legal document that sets the minimum pay and conditions for an industry or occupation.	A legally binding agreement between an employer and employees for a specific workplace.	An individual employment contract between an employer and an employee.
Who creates it?	The Australian Government through the Fair Work Act 2009 and administered by the FWC & FWO	The Fair Work Commission.	Employer and employees (often with union involvement).	Employer and individual employee.
Who does it apply to?	Employees who are covered by the national workplace relations system, including full-time, part-time, and casual workers	Employees in a particular industry or occupation.	Employees covered by that workplace's agreement.	The individual employee only.
Can it improve on minimum conditions	They set the minimum conditions	It sets the minimum conditions.	Yes, employees must be better off overall than under the relevant award.	Yes, but it cannot provide less than the legal minimum (NES and any applicable award).

Union involvement	Advocating for workers, negotiating improvements, and representing employees in disputes related to NES entitlements	Unions often advocate during award reviews but do not negotiate individual awards.	Yes – unions commonly negotiate enterprise agreements on behalf of employees.	Usually no, as it is an individual contract.

FWC (Fair Work Commission): Independent workplace relations tribunal that creates employment conditions, minimum wages, approves enterprise agreements, and resolves workplace disputes.
FWO (Fair Work Ombudsman): Helps employers and employees understand workplace laws by providing advice, investigating complaints, and taking action against breaches

National employment standards
Australian employees are protected by a set of legally guaranteed employment conditions. These conditions include:

- Maximum weekly hours of work
  - Full-time employee's hours of work must not exceed **38** ordinary hours per week, plus reasonable additional hours of work
- Right to request flexible working arrangements
  - Parents or carers and people over 55 years of age or living with a disability can have a change in working arrangements, such as changes to hours, job sharing and working from home.
  - Employers can only refuse on "reasonable business grounds".
- **Leave**
  - Employees have the right to paid annual, sick and compassionate leave as well as public holidays.
  - They further have the right to unpaid parental and long service leave.
- **Casual conversion**
  - Casual employees who worked for more than 12 months must be offered the option to **convert to full-time** or part-time permanent employment.

5 Unit 5

What is a financial market

Marketplace where buyers and sellers trade financial assets like stocks, bonds, currencies, and commodities. These markets connect those with surplus funds to invest with individuals, businesses, and governments that need capital to grow.

An intermediary is an entity that enables cooperation between two or more parties.

(12.1) Role Of Financial Markets In The Economy

Financial markets connect **savers** and **borrowers** through an intermediary to enable financial capital to be allocated in the economy.

- People with either **excess** or **shortage** of funds need financial markets to lend or borrow money, and markets allow these people to **find each other**
- Financial markets are also the factor markets for **financial capital** in the economy (the money form of physical capital)
  → Financial markets provide an efficient process where income that is not spent immediately can still contribute to the current demand by allowing others to borrow the surplus for immediate consumption and investment

There are two categories of investments

	Equity	**Dept**
Meaning	A business selling an ownership stake to an investor in exchange for financial capital to fund the business. You become a part-owner (shareholder) of a company.	You **lend** money to the business or government. You lend money to a company or government. They **promise** to pay you interest and repay your original investment at a later date.
Source of reward	From dividends and increases in share price	Returns come from interest payments
Risk vs reward	Higher risk but potentially higher returns	Lower risk but generally lower returns
Guarantee	No guarantee of income	Fixed and predictable
Example	Buying 100 shares in BHP and earning dividends as a share of the company's success	Buying a government bond that pays 4% interest per year, you then receive your initial payment at the end.

The key difference is **ownership** vs **borrowing**

Reasons for **saving**:

- The portion of household income that is not spent is saved
- Businesses might not want to invest all their money into one single (as it is highly risky) so they might divert money elsewhere.
- Businesses can save money instead of distributing income to their owners
- When the government budgets for a surplus (revenue is greater than its expenditure), it accumulates savings

Reasons for **borrowing:**

- Consumers borrow when they demand a good for more than what they can pay in the moment, so they take a **loan**
    - E.g. Loans for cars or mortgages for houses
- Entrepreneurs and business managers borrow to fund the operation or expansion of their businesses
- The government becomes a borrower of funds when it budgets for a deficit (expenditure is greater than revenue)

Foreign exchange market
This market is used for the trading of currencies. Countries are **interdependent** with each other in this market.
For example, during the Global Financial Crisis in 2008-09 (triggered by the collapse of the US housing market), many other countries **sold Australian assets out of fear** due to a need to raise cash, so Australia experienced financial difficulty even though **it did not have the same economic problem as the US**.

(12.2) Primary and secondary financial markets

Primary financial market
The primary market is where new financial assets are **sold for the first time**.

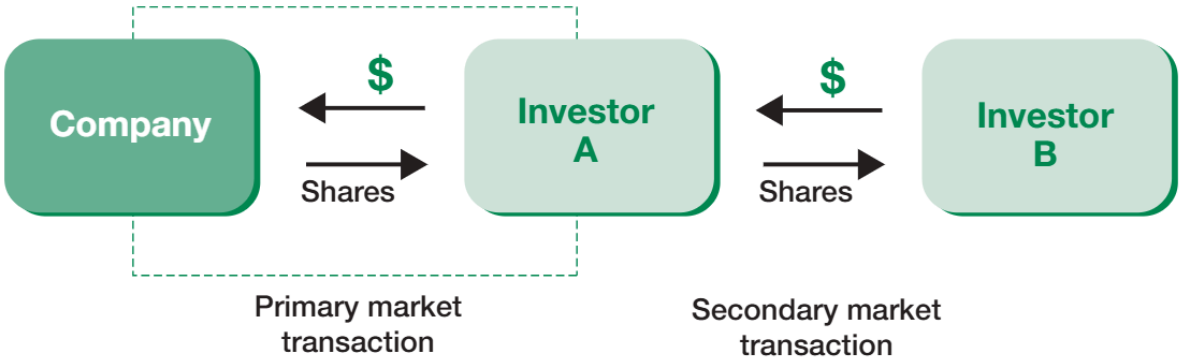
- Investors buy directly from the company or government.
- The company receives the money.
- Used to raise money for expansion or new projects.

Example:
A company sells shares to the public in an **Initial Public Offering (IPO)**. The money goes to the company. **Bonds** are also included in the primary market as they are direct transactions with the company

Secondary financial market
The secondary market is where **existing** financial assets are bought and sold between investors.

- The company does not receive the money.
- Investors **trade** with each other.
- Provides liquidity (makes it easy to buy and sell investments).

Example:
You buy shares in a company on the **Australian Securities Exchange (ASX)** from another investor. The money goes to the seller, not the company.



(12.3) Financial market products

<u>Dept finances</u> These finances involve the borrower receiving a loan and owing it back to the lender through interest				
Financial Product	**Mortgages**	**Consumer Credit**	**Business Loans**	**Bonds**

How it Works	A long-term loan used to buy property. The property acts as collateral (security) for the loan, and the borrower repays it with interest over time.	Money borrowed by individuals for personal purchases such as cars, furniture or credit card spending.	Banks or other lenders provide funds to businesses for expansion, equipment or cash flow. Businesses repay the loan with interest.	Investors lend money to a Gov/company. The issuer pays regular interest (coupon payments) and repays the principal at maturity.
Advantages	Enables people to buy homes without paying the full price upfront; long repayment period	Allows immediate purchases; flexible repayment options; useful for emergencies.	Helps businesses invest, expand and create jobs without giving up ownership.	Regular income; generally lower risk than shares; predictable returns.
Disadvantages	Interest costs can be high; risk of losing the property if repayments are not made	High interest rates (especially credit cards); can lead to debt if overspent; fees may apply.	Requires regular repayments; interest increases costs; lender may require security.	Lower returns than shares; bond prices may fall if interest rates rise; issuer could default.
Australian Example	A home loan from Commonwealth Bank or Westpac.	A NAB credit card or a Latitude personal loan.	An ANZ small business loan.	Australian Government Treasury Bonds.
Key Economic Terms	Collateral, principal, interest, variable rate, fixed rate, repayment, equity, lender.	Credit, debt, interest, credit limit, repayment, unsecured loan.	Capital, investment, collateral, principal, interest, cash flow, finance.	Debt security, coupon rate, maturity, principal, yield, interest.

	<u>Equity finance</u> Buying shares gives the investor part ownership (equity) in the company	<u>Neither</u> Foreign exchange does not involve borrowing/owning part of a business

Financial Product	Shares	Foreign Exchange (Forex)
How it Works	Investors buy ownership (equity) in a company. Returns come from dividends and increases in the share price.	Currencies are bought and sold to facilitate international trade, investment and travel or to speculate on exchange rate movements.
Advantages	Potential for high returns; dividends; ownership rights; capital growth.	Enables international trade and investment; businesses can hedge exchange rate risk; high liquidity.
Disadvantages	Prices can fall; dividends are not guaranteed; higher risk than bonds.	Exchange rates can be volatile; risk of losses from currency fluctuations; affected by global events.
Australian Example	Shares in BHP, Commonwealth Bank (CBA) or Woolworths traded on the ASX.	An Australian importer exchanging AUD for USD to pay a US supplier.
Key Economic Terms	Equity, dividend, capital gain, shareholder, ASX, market value, portfolio.	Exchange rate, appreciation, depreciation, currency, foreign exchange market (FOREX), hedging, speculation.

(12.4) The share market

<u>Purpose of the share market</u>

- The share market allows buying and selling of shares → the owner of a share becomes a part-owner of the company.
- It plays a vital role in the Australian economy for funding business growth and providing returns to investors.
- In 2024, about 38% of Australians owned shares or financial products.

Company Requirements

- Only **incorporated** businesses can issue shares, recognized as separate legal entities.
- Incorporated businesses have limited liability → owners are protected from bankruptcy risks.

- Companies can be public (shares traded freely) or private (restricted ownership and transfer → shares cannot be traded on the stock market or outside the business).
- When a company first lists itself on the stock exchange, it is called a **float** (also called an initial public offering)

<u>Benefit of shares</u>

For businesses:

- Used as financial capital to make profit

For individuals:

- Entitled to a share of the company's success (dividends)
- Shareholders are **not liable** for a company's debts beyond the price of the share they paid for
  → There is **little risk** and **big reward** for owning shares since there are unlimited gains and little responsibility for bankruptcy

<u>What happens when a company sells stocks (effect on economy)</u>

- The value of stocks reflect economic conditions of a country
  → A company approaching recession will have fewer economic opportunities for countries, leading to a low share price
- The share market allocates resources to different types of production
  → Successful companies will be able to use funds more efficiently
  → (opposite effect) People buying shares just for fun will trigger others too, so some companies will be unnecessarily profited: leads to misallocation of resources

(12.5) Domestic and Global Markets

- Australia is interdependent on the global market
  → Interdependent means all countries collectively depend on each other for support
  → Factors such as overseas crises can affect the Aus market
- But Australia is good at maintaining its own markets and avoiding downturns by overseas events

- Foreign exchange markets allow movement of funds globally

(12.6) Regulation of financial markets

Why do financial markets need to be regulated?

Financial market disturbances can have severe consequences, such as households losing their savings and companies going bankrupt. Such instability can also undermine confidence across the economy and reduce growth.

There are **four Government bodies** that regulate the financial market, with The **Council of Financial Regulators (CFR)** coordinating cooperation and collaboration among its four members.

Regulator	Key roles	How this supports stability/confidence
Reserve Bank of Australia (RBA)	Sets monetary policy by managing the cash rate. ● Manages money supply by printing banknotes ● Regulates the banking system by ensuring the efficiency of payment methods (e.g. credit cards) ● Works on behalf of the Gov with no profit motive ● Sets interest rates to influence cost and availability of money ● Monitors risks in Australia's financial system, conducts research to help APRA implement regulations ● Banks use special accounts with the RBA to settle debts between each other ● Helps support the Gov with funds in case of a shortage	Keeps inflation low and stable, supports employment, and promotes confidence in the economy and financial system.
Australian	Supervises banks, insurers, and	Reduces the risk of

Prudential Regulation Authority (APRA)	superannuation funds to ensure they remain financially sound. ● The government body established to regulate all deposit-taking institutions, insurance organisations and superannuation funds deposit-taking institutions are: ● Organizations who accept money from the public, like credit unions and banks	financial institution failures and protects depositors, policyholders, and superannuation members.
Australian Securities and Investments Commission (ASIC)	Regulates financial markets and enforces consumer protection and corporate laws. ● The government body with responsibility to corporate regulation, consumer protection and the oversight of financial service products.	Promotes fair, transparent, and trustworthy financial markets while protecting consumers and investors.
Australian Treasury	Advises the Government on economic and financial policy and develops financial sector laws and rules ● The source of economic policy advice to the government ● Influence how governments devise budgets, collect taxes, allocate expenditure, and implement monetary policy, labour market policy and market regulations	Helps create effective financial laws and policies that support a stable, efficient, and resilient financial system
Council of Financial Regulators (CFR)	Coordinates Australia's financial regulators (RBA, APRA, ASIC, and Treasury). ● Allows information sharing and collaboration of advice ● It doesn’t have any additional powers	Ensures a coordinated response to financial risks and crises, strengthening overall financial system stability

(13.1) Borrowers: the demand for funds

Reasons for borrowing

Individuals	They invest for personal reasons ● Mortgages: Pay for a house over time if funds are unavailable, house becomes security (collateral) ● Short-term purposes: car/education, these are **unsecured** and have **higher interest rates** (more money paid to the bank)
Businesses	Businesses access the most funds ● They need it for expansion or investment in research or projects ● They do this by issuing shares → The business borrows from individuals ● They could also get it from a bank
Government	Governments may borrow to raise the level of economic activity ● If the economy's growth rate is small, and funds are unavailable in financial markets, a Government might borrow to stimulate economic activity ● They also borrow if spending grows faster than revenue ● They can also fund major infrastructure projects

(13.2) Factors affecting the demand for funds

What is liquidity?
Liquidity is how easy it is to convert assets to money
→ Cash is the most liquid as no conversions are required

How can individuals hold money

- Hold as money (currency and bank deposits) - liquid
- Financial assets (bonds or shares) - not liquid

Benefits vs limitations of holding **non-liquid** money (assets)

Benefits	Limitations
There is high return → capital gain is not possible with cash as it can only remain its value or reduce due to inflation	Non-money assets hold risk and value can fluctuate Transaction motive: money is more convenient for purchases Precautionary motive: money is kept in case of emergencies Speculative motive: If people lose confidence in assets, they can keep money instead to **prevent capital loss**

Impact of technology on liquidity
Because payment technology, (like ATMs and credit cards), is more convenient than going to a bank for transactions, people no longer need to carry cash. This reduces the demand for liquid cash.
→ Also since technology makes trading shares much faster, people can invest easier, increasing the demand for **non-liquid assets**

Trade-off with holding money
The opportunity cost of holding liquid money is the foregone return from interest.

Businesses can be affected by economic conditions; it affects their confidence to invest or take in debt.

(13.3) Lenders: the supply of funds

✏️ Essay practice

Verb: **Analyse**

Break into parts and examine relationships

- Identify components and the relationship between them
- Draw out and relate the implication

There will always be:

- Pros
- Cons

Then provide how they apply

Break the issue apart → examine how the parts interact → show consequences

Basically: Ask yourself **"What happens next"** 2-3 times for an analysis

Resources

Term	Defin
Market	An arrangement where bu to exchange goods or ser
Price Mechanism	The price mechanism is th prices act as signals betw influencing the market for demand and ensuring the resources.
Market equilibrium	Market equilibrium is the pri consumer demand and proc agreement. At this point, su and the curves intersect. Th market has cleared, ensurin supply nor demand, and the price to change at equilibriu

mand and supply can affect equilibrium

t to exchange goods or services, equilibrium
cers' supply are in agreement, creating a stable
rs' ability and willingness to purchase a good or
bility to manufacture and furnish the product. At
g there is neither excess supply nor demand,
e.

the demand (D) and supply (S) curves produces
us factors can cause supply and demand to
n creates a shortage or surplus in the market. In
ty of goods than is demanded by consumers,
more than what producers can supply. Through
s a new equilibrium, resulting in changes to both
ease equilibrium price and quantity, while
quantity. Therefore, shifts in supply and demand
brium.

	Simpler: Market equilibrium demanded equals quantity s market outcome
Shortage	Demand for a product exce
Surplus	Supply of a good exceeds it
Market Failure	When the market fails to all efficiently, causing too much good/service to be produce
Externalities	Costs or benefits from produ experienced by third parties the transaction.
Social Costs	The total costs to society fro consumption. **Social Cost =** **Cost**
Social Benefits	The total benefits to society consumption. **Social Benef** **External Benefit**
Negative Externality	A cost imposed on third par activity.
Positive Externality	A benefit received by third p activity.
Price restrictions	A government mandated ma which protect producer's inc from fluctuations in prices o
Subsidy	A payment by the governme consumers to encourage pr
Regulation	Rules or laws imposed by g market behaviour.
Ban	A government policy that co production, sale, or consum

e to an increase in both its price and quantity
mes of consumers, greater product popularity,
ods or expensive substitutes cause demand for

demand causes the demand curve to shift to
ners are willing and able to purchase more at
price (P), consumers demand a greater quantity
ng an area of shortage in the market. According
e upward pressure on prices as consumers
consumers engage in competition by bidding
producers to increase supply. This results in an
traction along the demand curve. Consequently,
as long as there is excess demand, raising the
m quantity from Q to Qe. It is evident that an
both the equilibrium price and quantity.

ly to be sold at lower prices and quantity.
s lower disposable income, decline in product
ary goods or cheap subsidies.

and causes the demand curve to shift left from
lling and able to purchase at each price point. At
are supplying more than what consumers
According to market adjustment theory,
es as producers compete to sell excess stock.
urve, as firms lower prices to attract customers,
esults in the market moving towards a lower
ntity from Q to Qe. Therefore, decreasing
d quantity.

e to an increase in price but a decrease in
like an increase in the cost of production, a
duce, regulations due to safety (such as
natic conditions (i.e. out of season).

oly causes the supply curve to shift to the left
ng and able to supply less of a product at each
rium price (P), producers are supplying less than
e in the market. Economic theory suggests that
upplied, consumers compete for the limited
higher price signals producers to increase

Socially Optimal Level of Output	The quantity of a good wher equal society's total costs, r
Overallocation of Resources	When too many resources a a good, resulting in overpro negative externalities.
Underallocation of Resources	When too few resources are good, resulting in underproc positive externalities.
Public Provision	Government supplying good rather than relying on the pr
Equity	Fairness in the distribution c economic resources.
Efficiency	Using resources in a way th minimises waste, producing society.
Private Costs	Costs directly paid by the pr involved in an economic act

upply curve and a contraction along the demand
rds a new equilibrium, lowering the price from P
1. Thus, an increase in supply decreases
uantity.

ed to a decrease in price but increase in quantity
uction or technology improving production
ods to produce, or improved climatic conditions

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ve as price decreases. This leads to the market
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supply decreases equilibrium price but increases

ecrease in supply lead to a shortage in the
mers automatically raise the price to a new
ncrease in supply create a surplus, which
ers to sell existing stock, resulting in a decrease
d have significant implications on altering

ct is prone to an increase in both its price and

ause demand for a product to increase
e 2, an increase in demand causes the demand ating that consumers are willing and able to riginal equilibrium price (P), consumers can supply, creating an area of shortage in the
eory, shortages place upward pressure on antities of a good, so consumers engage in a purchase, encouraging producers to increase onomic theory states that...
sults in an expansion along the supply curve Consequently, the market moves towards a demand, raising the equilibrium price from P to
demand results in an increase in both the

uilibrium following changes in demand

Quick memory links

- **Negative externality → overproduction → overallocation**
- **Positive externality → underproduction → underallocation**
- **Efficiency = maximum use of resources**
- **Equity = fairness**
- **Social cost = private cost + external cost**
- **Social benefit = private benefit + external benefit**

1. Define what is meant by the price mechanism.

The process by which prices are influenced by market forces of supply and demand, ensuring the efficient allocation of resources

2. Describe what is meant by market equilibrium.

Market equilibrium is the price level at which consumer demand and producer supply are in agreement. At this point, supply is equal to demand and the curves intersect. This indicates that the market has cleared, ensuring there is neither excess supply nor demand, eradicating the need for a change in price or quantity level.

3. Explain why markets are said to achieve allocative efficiency.

In a perfectly competitive market, allocative efficiency means that resources are allocated to the goods most valued by society, and are achieved through the price mechanism that aligns what consumers are willing to pay with what producers are willing to supply. For example, when a product becomes highly desired, consumer demand drives the prices up, which then signals to the producers that the good has high value, prompting more resources to be allocated in producing it. This system achieves an optimal balance, distributing resources exactly how society desires.

4. Define what is meant by a price ceiling, and identify the circumstances in which a government might use a price ceiling.

A price ceiling is a Government-mandated maximum price that must be paid for a good or service. For example, this may be used to reduce rent costs by setting a limit to how much landlords can charge for houses, making living more affordable for society.

5. Define what is meant by a price floor, and identify the circumstances in which a government might use a price floor.

A price floor is a legal minimum price that a good or service must be sold for. This can be used by the Government for essential items such as wheat, dairy, etc., by setting a minimum price to support farmers and prevent market fluctuations or failures.

6. Explain what is meant by the term market failure, and distinguish between positive and negative externalities.

A market failure occurs when the price mechanism fails to allocate resources efficiently, causing overproduction or underproduction of a good. A key factor that causes market failure is when supply on the price mechanism doesn't consider all social costs and externalities in the production of a good. A positive externality is a spillover benefit received by third parties not involved in the economic transaction, whereas a negative externality is a cost imposed on third parties, such as pollution to the environment caused by production of a good.

7. Briefly outline the main characteristics of each of the four market structures.

A pure market economy is a theoretical structure with enough businesses in an industry that no firm has any market power to change prices since selling above or below market price will not maximise sales or profit, so products are homogenous and advertising is unnecessary, although there are no barriers to enter the industry. A monopolistic structure is one with many small firms in the industry, and firms have some market control as products have differentiation and can be sold independent to the market price. An oligopoly is a market structure with fewer, larger businesses which have greater control over the market, have more product differentiation and advertising, and have heavier barriers to enter the industry. A monopoly is a single firm that dominates the industry with extreme barriers blocking other establishing businesses, and the lack of competition and substitute goods force consumers into accepting price changes, meaning a monopoly is a price setter with full control over the market.

8. Explain what is meant by the term product differentiation and why it is important to a firm operating under conditions of monopolistic competition.

the process of making a product distinct from competitors' products through branding, quality, features or advertising. It is important in monopolistic competition because it allows firms to create a degree of brand loyalty and some control over price.

9. Classify each of the following industries as either pure competition, monopolistic competition, oligopoly or monopoly:
   a. manufacturers of computer printers

oligopoly

   b. the fish market in Sydney, where many producers sell seafood and consumers perceive that all the seafood is of the same quality

pure competition

   c. the market for developing websites, where many companies compete to sell their services

monopolistic competition

   d. Australia's banking sector

oligopoly

   e. Indian restaurants in Sydney

monopolistic competition

   f. the market for delivery of ordinary letters.

monopoly

Using the circular flow diagram and referring to leakages and injections, explain how and why the government sector might intervene in an economy which is in a recession:

A recession occurs when aggregate spending in an economy falls, caused when leakages such as saving, taxation and imports, exceed injections such as investments, government expenditure and exports. Consequently, unemployment will rise and business demand and output falls. In response, the government will intervene using fiscal policies to increase injections in the circular flow. For instance, a decrease in taxation and increase on infrastructure expenditure would raise household disposable income and encourage spending. The

increase in spending helps off-set the imbalance of leakages and injections, and support economic growth.

Discuss the role that advertising and marketing play in influencing consumer demand.

Businesses advertise and market their products to consumers to influence their taste and preferences, increasing demand for goods that they would otherwise not have considered. Advertising informs customers of the features and benefits of a product, improving the brand's image and awareness. However, advertising does not always increase demand as effectiveness is not always guaranteed and consumers may only be influenced by price and income constraints. Additionally, advertising can be misleading, resulting in inefficient consumer choices. Advertising acts as a non-price determinant of demand, influencing consumer sovereignty by shaping preferences rather than responding to them.

Outline government policies that might be used to encourage individuals to increase their savings:

The government implements strategies to increase individual's ability to save. Through lowering taxation, consumers are provided with more disposable income, allowing individuals to allocate more income towards saving. Additionally, providing higher welfare payments for low-income households, offering more capacity for individuals to save their income.

Explain the factors that influence an individual's demand for goods and services

An individual's demand for goods and services is influenced by several factors. The price of the good itself is a key determinant, as an increase in price leads to a contraction in quantity demanded due to the law of demand, as fewer consumers are willing or able to purchase the good at higher prices. Income also affects demand, as higher income increases consumers' purchasing power, allowing them to demand more normal goods. Additionally, the price of substitute goods influences demand, as an increase in the price of a substitute, such as plums, will lead consumers to switch to alternatives like peaches, increasing their demand. Other factors such as consumer preferences and advertising can also shift demand by making goods more desirable.

Explain how individual consumers, business firms and the government are all faced with the economic problem

The economic problem underlines the question of how to satisfy unlimited wants with scarce resources. Individuals have unlimited desires for goods but must face the problem of how to maximise personal utility with a limited budget and time. For example, higher income earners receive more disposable income and have higher choices, but are faced with the scarcity of time. Businesses have limited materials, machinery and staff, forcing them to utilise their productive resources and decide their most efficient allocation to yield maximum profit. The government has a finite budget, but is faced with endless public demands for goods and services such as roads, health and defence, and must decide how to allocate spending to optimise wellbeing of the entire population.

Define what is meant by an economic system.
Explain how Australia's economic system attempts to solve the economic problem. In your answer, use specific examples to

demonstrate how the government intervenes to affect the operation of free-market forces

An economic system is a method for answering and executing the economic problems of what, how much and how to produce, and for whom the resources are distributed to. Australia approaches these problems with a mixed-market economy approach, where consumer sovereignty dictates the market's production of goods and services, while the government steps in to regulate the fluctuating business cycle, promote income equality and produce essential goods and services that the free market would otherwise not have produced, achieved through taxation and government expenditure. The question on what and how much to produce is determined by consumer spending, as firms will gear production to what consumers want to maximise profit. Economist Adam Smith theorised that through voluntary trade and competition, resources are efficiently allocated without central planning. However, this does not prevent economic instability such as extended troughs and rising inflation. In response, the government will change interest rates using the RBA, which will affect the cost of loans and mortgages, which influences the level of consumer spending and business demand, causing the level of economic activity to adjust accordingly. The free market will not pursue social goals such as creating BOM weather stations, as the expenses outweigh the profits, hence the government will tax consumers' income to spend on essential needs of the community. Additionally, Australia uses a progressive tax system, where higher income earners contribute a larger portion of their income, resulting in a more equal distribution of wealth throughout the economy.

Explain how leakages and injections influence the level of economic activity

Leakages in the circular flow of income include savings, taxation and imports, where money exits the domestic economy. This results in a decrease in production output and GDP, unemployment trends upwards, and consumer spending lowers. Injections in the economy include investments, government expenditure and exports, where money enters the circular flow. As a result, GDP and output increase and unemployment usually falls, and consumer demand and spending rises.

Discuss how income levels and consumer confidence influence consumer spending decisions

Income levels and consumer confidence both play a significant role in influencing consumer spending decisions. Higher income increases disposable income, allowing individuals to spend more on both necessities and discretionary goods, making it a key determinant of consumption. However, even individuals with lower incomes must spend on essential goods, meaning income does not entirely dictate spending patterns. Consumer confidence also strongly influences spending, as individuals who are optimistic about future economic conditions are more likely to spend, while those who are uncertain may reduce consumption and increase saving. Nevertheless, the impact of these factors can vary depending on broader economic conditions. Overall, while both income and consumer confidence significantly influence spending, income tends to have a more direct effect, whereas confidence shapes how willing consumers are to spend.

Essay structure

- Use **low modality**: *may, might, could, tends to* rather than *will* or *always*.
- Always keep linking back to the **question wording**.
- Try to show **cause and effect** clearly.
- If possible, mention impacts on **consumers, firms, and government**.
- End each body paragraph with a small judgement, not just explanation

Introduction

The introduction in an economics essay typically consists of 3 to 4 sentences totaling around 200 words. It serves to provide the context by communicating the main theory underpinning the argument.
●**Word Count**: 200 words
●**Sentences**: 3 - 4 sentences long
●**Content**
○Context - to communicate the main theory that underpins your argument (optional)
○Thesis statement - states the position of the topic
○Main points - overview of argument
○Concluding sentence - sum up the intro

Body Paragraphs

Each body paragraph is typically 5 to 6 sentences long and contains about 250 words. The paragraphs should follow the **PGEAL** structure:

- **P (Point):** Introduce the main idea or topic sentence using terms from the essay question.
- **G(Graph):** Draw a graph
  e.g. Figure 1 - Excess demand
  [...]
- **E (Explain)**: Explain what the graph shows
- **A (Analyse):** Explain movement/change and cause → effect

- **I (Implications):** State broader effects
- **L (Link):** Conclude the paragraph by reinforcing the original point and linking to the next paragraph or topic.

Conclusion

The conclusion, approximately 150 words, restates the key points made in the essay and summarizes the main arguments clearly and concisely, similar to an English essay conclusion.

Use of Diagrams

Note: Diagrams should be **in-between paragraphs** so that you analyze **after** you draw them and not have a random diagram before a paragraph

Relevant economic diagrams should be included where necessary, selected based on the essay question. Diagrams must be accurately drawn to textbook size, properly labeled (e.g., "Figure 1"), and referenced explicitly within the text including axis labels. Only standard economic diagrams are allowed — do not use pie charts, tables, or complicated real-life data charts.

General Tips for Economic Writing

- **Objective Tone:** Economic essays require formal, objective writing without subjective language such as personal pronouns (e.g., he, she, I, we). Avoid everyday or layman terms; instead, use precise economic terminology.
- **Data Integration:** A key skill is blending theoretical concepts with real-life data or evidence. Sentences should alternate between presenting economic theory and supporting it with empirical data to demonstrate analytical depth.
- **Glossary Usage:** Consistently incorporate economic terms, concepts, and relationships throughout the essay to ensure subject-specific accuracy and clarity.
- **Logical and Linear Thinking:** Present arguments in a clear, structured, and logical manner. Avoid repetition and ensure all points are well-supported with reasons, explanations, and evidence.

- **Reliable Sources:** The Reserve Bank of Australia (RBA) website and similar authoritative sources are recommended for accurate data and economic information

🔢 NESA Verbs

Complexity	Key Verb	What it means	Example
🟢 Low	**Identify**	Recognise and name	One factor that influences opportunity cost is the availability of resources.
	List	Provide a series of items	
	Outline	Give a brief description; indicate the main features of “Name + brief effect” (no deep why)	Opportunity cost is the value of the next best alternative forgone when making a choice
	Define	State the meaning	A PPF shows the maximum combination of two goods an economy can produce using its available resources and technology
🟡 Low–Mid	**Describe**	Give characteristics and features	Moving from inside the PPF to a point on the curve indicates that the economy is using its resources more efficiently and increasing output without additional resources
	Summarise	Give a brief account of main points	Scarcity refers to the limited nature of resources compared to unlimited wants, requiring individuals and societies to make choices
	Explain	Show how or why something happens ● Relate **cause and effect**. ● Make the relationships between things evident. ● Provide why and/or how. Or: What happens → WHY it happens	Opportunity cost increases because resources are not perfectly adaptable. As production shifts, resources better suited to the alternative good must be used, resulting in larger sacrifices
	Classify	Arrange into groups	A public park is a public good, while private tutoring is a private good
🟠 Mid	**Compare**	Show similarities	A movement along the demand curve is caused by a change in price, whereas a shift of the demand curve results from non-price factors such as income or preferences
	Contrast	Show differences	Economic growth refers to an increase in real GDP, while economic development includes improvements in living standards, education, and health

	Distinguish	Recognise and show differences	Inflation is a sustained increase in the general price level, while deflation is a sustained decrease
	Apply	Use knowledge in a new situation	If a student chooses to work instead of study, the opportunity cost is the potential improvement in grades or future earnings from studying
	Analyse	Break into parts and examine relationships ● Identify components and the relationship between them ● Draw out and relate the implication	A subsidy lowers production costs, shifting the supply curve to the right. This results in a lower price and higher quantity traded, benefiting consumers and producers
🔴 High	**Investigate**	Plan and carry out inquiry	Rising interest rates increase borrowing costs, reducing consumer spending on credit-dependent goods like housing and cars. This can slow economic activity
	Examine	Inquire and investigate into details	Governments address market failure through policies such as taxes, subsidies, regulation, and provision of public goods to improve resource allocation
	Assess	Make a judgement of value, quality or outcomes **using criteria** For comparing: **Difference → Impact → Comparison** (link to the question) and **judgement** to conclude	Minimum wage laws can improve income equality but may increase unemployment if wages are set above equilibrium. Effectiveness depends on labour market conditions
	Evaluate	Make a judgement **with evidence**	Free markets can allocate resources efficiently through price signals, but market failures such as externalities and public goods mean government intervention is sometimes necessary
	Justify	Support an argument **with evidence**	A tax on cigarettes is justified as it reduces consumption of a demerit good and helps correct negative externalities like healthcare costs
🟣 Highest	**Discuss**	Explore issues with arguments **for and against**	Globalisation has increased trade, efficiency, and consumer choice in Australia. However, it has also contributed to structural unemployment and greater exposure to global shocks

	Critically analyse	Use interpretation and reasoning to assess a range of evidence and make judgements based on detailed analysis	Protectionism can safeguard domestic industries but often reduces efficiency, raises prices, and limits competition, potentially harming long-term economic growth
	Critically evaluate	add a degree or level of accuracy, knowledge and understanding, logic, questioning, reflection and quality to evaluate	Fiscal policy can stabilise growth through government spending and taxation. While effective in downturns, it may create inflationary pressure or increase public debt if mismanaged
	Propose	Put forward a plan or idea	
	Design	Plan and create	

Structure for an 'Explain' verb:

Identify → Describe → Link → Show cause & effect → Compare clearly

1️⃣ **Clear Topic Sentence**

Answer the question directly and mention both countries.

2️⃣ **Explain Country A**

- State factor
- Explain mechanism (how it affects growth/inflation/etc.)
- Link to economic outcome

3️⃣ **Explain Country B**

- Same factor
- Show difference
- Link to outcome

4️⃣ **Direct Comparison Sentence**

Use comparative language:

- "In contrast…"
- "Whereas…"
- "This resulted in higher…"

Explain why China experienced higher growth rates than Australia:

- China experienced higher economic growth than Australia primarily due to rapid industrialisation and significantly higher investment levels.
- During its industrial expansion, China shifted millions of workers from low-productivity agriculture into high-productivity manufacturing, which

dramatically increased national output. In addition, China maintained investment levels exceeding 40% of GDP, funding infrastructure, factories and export industries. This expanded productive capacity and boosted exports, increasing aggregate demand and GDP growth. In contrast,

- Australia is a mature, developed economy with limited structural transformation and lower investment as a percentage of GDP.
- As a result, Australia's growth has been more stable but slower, while China's transformation-driven growth rates were substantially higher

Difference between Outline and Describe

Outline talks in **general terms** but Describe is **specific for that thing only.**
E.g.

1. **Outline** the structure of Sodium Oxide
   - Ionic lattice of Cations and Anions
2. **Describe** the structure of Sodium Oxide
   - Ionic lattice of Sodium Cations and Oxygen Anions in the ratio of Na_2O

synonymes

Change - Alter, modify, vary, adjust
Causing - Inducing, prompting, triggering, sparking / Caused - brought about, initiated
Consequently - accordingly, as a consequence, As a result, In effect
Create - produce, generate
Consumer - customer, buyer, purchaser
Demonstrate - illustrate, verify, confirm, validate, exhibit, clarify
Purchase - Buy, Acquire, Procure, Obtain
Supply - provide, furnish, stock
Tends to - Prone to, incline to, likely to

Notification